SUMMARY MONTHLY SAFETY REPORT 1
for
ACTIVE SUBSTANCE: PF-07302048 (BNT162b2)

ATC CODE: J07BX03[1]

AUTHORISATION PROCEDURE in the EU: Centralised

INTERNATIONAL BIRTH DATE (IBD)[2]: 19 December 2020

EUROPEAN UNION REFERENCE DATE (EURD): 21 December 2020

INTERVAL COVERED BY THIS REPORT:

01 DECEMBER 2020 through 31 DECEMBER 2020

DATE OF THIS REPORT: 13 JANUARY 2021

Report Prepared by: Worldwide Medical & Safety

Pfizer - BioNTech

[1] Temporary ATC code.

[2] It corresponds to the earliest conditional approval date.

EXECUTIVE SUMMARY

This is the 1st Summary Monthly Safety Report (SMSR) for PF-07302048 (COVID-19 mRNA Vaccine, hereafter referred to as BNT162b2), covering the reporting interval 01 December 2020 through 31 December 2020.

BNT162b2 is a white to off-white frozen dispersion (pH: 6.9 - 7.9), provided as concentrate for dispersion for injection (sterile concentrate) as multidose vial to be diluted before use. The multidose vial contains 5 doses of 0.3 mL after dilution; use of 6 doses/vial was approved after the data-lock point of this report with the specification that low dead-volume syringes and/or needles should be used in order to extract 6 doses from a single vial. The low dead-volume syringe and needle combination should have a dead volume of no more than 35 microlitres. If standard syringes and needles are used, there may not be sufficient volume to extract a sixth dose from a single vial. Each dose contains 30 micrograms of BNT162b2 embedded in lipid nanoparticles (LPNs). The vaccine also contains (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate) (ALC-0315), 2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide (ALC-0159), 1,2-Distearoyl-sn-glycero-3-phosphocholine (DSPC), cholesterol, potassium chloride, potassium dihydrogen phosphate, sodium chloride, disodium phosphate dihydrate, sucrose and water for injections as excipients.

BNT162b2 is single-stranded, 5'-capped mRNA produced using a cell-free in vitro transcription from the corresponding DNA templates, encoding the viral spike (S) protein of SARS-CoV-2. The nucleoside-modified mRNA is formulated in LNPs, which enable delivery of the RNA into host cells to allow expression of the SARS-CoV-2 S antigen. The vaccine elicits both neutralizing antibody and cellular immune responses to the spike (S) antigen, which may contribute to protection against COVID-19.

BNT162b2 is indicated for active immunisation to prevent COVID-19 caused by SARS-CoV-2 virus, in individuals 16 years of age and older. No dosage adjustment is required in elderly individuals ≥65 years of age. It is administered intramuscularly, preferably in the deltoid muscle of the upper arm, after dilution as a course of 2 doses (0.3 mL each) at least 21 days apart.

It is estimated that approximately 26,079,300 doses of BNT162b2 were shipped worldwide during the current reporting interval from 01 December 2020 through 31 December 2020; these are also equivalent to the estimated doses of BNT162b2 cumulatively shipped worldwide from the receipt of the first temporary authorisation for emergency supply on 01 December 2020 through 31 December 2020.

BNT162b2 has received temporary authorisation for emergency supply in 19 countries and conditional marketing authorisation approval in 32 countries globally.

The Core Data Sheet (CDS), currently in development, will be designated as unique reference safety information (RSI) for all the countries, once it will be finalized and effective.

For the European Union and other countries that use it as reference, the RSI for this SMSR is the BNT162b2 EU Summary of Product Characteristics (EU SmPC), dated 21 December 2020, in effect at the end of the reporting period.

For the United States and other countries that use it as reference, the RSI for this SMSR is the BNT162b2 combined Emergency Use Authorisation (EUA) Fact Sheet for the Healthcare Professionals (HCP) and EUA prescribing information (PI), dated 23 December 2020, in effect at the end of the reporting period. A previous version of the combined EUA Fact Sheet for the HCP and EUA PI, dated 11 December 2020, was in effect during the reporting period and it was updated on 23 December 2020; the safety-related changes were to add, in the warnings section of the Fact Sheet for HCP and the warnings and precautions section of the EUA PI, a statement to monitor vaccine recipients for the occurrence of immediate adverse reactions according to the Centers for Disease Control and Prevention guidelines.

After the data-lock point of this report, both the RSIs (respectively, the combined EUA Fact Sheet for the HCP and EUA PI on 05 January 2021 and the EU SmPC on 08 January 2021) were updated to indicate that the use of 6 doses/vial in place of 5 doses/vial was approved.

During the reporting period, 12 validated signals (7 new signals and 5 ongoing before the start date of the reporting period) were evaluated and closed or still are undergoing evaluation:

- Anaphylaxis: closed to Important Identified Risk;
- Injection site redness, Injection site swelling, Malaise and Nausea: closed as Identified Risks (Not Important);
- Vomiting and Diarrhoea: closed as No Risks;
- Hypersensitivity (not Anaphylaxis)*, Insomnia*, Injection site pruritus*, Pain in extremity*, Facial paralysis*: ongoing under evaluation;

* they were considered as Identified Risks (not important) and included in the EU SmPC as adverse reactions in Section 4.8 at the request of the EMA at the time of conditional approval of the vaccine. The relevant signals are currently still undergoing evaluation to determine if they will be included as adverse reactions also in the EUA PI and company CDS.

Based on the new safety and efficacy/effectiveness data from the reporting interval for BNT162b2, the benefit-risk profile of BNT162b2 remains favorable.

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LIST OF ABBREVIATIONS

Acronym	Term
AE	adverse event
AESI	adverse event of special interest
BMI	body mass index
CDS	core data sheet
COPD	chronic obstructive pulmonary disease
COVID-19	coronavirus disease 2019
CT	computerised tomography
DLP	data lock point
DME	designed medically event
DNA	deoxyribonucleic acid
EMA	European Medicines Agency
EU	European Union
EUA	emergency use authorisation
EURD	European Union Reference Date
HA	health authority
HCP	healthcare professional
HLGT	(MedDRA) High Group Level Term
HLT	(MedDRA) High Level Term
IBD	international birth date
ICH	International Conference on Harmonisation
ICU	intensive care unit
LLT	(MedDRA) Lowest Level Term
LNP	lipid nanoparticle
MAH	marketing authorisation holder
MedDRA	medical dictionary for regulatory activities
MHRA	(UK) Medicines and Healthcare products Regulatory Agency
mRNA	messenger ribonucleic acid
PI	prescribing information
PT	(MedDRA) Preferred Term
PVP	pharmacovigilance plan
PY	person-years
RMP	risk management plan
RSI	reference safety information
TME	targeted medically event
SAE	serious adverse event
SAR	serious adverse reactions
SARS	severe acute respiratory syndrome
SARS-CoV-2	severe acute respiratory syndrome coronavirus 2
SmPC	Summary of Product Characteristics
SMQ	standardised MedDRA query
SMSR	summary monthly safety report

SOC	(MedDRA) System Organ Class
UK	United Kingdom
US	United States
VAED	vaccine-associated enhanced disease
VAERD	vaccine-associated enhanced respiratory disease

1. INTRODUCTION

This is the 1st SMSR for PF-07302048 (COVID-19 mRNA Vaccine, hereafter referred to as BNT162b2), covering the reporting interval 01 December 2020 through 31 December 2020. The format and content of this SMSR is in accordance with the EMA coreRMP19 Guidance (EMA/544966/2020) and, as applicable, with ICH Guideline E2C (R2) Periodic Benefit-Risk Evaluation Report [Step 5, January 2013] considering the information for the evidence from post-EUA/conditional marketing authorisation approval data sources.

BNT162b2 is a white to off-white frozen dispersion (pH: 6.9 - 7.9), provided as concentrate for dispersion for injection (sterile concentrate) as multidose vial to be diluted before use. The multidose vial contains 5 doses of 0.3 mL after dilution; after the DLP of this report, the use of 6 doses/vial was approved with the specification that low dead-volume syringes and/or needles should be used in order to extract 6 doses from a single vial. The low dead-volume syringe and needle combination should have a dead volume of no more than 35 microlitres. If standard syringes and needles are used, there may not be sufficient volume to extract a sixth dose from a single vial (see Section 4). Each dose contains 30 micrograms of BNT162b2 (embedded in LNPs). The vaccine also contains ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate) (ALC-0315), 2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide (ALC-0159), 1,2-Distearoyl-sn-glycero-3-phosphocholine (DSPC), cholesterol, potassium chloride, potassium dihydrogen phosphate, sodium chloride, disodium phosphate dihydrate, sucrose and water for injections as excipients.

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BNT162b2 is indicated for active immunisation to prevent COVID-19 caused by SARS-CoV-2 virus, in individuals 16 years of age and older. No dosage adjustment is required in elderly individuals ≥ 65 years of age. It is administered intramuscularly, preferably in the deltoid muscle of the upper arm, after dilution as a course of 2 doses (0.3 mL each) at least 21 days apart.

BNT162b2 received first temporary authorisation for emergency supply on 01 December 2020 in the UK and is currently authorised for emergency use in 19 countries.

BNT162b2 received first regulatory conditional marketing authorisation approval on 19 December 2020 in Switzerland and is currently conditionally approved in 32 countries.

Pfizer is responsible for the preparation of the SMSR on behalf of the MAH BioNTech according to the Pharmacovigilance Agreement in place. Data from BioNTech will be included in the report when applicable.

2. WORLDWIDE APPROVAL OR AUTHORISATION STATUS

BNT162b2 received first temporary authorisation for emergency supply under regulation 174 in the UK on 01 December 2020 and is currently authorised for emergency use in 19 countries.

BNT162b2 received first regulatory conditional marketing authorisation approval in Switzerland on 19 December 2020 and is currently conditionally approved in 32 countries.

Details of the current authorisation/approval status are presented in Appendix 4.

There were no withdrawals for safety reasons during the reporting interval.

3. ACTIONS TAKEN IN THE REPORTING INTERVAL FOR SAFETY REASONS

On 09 December 2020 UK MHRA proposed updated wording for the Regulation 174 UK Information for Healthcare Professionals and Information for Recipients document following assessment and expert consultation on reports of anaphylaxis and allergic reaction received following vaccine authorisation. Agreed changes to Section 4.4 were implemented by the MAH on 10 December 2020.

4. CHANGES TO REFERENCE SAFETY INFORMATION

The CDS, currently in development, will be designated as the unique RSI for all countries, once it is finalized and effective.

For the EU and other countries that use it as reference, the RSI for this SMSR is the BNT162b2 EU SmPC, dated 21 December 2020, in effect at the end of the reporting period which is located in Appendix 1. No changes were made to this RSI during this reporting interval.

For the US and other countries that use it as reference, the RSI for this SMSR is the BNT162b2 combined EUA Fact Sheet for the HCP and EUA PI, dated 23 December 2020, in effect at the end of the reporting period which is located in Appendix 1.1. A previous version of the combined EUA Fact Sheet for the HCP and EUA PI, dated 11 December 2020, was in effect during the reporting period and it was updated on 23 December 2020 to include a statement in the warnings and precautions sections to monitor vaccine recipients for the occurrence of immediate adverse reactions according to the Centers for Disease Control and Prevention guidelines. The summary of changes made is presented in Appendix 1.2.

After the DLP of this report, both the RSIs (respectively, the combined EUA Fact Sheet for the HCP and EUA PI on 05 January 2021 and the EU SmPC on 08 January 2021) were updated to indicate that the use of 6 doses/vial in place of 5 doses/vial was approved. It was specified that low dead-volume syringes and/or needles should be used in order to extract 6 doses from a single vial. The low dead-volume syringe and needle combination should have a dead volume of no more than 35 microlitres. If standard syringes and needles are used, there may not be sufficient volume to extract a sixth dose from a single vial.

5. ESTIMATED EXPOSURE AND USE PATTERNS

5.1. Cumulative and Interval Exposure Data

It is not possible to determine with certainty the number of individuals who received BNT162b2 during the period of this review. Estimated worldwide shipped doses may serve as a reasonable indicator of patient exposure.

With these caveats in mind, it is estimated that approximately 26,079,300 doses of BNT162b2 were shipped worldwide during the current reporting interval from 01 December 2020 through 31 December 2020; these are also equivalent to the estimated doses of BNT162b2 cumulatively shipped worldwide from the receipt of the first temporary authorisation for emergency supply on 01 December 2020 through 31 December 2020.

The estimated interval/cumulative number of shipped doses of BNT162b2 considering the distribution by Region[3] based on data provided in the shipment tracker ((b) (4))[4] from 01 December 2020 through 31 December 2020, are summarized in Table 1.

Table 1. Interval/Cumulative Estimated Shipped Doses of BNT162b2 by Region Worldwide

Region/Country/Other	% of Doses	Total Number of Shipped Doses
Europe	(b) (4)	
European Union (27)[a]		
European Free Trade Association[a] (3)		
Switzerland[a]		
UK[b]		
Other Countries[b]		
Commonwealth of Independent States[c]		
North America		
US[b]		
Canada[b]		
Central and South America		
Asia		
Japan		
Other Countries[b]		
Oceania		
Australia/New Zealand		
Other Countries		
Africa		
Total	**100.0%**	**26079300**

[3] Please note that currently there were no available data that allow to estimate exposure by gender and age group.

[4] Please consider that (b) (4) is the most accurate tracker of shipment used as data source for all the Regions and Countries; US shipment data not available in the (b) (4) were taken from the (b) (4) (b) (4)

Table 1. Interval/Cumulative Estimated Shipped Doses of BNT162b2 by Region Worldwide

Region/Country/Other	% of Doses	Total Number of Shipped Doses

a. Please consider that in this Region BNT162b2 was conditionally approved;
b. Please consider that in this Region BNT162b2 received authorisation for emergency supply;
c. Includes: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

Table 2 provides the estimated interval/cumulative number of shipped doses of BNT162b2 from the receipt of the first conditional marketing authorisation approval through 31 December 2020 for the 27 European Countries and for the 3 of the European Free Trade Association.

Table 2. Interval/Cumulative Estimated Shipped Doses of BNT162b2 by EU Countries (30)

EU Country	Total Number of Shipped Doses
European Union (27)	(b) (4)
Austria	
Belgium	
Bulgaria	
Croatia	
Cyprus	
Czech Republic	
Denmark	
Estonia	
Finland	
France	
Germany	
Greece	
Hungary	
Ireland	
Italy	
Latvia	
Lithuania	
Luxembourg	
Malta	
Netherlands	
Poland	
Portugal	
Romania	
Slovakia	
Slovenia	
Spain	
Sweden	
European Free Trade Association	
Iceland	
Liechtenstein	
Norway	

Table 2. Interval/Cumulative Estimated Shipped Doses of BNT162b2 by EU Countries (30)

EU Country	Total Number of Shipped Doses
Total	(b) (4)

6. DATA IN SUMMARY TABULATIONS

6.1. Reference Information

The MedDRA version 23.1 has been used to code adverse events/reactions in summary tabulations.

6.2 Cumulative and Interval Summary Tabulations from Post-Marketing Data Sources

Appendix 2 and Appendix 2.1 respectively provide interval and cumulative number of case reports (serious and non-serious, medically confirmed and non-medically confirmed) received from post-marketing data sources[5], overall, by sex, country, age groups and in special populations.

The cumulative data include all data up to 31 December 2020 while the interval data are referred to the interval period from 01 December 2020 to 31 December 2020.

Appendix 2.2 provides an interval summary tabulation of case reports with DMEs from post-marketing data sources[5].

Please refer to Appendices 2.3 and 2.4 for specific data stratified by country of incidence; in these appendices, data for spontaneous cases (including regulatory authority and literature cases) were presented separately from non-interventional sources.[6] In details:

Appendix 2.3 provides a cumulative and interval summary tabulation of case reports organized as medically confirmed and non-medically confirmed (fatal, serious and non-serious).

Appendix 2.4 provides a cumulative and interval summary tabulation of fatal case reports.

Appendix 2.5[7] and Appendix 2.6 provide a cumulative and interval summary tabulation of adverse drug reactions from post-marketing data sources[5] respectively by PT and by HLT organized according to SOC. Please refer to Appendix 2.5.1 and Appendix 2.6.1 for specific data per country of incidence.

[5] Correspond to post-EUA/conditional marketing authorisation approval data sources.

[6] There were no cases from non-interventional sources during the current interval period.

[7] Due to a technical formatting issue, 2 blank pages (page 5 and page 34) appear in this Appendix; the total data are however correctly displayed.

These tabulations in Appendix 2.5 and Appendix 2.6 include serious and non-serious adverse reactions from spontaneous sources, as well as serious adverse reactions from non-interventional studies and other non-interventional solicited sources[6]. Please note that adverse events totals presented in Appendix 2, Appendix 2.1 and for safety topic evaluations in Section 8.5 may differ from Appendix 2.5 and Appendix 2.6 adverse events totals, due to the fact that these Appendix 2.5 and Appendix 2.6 only display the number of serious and non-serious reactions from spontaneous sources, serious reactions from non-interventional studies and solicited sources as described above, whereas Appendix 2, Appendix 2.1 and the safety topic evaluation includes the total adverse events.

7. MEDICATION ERRORS

Cases potentially indicative of medication errors[8] that occurred in the reporting period are summarized below.

- Number of cases: 323[9] (8.9% of 3615 cases, the total PM dataset) of which 281 (87%) medically confirmed.
- Number of relevant medication error events: 473.[10]
- Country of incidence: US (247), Israel (30), UK (23), Germany (12), Romania (6), Italy (3), Croatia and Poland (1 each).

[8] MedDRA (version 23.1) Higher Level Terms: Accidental exposures to product; Product administration errors and issues; Product confusion errors and issues; Product dispensing errors and issues; Product label issues; Product monitoring errors and issues; Product preparation errors and issues; Product selection errors and issues; Product storage errors and issues in the product use system; Product transcribing errors and communication issues, OR Preferred Terms: Accidental poisoning; Circumstance or information capable of leading to device use error; Circumstance or information capable of leading to medication error; Contraindicated device used; Deprescribing error; Device use error; Dose calculation error; Drug titration error; Expired device used; Exposure via direct contact; Exposure via eye contact; Exposure via mucosa; Exposure via skin contact; Failure of child resistant product closure; Inadequate aseptic technique in use of product; Incorrect disposal of product; Intercepted medication error; Intercepted product prescribing error; Medication error; Multiple use of single-use product; Product advertising issue; Product distribution issue; Product prescribing error; Product prescribing issue; Product substitution error; Product temperature excursion issue; Product use in unapproved therapeutic environment; Radiation underdose; Underdose; Unintentional medical device removal; Unintentional use for unapproved indication; Vaccination error; Wrong device used; Wrong dosage form; Wrong dosage formulation; Wrong dose; Wrong drug; Wrong patient; Wrong product procured; Wrong product stored; Wrong rate; Wrong route; Wrong schedule; Wrong strength; Wrong technique in device usage process; Wrong technique in product usage process.

[9] One (1) case from India reporting the PTs Product administered to patient of inappropriate age and Off label use has been excluded from the analysis in this section as no vaccine was shipped to India as of 31 December 2020. The case has been recoded after DLP with generic COVID-19 vaccine. This case appears in Appendix 2.3, Appendix 2.5 and Appendix 2.5.1.

[10] This number of medication errors takes into account also the PT Incorrect route of product administration reported twice (one as serious and one as non-serious occurrence) in 1 case and the PT Product preparation error reported three times in another case (non-serious).

- Clusters of cases from the same reporter (mainly a health care professional) describing similar events in different individuals were reported in Germany (1 cluster of 8 cases), Israel (3 clusters of 5, 8 and 11 cases, respectively), the United Kingdom (2 clusters of 2 and 4 cases, respectively and 2 clusters of 3 cases each), the US (11 clusters, the largest one with 90 cases). In addition, information about multiple individuals (incorrect storage and vaccination to 105 individuals) was reported in a single German case.

- PTs indicative of medication errors: Poor quality product administered (136), Product temperature excursion issue (90), Circumstance or information capable of leading to medication error and Wrong technique in product usage process (37 each), Product preparation error (28), Incorrect route of product administration and Underdose (27), Accidental overdose (25), Product preparation issue (13), Product administered at inappropriate site (11), Inappropriate schedule of product administration (7), Accidental underdose and Incorrect dose administered (6 each), Accidental exposure to product and Product label confusion (4 each), Exposure via skin contact, Product prescribing error[11] and Product storage error (2 each), Counterfeit product administered, Expired product administered, Exposure via eye contact, Medication error and Product administration error (1 each).

- Medication error seriousness: serious (7), non-serious (464)[12]; seriousness criteria were hospitalization (1 event) and important medical events (6 events); all serious events were medically confirmed.

- Case outcome: resolved/resolving (6, of which 2 serious), not resolved (28, of which 7 serious), unknown (289, of which 3 serious).

- Medication errors of special interest were:

  a. The administration of undiluted vaccine (12 individuals):

Country	No. of Cases	Medication Error Analysis (Number of Events)	
US	4 (a1 through a4)	With harm	(6; Preparation 4, Administration 2)
Israel	1 (a5)	With harm – full undiluted vial	(1, Preparation)
US	6 (a6 through a11)	Without harm	(10; Preparation 6, Administration 4)
Israel	1 (a12)	Without harm	(1, Preparation)

  b. The administration of a "full diluted vial" to an individual (8 individuals):

Country	No. of Cases	Medication Error Analysis (Number of Events)	
Germany	7[13] (b1 through b7)	With harm	(7, Administration)
Germany	1 (b8)	Without harm	(1, Administration)

[11] After DLP, 1 case has been made invalid.

[12] In 1 case a medication error PT was reported twice, once as serious and once as non-serious occurrences.

[13] An 8th case, after DLP, identified as duplicate of 1 of these 7 cases, has not been included.

Further details about these cases are available in the medication error analysis subsections.

Medication Errors Analysis

Among the medication error cases, the following scenarios, categorized according to the EMA guidance "Good practice guide on recording, coding, reporting and assessment of medication errors" (EMA/762563/2014) were encountered:

- Medication errors associated with harm [i.e., associated adverse reaction(s)] were reported in 17 cases;
- Medication errors without harm (without associated adverse reactions) were reported in 282 cases (in 59 of them there were co-reported AEs);
- Potential medication errors were reported in 24 cases.

Medication errors associated with harm (19 medication errors in 17 cases)

There were 12 individuals who were administered undiluted vaccine or who received an incorrect dosage, as detailed below and cross-referenced with medication errors of interest above.

Country/ Case Seriousness	No. of Cases	Volume of vaccine administered	Medication Error PTs	Associated Reaction(s)
US / Serious	a1	Unknown volume of undiluted vaccine	Product preparation error, Accidental overdose	• Pain, Headache
Israel / Non-serious	a5	0.45 mL undiluted vaccine	Product preparation error	• Overdose, Vaccination site pain, Vaccination site swelling, Vaccination site erythema, Vaccination site hypersensitivity
US / Serious	a2	0.3 mL undiluted vaccine	Product preparation issue	• Feeling abnormal
US / Non-serious	a3	0.3 mL undiluted vaccine	Product preparation error, Incorrect dose administered	• Blood pressure diastolic increased
US / Non-serious	a4	0.3 mL undiluted vaccine	Product preparation error	• Pain, Fatigue, Overdose
Germany / Serious	b1	2.25 mL diluted vaccine	Accidental overdose	• Headache, Asthenia, Pain, Asthenia
Germany / Serious	b2	2.25 mL diluted vaccine	Accidental overdose (Non-serious)	• Vaccination site pain, Vaccination site swelling, Headache, Fatigue, Dyspnoea, Leukopenia
Germany / Non-serious	b3	2.25 mL diluted vaccine	Accidental overdose	• Pyrexia, Pain in extremity, Headache, Dizziness
Germany / Non-serious	b4	2.25 mL diluted vaccine	Accidental overdose	• Asthenia, Palpitations
Germany / Non-serious	b5	2.25 mL diluted vaccine	Accidental overdose	• Headache, Vaccination site pain, Vaccination site swelling, Asthenia, Muscular weakness
Germany / Non-serious	b6	2.25 mL diluted vaccine	Accidental overdose	• Agitation, Heart rate increased, Headache, Heart rate increased

Country/ Case Seriousness	No. of Cases	Volume of vaccine administered	Medication Error PTs	Associated Reaction(s)
Germany / Non-serious	b7	2.25 mL diluted vaccine	Accidental overdose	• Vaccination site pain

In 5 cases the vaccine was not administered in the deltoid muscle (PT Product administered at inappropriate site, 5 all non-serious). The site of the vaccination was reported as "higher than normal" (2, and in 1 case "hit a nerve" was also specified), "into the subacromial space" (1), "under the shoulder bone" (1) and "right shoulder" (1). Associated non-serious reactions included: Burning sensation, Condition aggravated, Discomfort, Insomnia, Nerve injury, Vaccination site movement impairment, and Vaccination site pain (1 each).

Medication errors without harm (430 medication errors in 282 cases)

Four hundred thirty (430) medication errors without harm were reported in 282 cases. Medication errors PTs described errors occurring during 1 or more steps of the vaccination process: preparation, administration, or scheduling of second dose.

– Preparation (159 events all non-serious): events mainly described errors in storage conditions, during dilution before use, and presence of air bubbles in the vial.

  - *Storage (94 events all non-serious)*: a cluster of 90 US non-serious cases referred to vaccine doses that had been through a temperature excursion; the 91st case described the administration of 105 doses after incorrect storage. The 92nd and 93rd cases described light signals on the shipping containers indicative of possible temperature excursion. In the 94th case, the vial was taken out of the fridge and heated in the hand for 30 seconds; it was unknown if the vaccine was administered. No lot/batch number were available for these cases.

  - *Dilution before use (35 events all non-serious)*: dilution was not performed (7 events, see table below and cross-referenced with medication errors of special interest above), or was performed either with a smaller volume of normal saline (15 events), or with a larger volume of normal saline (12 events) than instructed; in 2 cases, the total number of available doses after dilution in a single vial was less than 5.

Country/ Case Seriousness	No. of Cases	Volume of vaccine administered	Relevant Medication Error PTs (Underlined)
US / Non-serious	a6	Unknown volume of undiluted vaccine	Product preparation error, Accidental overdose
US / Non-serious	a7	Unknown volume of undiluted vaccine	Wrong technique in product usage process
US / Non-serious	a10	Unknown volume of undiluted vaccine	Overdose, Product preparation error
US / Non-serious (2 cases)	a8, a9	0.3 mL undiluted vaccine	Product preparation error, Accidental overdose
Israel / Non-serious	a12	0.3 mL undiluted vaccine	Product preparation error, Overdose
US / Non-serious	a11	0.45 mL undiluted vaccine	Accidental overdose, Product preparation error

- *Presence of air bubbles (17 events all non-serious)*: air bubbles were noted in some vials; in some cases, due to the attempt to expel air a partial dose of vaccine was administered.

- *Vial inversion (3 events)*: inversion of the vial prior to dilution was not performed in accordance to instructions.

- *Other preparation errors (10 events)*.

– Administration (268 events, 2 of which were serious): events mainly described errors in administration of vaccine after it had been through a temperature excursion, errors in the volume administered, error in route of administration, errors in the dosage of vaccine administered, and poor quality of vaccine administered due to the presence of particles after dilution.

  - *Administration after temperature excursion (93 events all non-serious)*: a cluster of 90 US non-serious cases referred to vaccine doses that had been administered after being through a temperature excursion. Additionally, a reporter described the administration of 3 doses from a vial (lot EJ1688) which had been through a temperature excursion.

  - *Errors in the volume administered (31 events all non-serious)*: partial doses were administered due to leakage, presence of air bubbles, syringe or needle malfunction.

  - *Errors in the vaccine dosage (29 events all non-serious)*: depending on the amount of volume of normal saline used during dilution, errors in dosages were reported (less volume of normal saline than recommended led to higher concentration [18 events] or larger volume of normal saline than recommended led to lower concentration [6 events]), other errors in dosage including administration of a dose which was 5 times the recommended dose to single individuals (5 events, see table below and cross-referenced with medication errors of special interest above).

Country/ Case Seriousness	No. of Cases	Volume of vaccine administered	Relevant Medication Error PTs (Underlined)
US / Non-serious	a6	Unknown volume of undiluted vaccine	Product preparation error, Accidental overdose
US / Non-serious (2 cases)	a8, a9	0.3 mL undiluted vaccine	Product preparation error, Accidental overdose
US / Non-serious	a11	0.45 mL undiluted vaccine	Accidental overdose, Product preparation error
Germany / Non-serious	b8	2.25 mL diluted vaccine	Accidental overdose

- *Errors in the route of administration (28 events, of which 1 serious)*: in 23 of the events the vaccine was administered subcutaneously[14]; in the remaining 5 it was administered parenterally without any further detail (2) or other than intramuscularly in the remaining ones (2, "in the sub acromial space, bumped her acromion", no further details were available for the second case).

- *Presence of particles[15] in the vial after dilution (18 events, of which 1 serious[16])*: the majority of the cases originated from Israel with 2 clusters of 8 and 5 cases respectively [when available (9), the lot/batch was EK4175]; 2 cases originated from the UK [lot/batch was EJ0553].

- *Vaccination site not in the deltoid muscle (9 events all non-serious)*. The vaccination site was reported "slightly off the muscle" (2), acromioclavicular joint area/subacromial space (2), as "not in the deltoid muscle" (1), "in the arm" (1), "in scapular space" (1), in the triceps (1), and "behind the deltoid muscle in the adipose/subcutaneous tissue" (1).

- *Accidental exposure and presence of air bubbles (7 events each all non-serious)*.

- *Other administration errors (46 events)*: including a 3-year-old girl (Section 8.5.4, *Use in Paediatric Individuals <16 Years of Age*) and 27 events which described a number of doses different from 5 from each reconstituted vial. In 7 cases (8 events), originated from Italy (3), Croatia, Poland, UK and US (1 each), 6 doses were administered from a vial; among the remaining 19 events, despite dilution being performed with the correct volume (1.8 mL) of normal saline, only 4 doses were drawn from the vial (2 clusters of 4 cases each from UK and US and 1 cluster of 11 cases from Israel).

– Scheduling (3 events all non-serious): the second dose of the vaccine was either administered on the same day (1st case) or in 5 days (2nd), while the second dose was not administered at the 21st day and appointment was not yet scheduled (3rd case).

Potential medication errors (24 medication errors in 24 cases)

Twenty-four (24) potential medication errors were reported in 24 cases and described mainly potential errors in scheduling the date for the administration of the second dose (14 events). Two (2) events referred to the recommended number of inversions of the vial (1)[17] and the presence of air bubbles (1); and the use of the vaccine in populations with haematological

[14] In 1 case the PT Incorrect route of product administration (serious), was assessed as non-serious following review assessment.

[15] Products complaints were reported in 14 cases.

[16] PT Poor quality product administered.

[17] The EU SmPC states to gently invert the vial containing the Pfizer BioNTech COVID-19 Vaccine 10 times to mix.

diseases, with immunomodulating medications, in immunocompromised persons, in pregnant women, or possible interactions (8 events).

No new significant safety information was identified based on review of the medication error cases.

8. SIGNAL AND RISK EVALUATION

8.1. Literature Review

Please refer to Appendix 6 for a summary description of the interval literature review that is performed for the purpose of signal detection. There were no relevant literature results retrieved for the purpose of the signal detection for BNT162b2 during the reporting interval.

8.2. Overview of Signals During the Reporting Interval: New, Ongoing, or Closed

New signals detected for BNT162b2 during the reporting interval are presented below in Table 3 along with the ongoing signals and signals closed during the reporting interval.

Table 3. Overview of Signals

Signal	Signal Type	Source	Category
Hypersensitivity (not anaphylaxis)	New and ongoing	HA request (EMA)	Not yet determined[a]
Insomnia	New and ongoing	HA request (EMA)	Not yet determined[a]
Injection site pruritus	New and ongoing	HA request (EMA)	Not yet determined[a]
Pain in extremity	New and ongoing	HA request (EMA)	Not yet determined[a]
Anaphylaxis	New and closed	HAs request (EMA and FDA)	Important Identified Risk
Malaise	New and closed	Unblinded clinical study data review	Identified Risk (Not Important)
Facial paralysis	New and ongoing	Initially opened and closed following review of unblinded clinical study data (C4591001) (DLP 14 Nov 2020) Re-opened due to HA request (EMA)	Not yet determined[a]
Injection site redness	Closed	Unblinded clinical study data review	Identified Risk (Not Important)
Vomiting	Closed	Unblinded clinical study data review	No Risk
Nausea	Closed	Unblinded clinical study data review	Identified Risk (Not Important)
Injection Site Swelling	Closed	Unblinded clinical study data review	Identified Risk (Not Important)

Table 3. Overview of Signals

Signal	Signal Type	Source	Category
Diarrhoea	Closed	Unblinded clinical study data review	No Risk

a. It was considered as an Identified Risk (Not Important) and included in the EU SmPC as adverse reaction in Section 4.8 at the request of the EMA at the time of conditional approval of the vaccine. The relevant signal is still currently undergoing evaluation to determine if it will be included as an adverse reaction also in the EUA PI and CDS.

Appendix 3 provides a summary of the safety signals that were new, ongoing, or closed during the reporting interval. Please refer to Appendix 3.1 for evaluation of signals during the reporting interval.

8.3. Summary of Safety Concerns

Table 4 summarises the important risks and missing information for BNT162b2.

Table 4. Ongoing Safety Concerns

Important Identified Risk	Anaphylaxis[a,d]
Important Potential Risk	Vaccine-Associated Enhanced Disease (VAED), Including Vaccine-Associated Enhanced Respiratory Disease (VAERD)[b]
Missing Information	Use in Pregnancy and While Breast Feeding[b]
	Use in Immunocompromised Patients[a]
	Use in Frail Patients With Co-Morbidities (e.g. COPD, Diabetes, Chronic Neurological Disease, Cardiovascular disorders)[a]
	Use in Patients With Autoimmune or Inflammatory Disorders[a]
	Interaction With Other Vaccines[a]
	Long-Term Safety Data[a]
	Use in Paediatric Individuals <16 Years of Age[c]
	Vaccine Effectiveness[c]

a. As per the EU RMP Version 1.0, dated 21 December 2020;
b. As per both the EU RMP Version 1.0, dated 21 December 2020 and the US PVP, Version 0.2, dated 05 December 2020;
c. As per the US PVP, Version 0.2, dated 05 December 2020;
d. The US PVP is being updated to include Anaphylaxis as an Important identified risk.

8.4. Summary of Adverse Events of Special Interest (AESIs)

Please refer to Appendix 5 for the list of the company's AESIs for BNT162b2. Please refer to Appendix 5.1 for the observed versus expected analysis for AESIs.

This list takes into consideration the lists of AESIs from the following expert groups and regulatory authorities: Brighton Collaboration (SPEAC), ACCESS protocol, US CDC (preliminary list of AESI for VAERS surveillance), MHRA (unpublished guideline).

The AESI terms are incorporated into a TME list and include events of interest due to their association with severe COVID-19 and terms of interest for vaccines in general.

The AESI list includes MedDRA PTs, HLTs, HLGTs or MedDRA SMQs and can be altered as directed by adverse events reports and the evolving safety profile of the vaccine.

8.5. Evaluation of Risks and New Information

Evaluation of new information collected from post-marketing data sources[5] for BNT162b2 during the reporting period for previously recognised important identified and important potential risks, missing information, AESIs and special situations is provided below in Section 8.5.1, Section 8.5.2, Section 8.5.3 and Section 8.5.4, respectively.

8.5.1. Evaluation of Important Identified and Important Potential Risks

Table 5 below presents the evaluation of new information received during the current reporting period from post-marketing data sources[5] for the important identified and important potential risks of BNT162b2.

Table 5. Risks Evaluation for BNT162b2

Safety Risk	Post-Marketing Cases Evaluation[a] Total Number of Cases in the Reporting Period (N=3615)
Important Identified Risk	
Anaphylaxis[b,d]	• Number of potentially relevant cases from the Anaphylactic reaction SMQ (Broad and Narrow) search strategy: 824 (22.8% of the total PM dataset), of which 613 were medically confirmed and 211 were non-medically confirmed; • Number of potentially relevant events: 1245; • Country of incidence: US (573), UK (224), Israel (8), Germany and Mexico (3 each), Canada and Romania (2 each) and Afghanistan[h], Greece, Hungary, Portugal, Puerto Rico, Qatar, Spain, Sweden and Switzerland (1 each); • Most frequently reported relevant PTs (≥2%): Pruritus (146), Rash (127), Dyspnoea (120), Cough (100), Urticaria (93), Flushing (90), Erythema (76), Chest discomfort (60), Throat tightness (38), Swelling face (37), Anaphylactic reaction (32), Lip swelling and Rash erythematous (31 each), Swollen tongue (27), Pharyngeal swelling and Swelling (26 each), Wheezing (20), Eye swelling (19) and Rash pruritic (17); • Relevant event seriousness: serious (314), non-serious (931); • Relevant event outcome[f]: fatal (3), resolved/resolving (603), resolved with sequelae (31), not resolved (259), unknown (350). Two out of the 3 patients who died (for both, relevant fatal PT Cardiac arrest) were frail patients with multiple co-morbidities (see Table 8, *Use in Frail Patients With Co-morbidities*); for the remaining patient, limited information was provided preventing a meaningful medical assessment. • Number of potentially relevant cases retrieved using the Anaphylaxis SMQ (Narrow) search strategy: 43 [relevant PTs Anaphylactic reaction (32), Anaphylactoid reaction (5), Anaphylactic shock (4), Circulatory collapse and Shock symptoms (1 each)]. Of note 13 out of these 43 patients were

Table 5. Risks Evaluation for BNT162b2

Safety Risk	Post-Marketing Cases Evaluation[a] Total Number of Cases in the Reporting Period (N=3615)
	allergic individuals with relevant medical histories of asthma, anaphylactic or anaphylactoid reaction, or hypersensitivity (seasonal, to drug or to contrast media); 2 of them also previously had COVID-19/suspected COVID-19. Anaphylaxis is included as adverse reaction in Section 4.8 of the EU SmPC and is to be added as an adverse reaction to the EUA PI and CDS. It is also included as an Important identified risk in the EU RMP and is being added to the US PVP as an Important identified risk based on previous evaluation of cases using the Brighton Collaboration criteria for case assessment. Based upon review of the available information, no additional change to the RSIs is warranted at this time. No new significant safety information was identified based on a review of these cases.
Important Potential Risk	
Vaccine-Associated Enhanced Disease (VAED) Including Vaccine-Associated Enhanced Respiratory Disease (VAERD)[c,e]	As noted by the Brighton Collaboration, there is currently no uniformly accepted definition of VAED (or VAERD) and the working group considers that a definitive case of VAED (Level 1 diagnostic certainty) cannot be ascertained with current knowledge of the mechanisms of pathogenesis of the condition.[18] Given this, identifying an individual case as VAED/VAERD is currently impractical and an expected rate of VAED is difficult to establish and a meaningful observed/expected analysis cannot be conducted at this point based on available data. The feasibility of conducting such an analysis will be re-evaluated on an ongoing basis. The search criteria utilised to identify potential cases of VAED for this SMSR included terms noted in the VAED data capture aid and which take into account the clinical parameters considered of relevance to the condition. • Number of cases based on search strategy: 4 (0.1% of the total PM dataset), all medically confirmed and serious[g]; • Country of incidence: US (4); • Patient's Gender: female (1), males (3); • Patients' Age: 35 to 56 years (n = 4), mean = 41.8, median = 38; • Respiratory system involvement [relevant events coded to PTs Dyspnoea (4) and Hypoxia (1)] in all these cases; in 1 patient also Gastrointestinal system involvement (relevant PT Diarrhoea) was co-reported; • Case outcome: not resolved (4). Three out of these 4 cases involved COVID-19 positive patients who experienced mild symptoms after short latency (respectively: 7 hours, 48 hours and 1 week after the vaccination). The remaining patient, a

[18] Flor M Munoz, et al. Vaccine-associated Enhanced Disease: Case Definition and Guidelines for Data Collection, Analysis, and Presentation of Immunization Safety Data. Brighton Collaboration. September 2020, Vaccine Journal Draft Manuscript.

Table 5. Risks Evaluation for BNT162b2

Safety Risk	Post-Marketing Cases Evaluation[a] Total Number of Cases in the Reporting Period (N=3615)
	35-year-old male, exhibited severe symptoms within less than 24 hours after receiving the vaccine and was hospitalized moving to ICU 2 days later with an O_2 saturation of 80%. CT scan showed extensive infiltration in the lungs; COVID test was positive. Because VAED may present as severe or unusual clinical manifestations of the known disease presentation, cases resulting from the search strategy are reviewed in this context. There is one case of a 35-year-old man who received 1 dose of vaccine and within 24 hours had symptoms of severe COVID-19. The patient did not receive the recommended 2 doses at least 21 days apart for maximum protection and therefore cannot be regarded as a vaccination failure. Additionally, this single case cannot be regarded as evidence for VAED/VAERD, particularly given the short latency between vaccination and COVID-19 symptoms and proposed immunological mechanisms for VAED/VAERD. Surveillance for this potential risk will continue. No new significant safety information was identified based on a review of these cases.

a. Please note that this corresponds to evidence from post-EUA/conditional marketing authorisation approval data sources;
b. As per the EU RMP Version 1.0, dated 21 December 2020;
c. As per both the EU RMP Version 1.0, dated 21 December 2020 and the US PVP, Version 0.2, dated 05 December 2020;
d. Search criteria: Anaphylactic reaction (SMQ Narrow and Broad);
e. Search criteria: Standard Decreased Therapeutic Response Search AND PTs Dyspnoea; Tachypnoea; Hypoxia; COVID 19 pneumonia; Respiratory Failure; Acute Respiratory Distress Syndrome; Cardiac Failure; Cardiogenic shock; Acute myocardial infarction; Arrhythmia; Myocarditis; Vomiting; Diarrhoea; Abdominal pain; Jaundice; Acute hepatic failure; Deep vein thrombosis; Pulmonary embolism; Peripheral Ischaemia; Vasculitis; Shock; Acute kidney injury; Renal failure; Altered state of consciousness; Seizure; Encephalopathy; Meningitis; Cerebrovascular accident; Thrombocytopenia; Disseminated intravascular coagulation; Chillblains; Erythema multiforme; Multiple organ dysfunction syndrome; Multisystem inflammatory syndrome in children;
f. Please consider that a double episode of Flushing was reported with different clinical outcomes in 1 case hence the sum of the event outcomes exceeds the total number of PT events;
g. One of the cases initially entered in the safety database as non-serious was upgraded to serious after DLP;
h. The patient was vaccinated in the US.

8.5.2. Evaluation of AESIs

Table 6 below presents the evaluation of new information received during the current reporting period from post-marketing data sources[5] with regard to the AESIs for BNT162b2. Where applicable, observed versus expected analysis is provided in Appendix 5.1.

Table 6. AESIs Evaluation for BNT162b2

AESIs[a] Category	Post-Marketing Cases Evaluation[f] Total Number of Cases in the Reporting Period (N=3615)
Anaphylactic Reactions *Search criteria: Anaphylactic reaction SMQ (Narrow and Broad)*	For relevant cases, please refer to the Risk 'Anaphylaxis' in Table 5.
Cardiovascular AESIs *Search criteria: PTs Acute myocardial infarction; Arrhythmia; Cardiac failure; Cardiac failure acute; Cardiogenic shock; Coronary artery disease; Myocardial infarction; Postural orthostatic tachycardia syndrome; Stress cardiomyopathy; Tachycardia*	• Number of cases: 85 (2.4% of the total PM dataset), of which 76 medically confirmed and 9 non-medically confirmed; • Country of incidence: US (55), UK (26), Germany, Greece, Israel and Puerto Rico (1 each); • Number of relevant events: 85, of which 24 serious, 61 non-serious; • Reported relevant PTs: Tachycardia (78); Acute myocardial infarction, Arrhythmia and Myocardial infarction (2 each) and Cardiac failure (1); • Relevant event onset latency (n = 69): Range from <24 hours to 4 days; • Relevant event outcome: fatal (2), resolved/resolving (53), resolved with sequelae (1), not resolved (7) and unknown (22). No new significant safety information was identified based on a review of these cases.
Covid-19 AESIs *Search criteria: Covid-19 SMQ (Narrow and Broad)*	• Number of cases: 195 (5.4% of the total PM dataset), of which 151 medically confirmed and 44 non-medically confirmed; • Country of incidence: US (172), UK (19), Bulgaria, Canada, Israel and Slovakia (1 each); • Number of relevant events: 202, of which 97 serious, 105 non-serious; • Most frequently reported relevant PTs (>1 occurrence): SARS-CoV-2 test positive (89), COVID-19 (71), Exposure to SARS-CoV-2 and Suspected COVID-19 (11 each), Coronavirus test positive (5), Coronavirus infection (4), Asymptomatic COVID-19 and SARS-CoV-2 antibody test positive (3 each) and SARS-CoV-2 test negative (2); • Relevant event onset latency (n = 112): Range from <24 hours to 22 days, median 4.5 days; • Relevant event outcome: not resolved (21), resolved/resolving (6) and unknown (175). No new significant safety information was identified based on a review of these cases.
Dermatological AESIs *Search criteria: PT Chillblains*	No cases.
Haematological AESIs *Search criteria: Leukopenias NEC (HLT) (Primary Path) OR*	• Number of cases: 3 (0.08% of the total PM dataset), of which 2 medically confirmed and 1 non-medically confirmed; • Country of incidence: US (2) and Germany (1);

Table 6. AESIs Evaluation for BNT162b2

AESIs[a] Category	Post-Marketing Cases Evaluation[f] Total Number of Cases in the Reporting Period (N=3615)
Neutropenias (HLT) (Primary Path) OR PTs Haemorrhage; Haemorrhagic disorder; Thrombocytopenia	• Number of relevant events: 3, of which 1 serious, 2 non-serious; • Reported relevant PTs: Haemorrhage (2) and Leukopenia (1); • Relevant event onset latency (n = 3): Range from <24 hours to 2 days; • Relevant event outcome: not resolved (2), and unknown (1). No new significant safety information was identified based on a review of these cases.
Hepatic AESIs *Search criteria: Liver related investigations, signs and symptoms (SMQ) (Narrow and Broad) OR PT Liver Injury*	• Number of cases: 1 case (0.03% of the total PM dataset), medically confirmed; • Country of incidence: US; • Number of relevant events: 1 non-serious event (relevant PT: Hepatic pain), occurred within 24 hours since vaccine administration, with outcome of resolving. No new significant safety information was identified based on a review of this case.
Facial Paralysis *Search criteria: PT Facial Paralysis*	• Number of cases: 21[c] (0.6% of the total PM dataset), of which 11 medically confirmed and 10 non-medically confirmed; • Country of incidence: US (14), Germany and UK (2 each) and Afghanistan[h], Canada and Israel (1 each); • Number of events: 21, of which 14 serious, 7 non-serious; • Relevant reported LLTs which encoded to the PT: Facial paralysis (21) were: Bell's palsy (13), Facial droop and Facial paralysis (3 each), Palsy Bells (2 each) and Facial palsy (1); there was 1 case reporting 2 different LLTs that coded to the same PT Facial paralysis; • In all the cases, paralysis was unilateral; • Relevant event onset latency (n = 13): Range from <24 hours to 10 days; • Relevant event outcome: not resolved (7), resolved/resolving (4), resolved with sequelae (1) and unknown (9). Please see Appendix 5.1 for Observed versus Expected analysis of Facial paralysis. An evaluation of facial paralysis events using the Brighton Collaboration criteria for individual case assessment is ongoing.
Immune-Mediated/Autoimmune AESIs[g] *Search criteria: Immune-mediated/autoimmune disorders (SMQ) (Broad and Narrow) OR Autoimmune disorders HLGT (Primary Path) OR PTs Cytokine release syndrome; Cytokine storm; Hypersensitivity*	• Number of cases: 91 (2.5% of the total PM dataset), of which 68 medically confirmed and 23 non-medically confirmed; • Country of incidence: US (59), UK (25), Israel and Mexico (2 each) and Bulgaria, Canada and Portugal (1 each); • Number of events: 92, of which 27 serious, 65 non-serious; • Most frequently reported relevant PTs (>1 occurrence): Hypersensitivity (42), Anosmia (31) and Autoimmune disorder, Facial paresis and Pericarditis* (2 each); • Relevant event onset latency (n = 61): Range from <24 hours to 8 days, median 1 day; • Relevant event outcome: resolved/resolving (31), resolved with sequelae (2), not resolved (24) and unknown (35).

Table 6. AESIs Evaluation for BNT162b2

AESIs[a] Category	Post-Marketing Cases Evaluation[f] Total Number of Cases in the Reporting Period (N=3615)
	* Observed/Expected analysis performed for Pericarditis. No new significant safety information was identified based on a review of these cases and of the Observed versus Expected analysis (see Appendix 5.1).
Musculoskeletal AESIs *Search criteria: PTs Arthralgia; Arthritis; Chronic fatigue syndrome; Polyarthritis; Polyneuropathy; Post viral fatigue syndrome*	• Number of cases: 205 (5.7% of the total PM dataset), of which 145 medically confirmed and 60 non-medically confirmed; • Country of incidence: US (141), UK (60), Puerto Rico (2), Israel and Poland (1 each); • Number of relevant events: 205, of which 27 serious, 178 non-serious; • Reported relevant PTs: Arthralgia (203) and Arthritis and Chronic fatigue syndrome (1 each); • Relevant event onset latency (n = 155): Range from <24 hours to 31 days, median 1 day; • Relevant event outcome[d]: resolved/resolving (79), resolved with sequelae (5), not resolved (71), and unknown (52). No new significant safety information was identified based on a review of these cases.
Neurological AESIs (including demyelination) *Search criteria: Convulsions (SMQ) (Broad and Narrow) OR Demyelination (SMQ) (Broad and Narrow) OR PTs Ataxia; Cataplexy; Cerebrovascular accident; Fibromyalgia; Intracranial pressure increased; Meningitis; Meningitis aseptic; Narcolepsy*	• Number of cases: 18 (0.5% of the total PM dataset), of which 13 medically confirmed and 5 non-medically confirmed; • Country of incidence: US (9), UK (5), Germany (3) and Mexico (1); • Number of relevant events: 22, of which 18 serious, 4 non-serious; • Most frequently reported relevant PTs (>1 occurrence) included: Seizure* (6), Cerebrovascular accident* (5) and Epilepsy, Generalised tonic-clonic seizure and Guillain-Barre syndrome* (2 each); • Relevant event onset latency (n = 18): Range from <24 hours to 6 days; • In 4 cases, the patient's medical history was relevant for Generalised tonic-clonic seizure (2), Cataplexy, Epilepsy and Familial risk factor (1 each). There was 1 case reporting 2 relevant medical history terms; • Relevant events outcome: resolved/resolving (7), resolved with sequelae (3), not resolved (4) and unknown (8). * Observed/Expected analysis performed for seizure, stroke and Guillain-Barre syndrome. No new significant safety information was identified based on a review of these cases and of the Observed versus Expected analysis (see Appendix 5.1).
Other AESIs *Search criteria: Herpes viral infections (HLT) (Primary Path) OR PTs Adverse event following immunisation; Ageusia; Inflammation; Manufacturing laboratory analytical testing issue; Manufacturing materials issue; Manufacturing production issue; MERS-CoV test; MERS-CoV test*	• Number of cases: 552 (15.3% of the total PM dataset), of which 379 medically confirmed and 173 non-medically confirmed; • Country of incidence: US (402), UK (138), Canada, Israel and Puerto Rico (2 each) and Bulgaria, Chile, Germany, Italy, Oman and Poland (1 each); • Number of relevant events: 563, of which 76 serious, 487 non-serious;

Table 6. AESIs Evaluation for BNT162b2

AESIs[a] Category	Post-Marketing Cases Evaluation[f] Total Number of Cases in the Reporting Period (N=3615)
negative; MERS-CoV test positive; Middle East respiratory syndrome; Multiple organ dysfunction syndrome; Occupational exposure to communicable disease; Patient isolation; Product availability issue; Product distribution issue; Product supply issue; Pyrexia; Quarantine; SARS-CoV-1 test; SARS-CoV-1 test negative; SARS-CoV-1 test positive	• Most frequently reported relevant PTs (>1 occurrence) included: Pyrexia (503), Ageusia (30), Herpes zoster and Oral herpes (9 each), Inflammation (7) and Herpes virus infection (2); • Relevant event onset latency (n = 416): Range from <24 hours to 31 days, median 1 day; • Relevant events outcome[e]: resolved/resolving (249), resolved with sequelae (2), not resolved (143) and unknown (171). No new significant safety information was identified based on a review of these cases.
Pregnancy Related AESIs *Search criteria: PTs Amniotic cavity infection; Caesarean section; Congenital anomaly; Death neonatal; Eclampsia; Foetal distress syndrome; Low birth weight baby; Maternal exposure during pregnancy; Placenta praevia; Pre-eclampsia; Premature labour; Stillbirth; Uterine rupture; Vasa praevia*	For relevant cases, please refer to the subsection *Use in Pregnancy and While Breast Feeding* in Table 8.
Renal AESIs *Search criteria: PTs Acute kidney injury; Renal failure.*	No cases.
Respiratory AESIs *Search criteria: Lower respiratory tract infections NEC (HLT) (Primary Path) OR Respiratory failures (excl neonatal) (HLT) (Primary Path) OR Viral lower respiratory tract infections (HLT) (Primary Path) OR PTs: Acute respiratory distress syndrome; Endotracheal intubation; Hypoxia; Pulmonary haemorrhage; Respiratory disorder; Severe acute respiratory syndrome*	• Number of cases: 2 cases (0.06% of the total PM dataset) medically confirmed; • Country of incidence: US; • Number of relevant events: 2 serious events (relevant PT: Hypoxia), with onset latency respectively of <24 hours and 3 days, both with outcome of not resolved. One of these 2 cases was also reviewed among the potential relevant cases for the Risk 'VAED Including VAERD' in Table 5. No new significant safety information was identified based on a review of these cases.
Thromboembolic Events *Search criteria: Embolism and thrombosis (HLGT) (Primary Path) OR PTs Deep vein thrombosis; Disseminated intravascular coagulation; Embolism; Embolism venous; Pulmonary embolism*	• Number of cases: 1 case (0.03% of the total PM dataset), medically confirmed; • Country of incidence: US; • Number of relevant events: 1 serious event (relevant PT: Pulmonary embolism), with onset latency of 3 days and outcome of unknown. No new significant safety information was identified based on a review of this case.
Vasculitic Events	No cases.

Table 6. AESIs Evaluation for BNT162b2

AESIs[a] Category	Post-Marketing Cases Evaluation[f] Total Number of Cases in the Reporting Period (N=3615)
Search criteria: Vasculitides HLT (Primary Path) OR PTs Kawasaki's disease; Microangiopathy; Peripheral ischaemia	

a. For the complete list of the AESIs, please refer to Appendix 5;
b. An additional case reporting the PT Congenital anomaly has been excluded from the analysis since re-evaluated upon review as invalid due to no adverse event; the case was accordingly invalidated in the safety database after DLP. In 5 additional cases the PT Maternal exposure during pregnancy was captured after DLP, please refer to Table 8, *Use in Pregnancy and While Breast Feeding*;
c. Two additional cases reporting the PT Facial paralysis have been excluded from the analysis since re-evaluated upon review as invalid as the reporter had no first-hand knowledge of the event; the cases were accordingly invalidated in the safety database after DLP;
d. A double episode of Arthralgia was reported with different clinical outcome in 2 cases hence the sum of the events outcome exceeds the total number of PT events;
e. A double episode of Pyrexia was reported with different clinical outcome in 2 cases hence the sum of the events outcome exceeds the total number of PT events;
f. Please note that this corresponds to evidence from post-EUA/conditional marketing authorisation approval data sources;
g. Cases reporting the PT Guillain-Barre syndrome overlapping in this category were described in the Neurological category;
h. The patient was vaccinated in the US.

8.5.3. Evaluation of Special Situations

Table 7 below presents the evaluation of new information received during the current reporting period from post-marketing data sources[5] for BNT162b2 in relation to special situations (Death, Lack of Efficacy and Vaccine Interactions).

Table 7. Evaluation of Special Situations for BNT162b2

Topic	Post-Marketing Cases Evaluation[a] Total Number of Cases in the Reporting Period (N=3615)
Death	• Number of fatal cases: 10 (0.3% of the total PM dataset) of which 7 were medically confirmed and 3 non-medically confirmed; • Country of incidence: Israel (3), UK and US (2 each) and Cyprus, Sweden and Switzerland (1 each); • Patient's Gender: females (3), males (4), unknown (3); • Patients' Age: 41 to 95 years (n = 8), mean = 74.3, median = 79; • Adults (3), Elderly (7); • Relevant causes of death: Death (5), Cardiac arrest (3), Cardiac failure, Diarrhoea and Myocardial infarction (1 each); for 1 patient both Cardiac arrest and Cardiac failure were reported as causes of death; • Out of 10 cases: o 5 cases involved frail patients with co-morbidities (4) and an immunocompromised patient (1) (see also Table 8, *respective subsections*); o 1 case involved a 63-year-old male patient treated with atenolol and chlorthalidone due to underlying hypertension who died due to myocardial infarction;

Table 7. Evaluation of Special Situations for BNT162b2

Topic	Post-Marketing Cases Evaluation[a] Total Number of Cases in the Reporting Period (N=3615)
	○ 4 cases in which a meaningful assessment was precluded by the limited information provided (cause of death was unknown in 3 cases, while diarrhea with unknown onset latency and fatal outcome was reported in the remaining case). Please see Appendix 5.1 for Observed versus Expected analysis of Death. No new significant safety information was identified based on a review of these cases and of the Observed versus Expected analysis (see Appendix 5.1).
Lack of Efficacy	• Number of cases: 134 (3.7%) of which 105 were medically confirmed and 29 non-medically confirmed; • Country of incidence: US (118), UK (14), Canada and Israel (1 each); • Case outcome: resolved/resolving (8), not resolved (25) and unknown (101);[19] • There were 55 cases in which physicians, pharmacists, nurses and hospital workers reported about themselves; • Number of lack of efficacy events: 134; • PTs indicative of lack of therapeutic efficacy included: Drug ineffective (132), Therapeutic product ineffective and Vaccination failure (1 each);[20] • Lack of efficacy seriousness: serious (91), non-serious (43)[21]; seriousness criterion was important medical event (91), hospitalization (2) and life-threatening, disability or permanent damage (1 each); there were 73 serious events medically confirmed; • Lack of efficacy term was reported in 69 cases after the 1st dose of the vaccine, while in the remaining cases it was unknown after which dose the lack of efficacy was reported. According to the EU SmPC and EUA PI, individuals may not be fully protected until 7 days after their second dose of vaccine, therefore for the above 69 cases, the reported events may represent signs and symptoms of intercurrent and not earlier diagnosed COVID-19 infection or infection in an individual who has not become immune due to an incomplete vaccination regimen rather than vaccine ineffectiveness; • Latency of the events was known for 83 events: 66 patients were COVID-19 positive within the 7th day after vaccination (in 38 cases after the 1st dose); 14 patients were COVID-19 positive from 8 to 13 days after the 1st dose of the vaccine; in the last 3 cases, individuals were COVID positive at the 8th and 9th day after vaccination (dose number unknown). No new significant safety information was identified based on a review of these cases.
Vaccine Interactions	• Number of cases: 1 (0.03%) serious and medically confirmed, involving a 33-year-old female patient; • Country of incidence: UK;

[19] As per case processing procedure, in the vaccine lack of effect cases, the reported vaccine preventable illness (e.g., Covid-19 infection) and the Lack of effect term (Drug Ineffective) are linked and dates, outcomes and listedness, are the same for both events. So, outcome refers to the recovery from the vaccine preventable illness.

[20] After DLP, the 2 PTs Therapeutic product ineffective and Vaccination failure were recoded as Drug ineffective.

[21] Event seriousness of PTs indicative of possible lack of therapeutic effect captured at the DLP, was upgraded to serious as per case processing convention at completion of the case.

Table 7. Evaluation of Special Situations for BNT162b2

Topic	Post-Marketing Cases Evaluation[a] Total Number of Cases in the Reporting Period (N=3615)
	• Relevant reported interaction PT: Alcohol interaction; • Co-reported events coded to the PTs: Diarrhoea, Headache; • Case outcome: not resolved. No new significant safety information was identified based on a review of this case.

a. Please note that this corresponds to evidence from post-EUA/conditional marketing authorisation approval data sources.

8.5.4. Evaluation of Missing Information

Table 8 below summarises the evaluation of new information received during the current reporting period from post-marketing data sources[5] in relation to the Missing information associated with the use of BNT162b2.

Table 8. Evaluation of Missing Information for BNT162b2

Missing Information	Post-Marketing Cases Evaluation[a] Total Number of Cases in the Reporting Period (N=3615)

Use in Pregnancy and While Breast Feeding[b]	• Number of cases: 67[k] (1.9% of the total PM dataset) of which 42 medically confirmed and 25 non-medically confirmed;
	• Country of incidence: US (62), Israel (3) and Portugal and UK (1 each).
	Pregnancy cases: 28 cases including:
	• 26 cases indicative of exposure to vaccine during pregnancy [relevant PT events Maternal exposure during pregnancy (21), Exposure during pregnancy (3) and Maternal exposure timing unspecified (2)[l]], of which:
	  • 17 cases reporting exposure in utero only without the occurrence of any clinical event;
	  • 9 cases, all non-serious, reporting overall 12 additional clinical events, which occurred in the vaccinated mothers; these events encoded to the PTs Vaccination site pain (4), Headache and Pain in extremity (2 each), Bloody discharge, Myalgia, Pain and Rhinorrhoea (1 each);
	• 2 additional cases reporting off-label prescription to pregnant women (vaccine not administered yet).
	
	Breast Feeding baby cases[j]: 39, of which:
	  • 35 cases reporting exposure to vaccine during breastfeeding without the occurrence of any clinical event;
	  • 4 cases, all non-serious, reporting overall 12 additional clinical events occurred, all as single occurrences, in the patients exposed to vaccine via breastfeeding; these events encoded to the PTs: Abdominal discomfort, Decreased appetite, Hypersensitivity, Illness, Infantile vomiting, Infant irritability, Insomnia, Irritability, Lethargy, Pyrexia, Rash and Vomiting.
	
	No new significant safety information was identified based on a review of these cases.

Use in Immunocompromised Patients[c,e,h]	• Number of cases: 61 (1.7% of the total PM dataset) of which 42 were medically confirmed and 19 non-medically confirmed; • Case Seriousness: Serious (11), Non-Serious (50);

Table 8. Evaluation of Missing Information for BNT162b2

	• Country of incidence: US (43), UK (14), Israel (2), Canada and Puerto Rico (1 each); • Gender: Females (50) and Males (11); • Age (n = 58) ranged from 23 to 88 years, mean = 53.2, median = 55.5; • Relevant patients' medical histories most frequently reported (>2 cases) coded to the PTs: Breast cancer (13), Radiotherapy (7), Thyroidectomy, Prostate cancer, Chemotherapy, Breast conserving surgery and Breast cancer female (4 each) and Neoplasm malignant, Immunodeficiency, Hysterectomy and Cervix carcinoma (3 each); • Of the 279 clinical events overall reported, the most frequent (>2 occurrences) coded to the PTs: Headache (19), Nausea and Pyrexia (14 each), Chills and Fatigue (12 each), Pain and Pain in extremity (10 each), Malaise (8), Arthralgia and Myalgia (7 each), Cough and Dizziness (6 each), Flushing and Oropharyngeal pain (5 each), Asthenia, Chest discomfort, Heart rate increased, Lymphadenopathy and Vomiting (4 each), Dysgeusia, Throat tightness and Vaccination site pain (3 each); • Case outcome: fatal (1, see Table 7, *Death*), resolved/resolving (22), resolved with sequelae (2), not resolved (23), unknown (13). • The fatal case involved a 61-year-old male patient who died due to an unknown cause of death 4 days after having received the vaccine. Of note the patient, a very heavy smoker for almost 50 years, with medical history of emphysema and tumor resection in the bladder, did not have any complaints in the days following the vaccination. Overall, the review of these cases did not reveal any new safety information in immunocompromised patients that has not been identified in the overall population.
Use in Patients With Autoimmune or Inflammatory Disorders[c,f,h]	• Number of cases: 235 (6.5% of the total PM dataset) of which 180 were medically confirmed and 55 non-medically confirmed; • Case Seriousness: Serious (55), Non-Serious (180); • Country of incidence: US (181), UK (48), Puerto Rico (2), Hungary, Mexico, Portugal and United Arab Emirates (1 each); • Gender: Females (207), Males (26) and Unknown (2); • Age (n = 227) ranged from 22 to 93 years, mean = 46.3, median = 47; • Relevant patients' medical histories most frequently reported (>4 cases) coded to the PTs: Hypothyroidism (69), Rheumatoid arthritis (22), Autoimmune thyroiditis (17), Arthritis (16), Colitis ulcerative (11), Psoriasis and Type 1 diabetes mellitus (10 each), Coeliac disease (9), Multiple sclerosis, Chron's disease and Thyroid disorder (8 each), Raynaud's phenomenon (7) and Autoimmune disorder, Basedow's disease, Hyperthyroidism and Psoriatic arthropathy (5 each); • Of the 1005 events overall reported, the most frequent (>20 occurrences) coded to the PTs: Headache (68), Fatigue (43), Pyrexia (42), Nausea (35), Chills (33), Dizziness (32), Myalgia (29), Arthralgia and Pain (28), Pain in extremity (27) and Vaccination site pain (26); • Case outcome: resolved/resolving (127), resolved with sequelae (2), not resolved (78) and unknown (28). Overall, the review of these cases did not reveal any new safety information in patients with autoimmune or inflammatory disorders that has not been identified in the overall population.

Table 8. Evaluation of Missing Information for BNT162b2

Use in Frail Patients With Co-morbidities (e.g. COPD, Diabetes, Chronic Neurological Disease, Cardiovascular Disorders)[c,g,h]	• Number of cases: 274 (7.6% of the total PM dataset) of which 197 were medically confirmed and 77 non-medically confirmed; • Case Seriousness: Serious (69), Non-Serious (205); • Country of incidence: US (184), UK (82), Israel (4), Puerto Rico (2) and Germany and Switzerland (1 each); • Gender: Females (211), Males (61) and Unknown (2); • Age (n = 269) ranged from 3 to 93 years, mean = 48.8, median = 49; • Relevant patients' medical histories most frequently reported (>4 cases) coded to the PTs: Asthma (157), Diabetes mellitus (55), Type 2 diabetes mellitus (26), COPD (7), Dementia and Chronic kidney disease (6 each) and Pulmonary embolism (5); • Of the 1182 events overall reported, the most frequent (>20 occurrences) coded to the PTs: Headache (77), Fatigue (59), Chills, Nausea and Pyrexia (46 each), Vaccination site pain (35), Dizziness (32), Myalgia, Pain and Pain extremity (28 each), Malaise (27), Arthralgia (23) and Diarrhoea (21); • Case outcome: fatal (4, see Table 7 *Death* and Table 5 *Anaphylaxis*), resolved/resolving (130), resolved with sequelae (6), not resolved (92) and unknown (42); • Fatal cases involved: o A 41-year-old female patient with severe cardiac and pulmonary history who died due to cardiac arrest; o A 74-year-old male patient with medical history of heart attacks, active heart disease and malignancy who died due to cardiac arrest and cardiac failure; o Two elderly female patients respectively of 84 years and of 91 years with medical history of dementia who died due to an unknown cause of death. Overall, the review of these cases did not reveal any new safety information in frail patients with co-morbidities that has not been identified in the overall population.
Interaction With Other Vaccines[c]	There were no cases reporting an interaction with other vaccines during the reporting interval (please refer to Table 7, *Vaccine Interactions).*
Long-Term Safety Data[c]	Not applicable
Use in Paediatric Individuals <16 Years of Age[d]	• Number of cases: 3 (0.08% of the total PM dataset), all medically confirmed, and indicative of erroneous administration in paediatric subjects <16 Years of Age (relevant PT Product administered to patient of inappropriate age[i], see Section 7 *Medication Errors*); • Country of incidence: UK (2) and US (1). • Cases Seriousness: Serious (1), Non-Serious (2); • Gender: Females (3); Patients' Age: 22 months, 3 years and 4 years; • Eight events overall co-reported, all as single occurrences, encoded to PTs Abdominal pain upper, Fatigue, Feeling of body temperature change, Flushing, Headache, Malaise, Pruritus, Vaginal infection; • Case outcome: resolved/resolving (2) and not resolved (1). No new significant safety information was identified based on a review of these cases.
Vaccine effectiveness[d]	Relevant cases for vaccine effectiveness during the reporting interval are reviewed in Table 7, *Lack of Efficacy*.

a. Please note that this corresponds to evidence from post-EUA/conditional marketing authorisation approval data sources;

Table 8. Evaluation of Missing Information for BNT162b2

b. Missing information as per both the EU-RMP Version 1.0, dated 21 December 2020 and the US PVP, Version 0.2, dated 05 December 2020;
c. Missing information as per the EU-RMP Version 1.0, dated 21 December 2020;
d. Missing information as per the US PVP, Version 0.2, dated 05 December 2020;
e. Search criteria: Patients with Medical history of PTs included in SMQ Malignancy related conditions (Narrow and Broad); SMQ Malignancy related therapeutic and diagnostic procedures; SMQ Malignant or unspecified tumours; HLGT Immunodeficiency syndromes (Primary Path); HLT Retroviral infections (Primary Path); or of PTs Heart transplant; Pancreas islet cell transplant; Small intestine transplant; Allogenic bone marrow transplantation therapy; Allogenic stem cell transplantation; Autologous bone marrow transplantation therapy; Autologous haematopoietic stem cell transplant; Cord blood transplant therapy; Bone marrow transplant; Stem cell transplant; Liver transplant; Renal transplant; Lung transplant;
f. Search Criteria: Patients with Medical history of PTs included in HLGT Autoimmune disorders (Primary Path); Immune disorders NEC (Primary Path); in HLT Neuromuscular junction dysfunction (Primary Path); in SMQ Immune-mediated/autoimmune disorders (Narrow and Broad);
g. Search Criteria: Patients with Medical history of PTs included in HLGTs (Primary Path when applicable) Bronchial disorders (excl neoplasms), Heart failures, Mental impairment disorders, Movement disorders (incl parkinsonism), Nephropathies, Pulmonary vascular disorders and Renal disorders (excl nephropathies) and in HLTs (Primary Path when applicable) Autonomic nervous system disorders, Diabetes mellitus (incl subtypes), Hepatic failure and associated disorders, Hepatic fibrosis and cirrhosis, Motor neurone diseases, Muscle tone abnormal, Neuromuscular disorders NEC, Pulmonary hypertensions, Respiratory failures (excl. neonatal);
h. One hundred and thirty-three cases, retrieved applying the established Search criteria but overlapping among the 3 different categories (Immunocompromised, Autoimmune/Inflammatory, Frail Patients with Co-morbidities), were discussed only once in the category for which they were evaluated to be more consistent;
i. Appropriate Medication Error PT Product administered to patient of inappropriate age added in 2 out of these 3 cases after DLP;
j. In 2 cases the appropriate PT Exposure via breast milk was coded after the DLP in place of the initial incorrectly coded PT Foetal exposure timing unspecified;
k. An additional case reporting the PT Congenital anomaly has been excluded from the analysis since re-evaluated upon review as invalid due to no adverse event; the case was accordingly invalidated in the safety database after DLP.
l. All the events indicative of vaccine exposure during pregnancy (Exposure during pregnancy and Maternal exposure timing unspecified) were re-coded to the unique PT Maternal exposure during pregnancy in the safety database after DLP.

9. OVERALL BENEFIT-RISK EVALUATION

9.1. Benefits

BNT162b2 is indicated for active immunisation to prevent COVID-19 caused by SARS-CoV-2 virus, in individuals 16 years of age and older.

In the Phase 2/3 portion, approximately 44,000 participants were randomised equally and were to receive 2 doses of COVID-19 mRNA Vaccine or placebo (normal saline) separated by 21 days. The efficacy analyses included participants that received their second vaccination within 19 to 42 days after their first vaccination. Participants are planned to be followed for up to 24 months after Dose 2, for assessments of safety and efficacy against COVID-19.

The population for the analysis of the primary efficacy endpoint included 36,621 participants 12 years of age and older (18,242 in the COVID-19 mRNA Vaccine group and 18,379 in the placebo group) who did not have evidence of prior infection with SARS-CoV-2 through 7 days after the second dose. In addition, 134 participants were between the ages of 16 to 17 years of age (66 in the COVID-19 mRNA Vaccine group and 68 in the placebo group) and 1616 participants 75 years of age and older (804 in the COVID-19 mRNA Vaccine group and 812 in the placebo group).

At the time of the primary efficacy analysis, participants had been followed for symptomatic COVID-19 for in total 2,214 person-years for the COVID-19 mRNA Vaccine and in total 2,222 person-years in the placebo group. There were no meaningful clinical differences in overall vaccine efficacy in participants who were at risk of severe COVID-19 including those with 1 or more comorbidities that increase the risk of severe COVID-19 (e.g. asthma, body mass index (BMI) ≥ 30 kg/m2, chronic pulmonary disease, diabetes mellitus, hypertension).

The vaccine efficacy information is presented in Table 9.

Table 9. Vaccine efficacy – First COVID-19 occurrence from 7 days after Dose 2, by age subgroup – participants without evidence of infection prior to 7 days after Dose 2 – evaluable efficacy (7 days) population

First COVID-19 occurrence from 7 days after Dose 2 in participants without evidence of prior SARS-CoV-2 infection*			
Subgroup	**COVID-19 mRNA Vaccine** **N[a] = 18,198** **Cases** n1[b] Surveillance time[c] (n2[d])	**Placebo** **N[a] = 18,325** **Cases** n1[b] Surveillance time[c] (n2[d])	**Vaccine efficacy** % (95% CI)[f]
All subjects[e]	8 2.214 (17,411)	162 2.222 (17,511)	95.0 (90.0, 97.9)
16 to 64 years	7 1.706 (13,549)	143 1.710 (13,618)	95.1 (89.6, 98.1)
65 years and older	1 0.508 (3848)	19 0.511 (3880)	94.7 (66.7, 99.9)
65 to 74 years	1 0.406 (3074)	14 0.406 (3095)	92.9 (53.1, 99.8)
75 years and older	0 0.102 (774)	5 0.106 (785)	100.0 (-13.1, 100.0)

Note: Confirmed cases were determined by Reverse Transcription-Polymerase Chain Reaction (RT-PCR) and at least 1 symptom consistent with COVID-19 [*Case definition: (at least 1 of) fever, new or increased cough, new or increased shortness of breath, chills, new or increased muscle pain, new loss of taste or smell, sore throat, diarrhoea or vomiting.]

* Participants who had no serological or virological evidence (prior to 7 days after receipt of the last dose) of past SARS-CoV-2 infection (i.e., N-binding antibody [serum] negative at Visit 1 and SARS-CoV-2 not detected by nucleic acid amplification tests (NAAT) [nasal swab] at Visits 1 and 2), and had negative NAAT (nasal swab) at any unscheduled visit prior to 7 days after Dose 2 were included in the analysis.

a. N = number of participants in the specified group.
b. n1 = Number of participants meeting the endpoint definition.
c. Total surveillance time in 1000 person-years for the given endpoint across all subjects within each group at risk for the endpoint. Time period for COVID-19 case accrual is from 7 days after Dose 2 to the end of the surveillance period.
d. n2 = Number of subjects at risk for the endpoint.
e. No confirmed cases were identified in participants 12 to 15 years of age.
f. Confidence interval (CI) for vaccine efficacy is derived based on the Clopper and Pearson method adjusted to the surveillance time. CI not adjusted for multiplicity.

In the second primary analysis, compared to placebo, efficacy of COVID-19 mRNA Vaccine in participants from first COVID-19 occurrence from 7 days after Dose 2 compared to participants with or without evidence of prior infection with SARS-CoV-2 was 94.6% (95% credible interval of 89.9% to 97.3%) in participants 16 years of age and older.

Additionally, subgroup analyses of the primary efficacy endpoint showed similar efficacy point estimates across genders, racial and ethnic groups, and participants with medical comorbidities associated with high risk of severe COVID-19.

9.2. Risks

An assessment of the important risks, identified and potential, was performed using the following data sources: post-EUA/conditional marketing authorisation approval experience, and literature as applicable. Interval findings are summarized in Table 5. A review of signals identified, evaluated, closed and ongoing was presented (see Table 3, Appendix 3 and Appendix 3.1).

Based on pharmacovigilance monitoring activities, since first authorisation, anaphylaxis has been recognised as an important identified risk. Facial paralysis, pain in extremity, insomnia, injection site pruritus and hypersensitivity (less severe than anaphylaxis) were included as Identified Risks (not important) in the EU SmPC as adverse reactions in Section 4.8 at the request of the EMA at the time of conditional approval of the vaccine; the relevant signals are currently undergoing evaluation to determine if they will be included as adverse reactions in the EUA PI and CDS.

Based on all available safety and efficacy data for BNT162b2 the benefit-risk profile of the vaccine remains favorable.

9.3. Overall Benefit-Risk

The identified risks associated with the use of BNT162b2 are minimized through provision of relevant product information in the RSI to support safe use of the product. Risks have been evaluated in the context of the enumerated benefits of the product. Based on the available safety and efficacy data for BNT162b2, the overall benefit-risk profile of BNT162b2 remains favourable.

10. CONCLUSION AND ACTIONS

The MAH will continue to review the safety of BNT162b2, including all reports of adverse experiences and will revise the product documents if an evaluation of the safety data yields significant new information.

ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

▼This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions. See section 4.8 for how to report adverse reactions.

1. NAME OF THE MEDICINAL PRODUCT

Comirnaty concentrate for dispersion for injection
COVID-19 mRNA Vaccine (nucleoside modified)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

This is a multidose vial and must be diluted before use.

One vial (0.45 mL) contains 5 doses of 0.3 mL after dilution.

1 dose (0.3 mL) contains 30 micrograms of COVID-19 mRNA Vaccine (embedded in lipid nanoparticles).

Single-stranded, 5'-capped messenger RNA (mRNA) produced using a cell-free *in vitro* transcription from the corresponding DNA templates, encoding the viral spike (S) protein of SARS-CoV-2.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Concentrate for dispersion for injection (sterile concentrate).
The vaccine is a white to off-white frozen dispersion (pH: 6.9 - 7.9).

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Comirnaty is indicated for active immunisation to prevent COVID-19 caused by SARS-CoV-2 virus, in individuals 16 years of age and older.

The use of this vaccine should be in accordance with official recommendations.

4.2 Posology and method of administration

Posology

Individuals 16 years of age and older
Comirnaty is administered intramuscularly after dilution as a course of 2 doses (0.3 mL each) at least 21 days apart (see sections 4.4 and 5.1).

There are no data available on the interchangeability of Comirnaty with other COVID-19 vaccines to complete the vaccination course. Individuals who have received 1 dose of Comirnaty should receive a second dose of Comirnaty to complete the vaccination course.

Paediatric population
The safety and efficacy of Comirnaty in children and adolescents aged less than 16 years of age have not yet been established. Limited data are available.

Elderly population
No dosage adjustment is required in elderly individuals ≥ 65 years of age.

Method of administration

Comirnaty should be administered intramuscularly.

The preferred site is the deltoid muscle of the upper arm.

Do not inject the vaccine intravascularly, subcutaneously or intradermally.

The vaccine should not be mixed in the same syringe with any other vaccines or medicinal products.

For precautions to be taken before administering the vaccine, see section 4.4.

For instructions regarding thawing, handling and disposal of the vaccine, see section 6.6.

4.3 Contraindications

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Traceability

In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded.

General recommendations

Hypersensitivity and anaphylaxis

Events of anaphylaxis have been reported. Appropriate medical treatment and supervision should always be readily available in case of an anaphylactic reaction following the administration of the vaccine.

Close observation for at least 15 minutes is recommended following vaccination. A second dose of the vaccine should not be given to those who have experienced anaphylaxis to the first dose of Comirnaty.

Anxiety-related reactions

Anxiety-related reactions, including vasovagal reactions (syncope), hyperventilation or stress-related reactions may occur in association with vaccination as a psychogenic response to the needle injection. It is important that precautions are in place to avoid injury from fainting.

Concurrent illness

Vaccination should be postponed in individuals suffering from acute severe febrile illness or acute infection. The presence of a minor infection and/or low-grade fever should not delay vaccination.

Thrombocytopenia and coagulation disorders

As with other intramuscular injections, the vaccine should be given with caution in individuals receiving anticoagulant therapy or those with thrombocytopenia or any coagulation disorder (such as haemophilia) because bleeding or bruising may occur following an intramuscular administration in these individuals.

Immunocompromised individuals

The efficacy, safety and immunogenicity of the vaccine has not been assessed in immunocompromised individuals, including those receiving immunosuppressant therapy. The efficacy of Comirnaty may be lower in immunosuppressed individuals.

Duration of protection

The duration of protection afforded by the vaccine is unknown as it is still being determined by ongoing clinical trials.

Limitations of vaccine effectiveness

As with any vaccine, vaccination with Comirnaty may not protect all vaccine recipients. Individuals may not be fully protected until 7 days after their second dose of vaccine.

Excipients:

This vaccine contains less than 1 mmol potassium (39 mg) per dose, that is to say essentially 'potassium-free'.

This vaccine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

4.5 Interaction with other medicinal products and other forms of interaction

No interaction studies have been performed.

Concomitant administration of Comirnaty with other vaccines has not been studied.

4.6 Fertility, pregnancy and lactation

Pregnancy

There is limited experience with use of Comirnaty in pregnant women. Animal studies do not indicate direct or indirect harmful effects with respect to pregnancy, embryo/foetal development, parturition or post-natal development (see section 5.3). Administration of Comirnaty in pregnancy should only be considered when the potential benefits outweigh any potential risks for the mother and foetus.

Breast-feeding

It is unknown whether Comirnaty is excreted in human milk.

Fertility

Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity (see section 5.3)

4.7 Effects on ability to drive and use machines

Comirnaty has no or negligible influence on the ability to drive and use machines. However, some of the effects mentioned under section 4.8 may temporarily affect the ability to drive or use machines.

4.8 Undesirable effects

Summary of safety profile

The safety of Comirnaty was evaluated in participants 16 years of age and older in 2 clinical studies that included 21,744 participants that have received at least one dose of Comirnaty.

In Study 2, a total of 21,720 participants 16 years of age or older received at least 1 dose of Comirnaty and a total of 21,728 participants 16 years of age or older received placebo (including 138 and 145 adolescents 16 and 17 years of age in the vaccine and placebo groups, respectively). A total of 20,519 participants 16 years of age or older received 2 doses of Comirnaty.

At the time of the analysis of Study 2, a total of 19,067 (9,531 Comirnaty and 9,536 placebo) participants 16 years of age or older were evaluated for safety for at least 2 months after the second dose of Comirnaty. This included a total of 10,727 (5,350 Comirnaty and 5,377 placebo) participants 16 to 55 years of age and a total of 8,340 (4,181 Comirnaty and 4,159 placebo) participants 56 years and older.

The most frequent adverse reactions in participants 16 years of age and older were injection site pain (> 80%), fatigue (> 60%), headache (> 50%), myalgia and chills (> 30%), arthralgia (> 20%), pyrexia and injection site swelling (> 10%) and were usually mild or moderate in intensity and resolved within a few days after vaccination. A slightly lower frequency of reactogenicity events was associated with greater age.

Tabulated list of adverse reactions from clinical studies
Adverse reactions observed during clinical studies are listed below according to the following frequency categories:

Very common (≥ 1/10),
Common (≥ 1/100 to < 1/10),
Uncommon (≥ 1/1,000 to < 1/100),
Rare (≥ 1/10,000 to < 1/1,000),
Very rare (< 1/10,000),
Not known (cannot be estimated from the available data).

Table 1: Adverse reactions from Comirnaty clinical trials

System Organ Class	Very common (≥ 1/10)	Common (≥ 1/100 to < 1/10)	Uncommon (≥ 1/1,000 to < 1/100)	Rare (≥ 1/10,000 to < 1/1,000)	Not known (cannot be estimated from the available data)
Blood and lymphatic system disorders			Lymphadenopathy		
Immune system disorders					Anaphylaxis; hypersensitivity
Psychiatric disorders			Insomnia		

System Organ Class	Very common (≥ 1/10)	Common (≥ 1/100 to < 1/10)	Uncommon (≥ 1/1,000 to < 1/100)	Rare (≥ 1/10,000 to < 1/1,000)	Not known (cannot be estimated from the available data)
Nervous system disorders	Headache			Acute peripheral facial paralysis†	
Gastrointestinal disorders		Nausea			
Musculoskeletal and connective tissue disorders	Arthralgia; myalgia		Pain in extremity		
General disorders and administration site conditions	Injection site pain; fatigue; chills; pyrexia*; injection site swelling	Injection site redness	Malaise; injection site pruritus		

*A higher frequency of pyrexia was observed after the 2nd dose.
†Throughout the safety follow-up period to date, acute peripheral facial paralysis (or palsy) was reported by four participants in the COVID-19 mRNA Vaccine group. Onset was Day 37 after Dose 1 (participant did not receive Dose 2) and Days 3, 9, and 48 after Dose 2. No cases of acute peripheral facial paralysis (or palsy) were reported in the placebo group.

The safety profile in 545 subjects receiving Comirnaty, that were seropositive for SARS-CoV-2 at baseline, was similar to that seen in the general population.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V and include batch/Lot number if available.

4.9 Overdose

Overdose data is available from 52 study participants included in the clinical trial that due to an error in dilution received 58 micrograms of Comirnaty. The vaccine recipients did not report an increase in reactogenicity or adverse reactions.

In the event of overdose, monitoring of vital functions and possible symptomatic treatment is recommended.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: vaccines, ATC code: J07BX

Mechanism of action

The nucleoside-modified messenger RNA in Comirnaty is formulated in lipid nanoparticles, which enable delivery of the non replicating RNA into host cells to direct transient expression of the SARS-CoV-2 S antigen. The mRNA codes for membrane-anchored, full-length S with two point mutations within the central helix. Mutation of these two amino acids to proline locks S in an antigenically preferred prefusion conformation. The vaccine elicits both neutralizing antibody and cellular immune responses to the spike (S) antigen, which may contribute to protection against COVID-19.

Efficacy

Study 2 is a multicentre, multinational, Phase 1/2/3 randomised, placebo-controlled, observer-blind dose-finding, vaccine candidate selection and efficacy study in participants 12 years of age and older. Randomisation was stratified by age: 12 through 15 years of age, 16 through 55 years of age, or 56 years of age and older, with a minimum of 40% of participants in the ≥ 56-year stratum. The study excluded participants who were immunocompromised and those who had previous clinical or microbiological diagnosis of COVID-19. Participants with pre-existing stable disease, defined as disease not requiring significant change in therapy or hospitalization for worsening disease during the 6 weeks before enrolment, were included as were participants with known stable infection with human immunodeficiency virus (HIV), hepatitis C virus (HCV) or hepatitis B virus (HBV). At the time of the analysis of Study 2, information presented is based on participants 16 years and older.

Efficacy in participants 16 years of age and older

In the Phase 2/3 portion, approximately 44,000 participants were randomised equally and were to receive 2 doses of COVID-19 mRNA Vaccine or placebo separated by 21 days. The efficacy analyses included participants that received their second vaccination within 19 to 42 days after their first vaccination. Participants are planned to be followed for up to 24 months after Dose 2, for assessments of safety and efficacy against COVID-19. In the clinical study, participants were required to observe a minimum interval of 14 days before and after administration of an influenza vaccine in order to receive either placebo or COVID-19 mRNA Vaccine. In the clinical study, participants were required to observe a minimum interval of 60 days before or after receipt of blood/plasma products or immunoglobulins within through conclusion of the study in order to receive either placebo or COVID-19 mRNA Vaccine.

The population for the analysis of the primary efficacy endpoint included, 36,621 participants 12 years of age and older (18,242 in the COVID-19 mRNA Vaccine group and 18,379 in the placebo group) who did not have evidence of prior infection with SARS-CoV-2 through 7 days after the second dose. In addition, 134 participants were between the ages of 16 to 17 years of age (66 in the COVID-19 mRNA Vaccine group and 68 in the placebo group) and 1616 participants 75 years of age and older (804 in the COVID-19 mRNA Vaccine group and 812 in the placebo group).

Efficacy against COVID-19

At the time of the primary efficacy analysis, participants had been followed for symptomatic COVID-19 for in total 2,214 person-years for the COVID-19 mRNA Vaccine and in total 2,222 person-years in the placebo group.

There were no meaningful clinical differences in overall vaccine efficacy in participants who were at risk of severe COVID-19 including those with 1 or more comorbidities that increase the risk of severe

COVID-19 (e.g. asthma, body mass index (BMI) ≥ 30 kg/m^2, chronic pulmonary disease, diabetes mellitus, hypertension).

The vaccine efficacy information is presented in Table 2.

Table 2: Vaccine efficacy – First COVID-19 occurrence from 7 days after Dose 2, by age subgroup – participants without evidence of infection prior to 7 days after Dose 2 – evaluable efficacy (7 days) population

First COVID-19 occurrence from 7 days after Dose 2 in participants without evidence of prior SARS-CoV-2 infection*			
Subgroup	**COVID-19 mRNA Vaccine N[a] = 18,198 Cases** n1[b] Surveillance time[c] (n2[d])	**Placebo N[a] = 18,325 Cases** n1[b] Surveillance time[c] (n2[d])	**Vaccine efficacy** % (95% CI)[f]
All subjects[e]	8 2.214 (17,411)	162 2.222 (17,511)	95.0 (90.0, 97.9)
16 to 64 years	7 1.706 (13,549)	143 1.710 (13,618)	95.1 (89.6, 98.1)
65 years and older	1 0.508 (3848)	19 0.511 (3880)	94.7 (66.7, 99.9)
65 to 74 years	1 0.406 (3074)	14 0.406 (3095)	92.9 (53.1, 99.8)
75 years and older	0 0.102 (774)	5 0.106 (785)	100.0 (-13.1, 100.0)

Note: Confirmed cases were determined by Reverse Transcription-Polymerase Chain Reaction (RT-PCR) and at least 1 symptom consistent with COVID-19 [*Case definition: (at least 1 of) fever, new or increased cough, new or increased shortness of breath, chills, new or increased muscle pain, new loss of taste or smell, sore throat, diarrhoea or vomiting.]

* Participants who had no serological or virological evidence (prior to 7 days after receipt of the last dose) of past SARS-CoV-2 infection (i.e., N-binding antibody [serum] negative at Visit 1 and SARS-CoV-2 not detected by nucleic acid amplification tests (NAAT) [nasal swab] at Visits 1 and 2), and had negative NAAT (nasal swab) at any unscheduled visit prior to 7 days after Dose 2 were included in the analysis.

a. N = number of participants in the specified group.
b. n1 = Number of participants meeting the endpoint definition.
c. Total surveillance time in 1000 person-years for the given endpoint across all subjects within each group at risk for the endpoint. Time period for COVID-19 case accrual is from 7 days after Dose 2 to the end of the surveillance period.
d. n2 = Number of subjects at risk for the endpoint.
e. No confirmed cases were identified in participants 12 to 15 years of age.
f. Confidence interval (CI) for vaccine efficacy is derived based on the Clopper and Pearson method adjusted to the surveillance time. CI not adjusted for multiplicity.

In the second primary analysis, compared to placebo, efficacy of COVID-19 mRNA Vaccine in participants from first COVID-19 occurrence from 7 days after Dose 2 compared to participants with or without evidence of prior infection with SARS-CoV-2 was 94.6% (95% credible interval of 89.9% to 97.3%) in participants 16 years of age and older.

Additionally, subgroup analyses of the primary efficacy endpoint showed similar efficacy point estimates across genders, racial and ethnic groups, and participants with medical comorbidities associated with high risk of severe COVID-19.

Paediatric population

The European Medicines Agency has deferred the obligation to submit the results of studies with Comirnaty in the paediatric population in prevention of COVID-19 (see section 4.2 for information on paediatric use).

This medicinal product has been authorised under a so-called 'conditional approval' scheme. This means that further evidence on this medicinal product is awaited. The European Medicines Agency will review new information on this medicinal product at least every year and this SmPC will be updated as necessary.

5.2 Pharmacokinetic properties

Not applicable.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of repeat dose toxicity and reproductive and developmental toxicity.

General toxicity
Rats intramuscularly administered Comirnaty (receiving 3 full human doses once weekly, generating relatively higher levels in rats due to body weight differences) demonstrated some injection site oedema and erythema and increases in white blood cells (including basophils and eosinophils) consistent with an inflammatory response as well as vacuolation of portal hepatocytes without evidence of liver injury. All effects were reversible.

Genotoxicity/Carcinogenicity
Neither genotoxicity nor carcinogenicity studies were performed. The components of the vaccine (lipids and mRNA) are not expected to have genotoxic potential.

Reproductive toxicity
Reproductive and developmental toxicity were investigated in rats in a combined fertility and developmental toxicity study where female rats were intramuscularly administered Comirnaty prior to mating and during gestation (receiving 4 full human doses that generate relatively higher levels in rat due to body weight differences, spanning between pre-mating day 21 and gestational day 20). SARS-CoV-2 neutralizing antibody responses were present in maternal animals from prior to mating to the end of the study on postnatal day 21 as well as in foetuses and offspring. There were no vaccine-related effects on female fertility, pregnancy, or embryo-foetal or offspring development. No Comirnaty data are available on vaccine placental transfer or excretion in milk.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate) (ALC-0315)
2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide (ALC-0159)
1,2-Distearoyl-sn-glycero-3-phosphocholine (DSPC)
Cholesterol
Potassium chloride
Potassium dihydrogen phosphate
Sodium chloride
Disodium phosphate dihydrate
Sucrose
Water for injections

6.2 Incompatibilities

This medicinal product must not be mixed with other medicinal products except those mentioned in section 6.6.

6.3 Shelf life

Unopened vial: 6 months at -90 °C to -60 °C'.

Once removed from the freezer, the unopened vaccine can be stored for up to 5 days at 2 °C to 8 °C, and up to 2 hours at temperatures up to 30 °C, prior to use.

Once thawed, the vaccine should not be re-frozen.

Closed-lid vial trays containing 195 vials removed from frozen storage (< -60 °C) may be at room temperature (< 25 °C) for up to 5 minutes for transfer between ultra-low-temperature environments. After vial trays are returned to frozen storage following room temperature exposure, they must remain in frozen storage for at least 2 hours before they can be removed again.

Diluted medicinal product

Chemical and physical in-use stability has been demonstrated for 6 hours at 2 ºC to 30 ºC after dilution in sodium chloride 9 mg/mL (0.9%) solution for injection. From a microbiological point of view, the product should be used immediately. If not used immediately, in-use storage times and conditions are the responsibility of the user.

6.4 Special precautions for storage

Store in a freezer at -90 °C to -60 °C.
Store in the original package in order to protect from light.
During storage, minimise exposure to room light, and avoid exposure to direct sunlight and ultraviolet light.
Thawed vials can be handled in room light conditions.

When you are ready to thaw or use the vaccine

- Open-lid vial trays, or vial trays containing less than 195 vials removed from frozen storage (< -60 °C) may be at room temperature (< 25 °C) for up to 3 minutes to remove vials or for transfer between ultra-low-temperature environments.
- Once a vial is removed from the vial tray, it should be thawed for use.
- After vial trays are returned to frozen storage following room temperature exposure, they must remain in frozen storage for at least 2 hours before they can be removed again.

For storage conditions after thawing and dilution of the medicinal product, see section 6.3.

6.5 Nature and contents of container

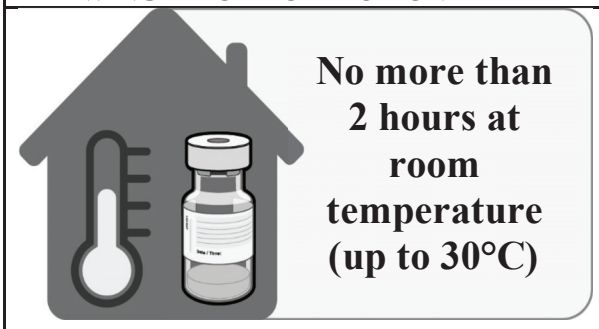
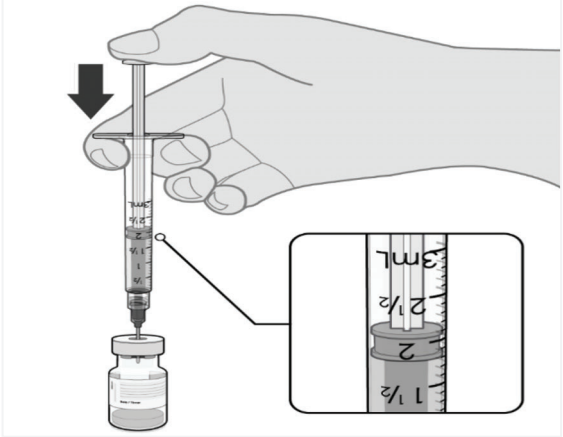
2 mL clear multidose vial (type I glass) with a stopper (synthetic bromobutyl rubber) and a flip-off plastic cap with aluminium seal. Each vial contains 5 doses.

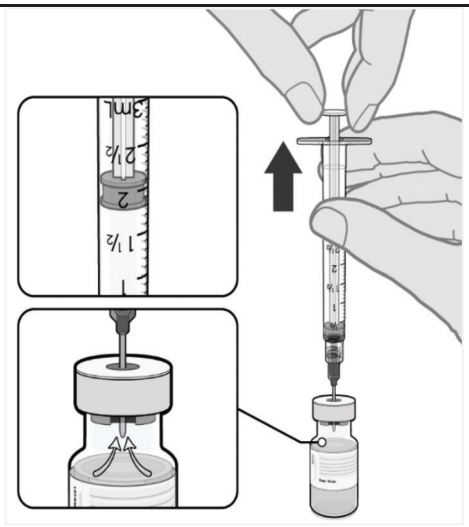
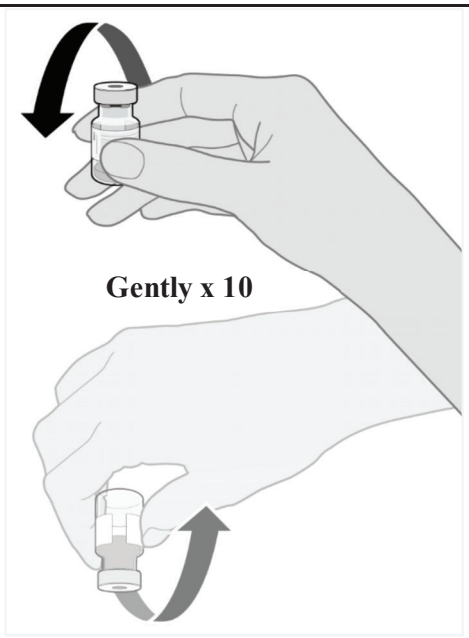
Pack size: 195 vials

6.6 Special precautions for disposal and other handling

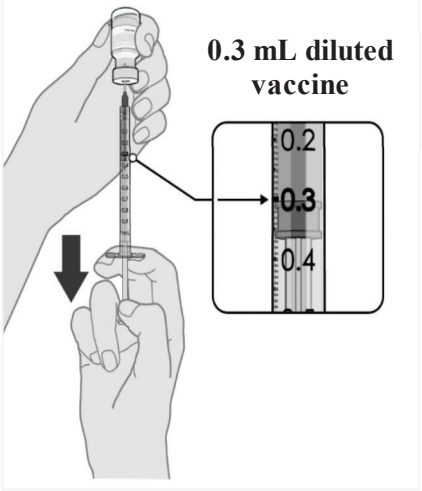
Handling instructions

Comirnaty should be prepared by a healthcare professional using aseptic technique to ensure the sterility of the prepared dispersion.

THAWING PRIOR TO DILUTION	
	• The multidose vial is stored frozen and must be thawed prior to dilution. Frozen vials should be transferred to an environment of 2 °C to 8 °C to thaw; a 195 vial pack may take 3 hours to thaw. Alternatively, frozen vials may also be thawed for 30 minutes at temperatures up to 30 °C for immediate use. • Allow the thawed vial to come to room temperature and gently invert it 10 times prior to dilution. Do not shake. • Prior to dilution, the thawed dispersion may contain white to off-white opaque amorphous particles.
DILUTION	
 **1.8 mL of 0.9% sodium chloride injection**	• The thawed vaccine must be diluted in its original vial with 1.8 mL sodium chloride 9 mg/mL (0.9%) solution for injection, using a 21 gauge or narrower needle and aseptic techniques.

 **Pull back plunger to 1.8 mL to remove air from vial**	• Equalise vial pressure before removing the needle from the vial stopper by withdrawing 1.8 mL air into the empty diluent syringe.
 **Gently x 10**	• Gently invert the diluted dispersion 10 times. Do not shake. • The diluted vaccine should present as an off-white dispersion with no particulates visible. Discard the diluted vaccine if particulates or discolouration are present.

<table>
<tr>
<td> 

Record appropriate date and time.
Use within 6 hours after dilution</td>
<td>• The diluted vials should be marked with the appropriate date and time.
• Do not freeze or shake the diluted dispersion. If refrigerated, allow the diluted dispersion to come to room temperature prior to use.</td>
</tr>
<tr>
<td colspan="2">PREPARATION OF INDIVIDUAL 0.3 mL DOSES OF COMIRNATY</td>
</tr>
<tr>
<td> 
</td>
<td>• After dilution, the vial contains 2.25 mL corresponding to 5 doses of 0.3 mL. Withdraw the required 0.3 mL dose of diluted vaccine using a sterile needle.
• Discard any unused vaccine within 6 hours after dilution.</td>
</tr>
</table>

Disposal

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

BioNTech Manufacturing GmbH
An der Goldgrube 12
55131 Mainz
Germany
Phone: +49 6131 90840
Fax: +49 6131 9084390
info@biontech.de

8. MARKETING AUTHORISATION NUMBER(S)

EU/1/20/1528

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: {DD month YYYY}

10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency http://www.ema.europa.eu.

ANNEX II

A. MANUFACTURERS OF THE BIOLOGICAL ACTIVE SUBSTANCES AND MANUFACTURERS RESPONSIBLE FOR BATCH RELEASE

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

E. SPECIFIC OBLIGATION TO COMPLETE POST-AUTHORISATION MEASURES FOR THE CONDITIONAL MARKETING AUTHORISATION

A. MANUFACTURERS OF THE BIOLOGICAL ACTIVE SUBSTANCES AND MANUFACTURERS RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturers of the biological active substance(s)
BioNTech Manufacturing GmbH
An der Goldgrube 12
55131 Mainz
Germany

Rentschler Biopharma SE
Erwin-Rentschler-Strasse 21
88471 Laupheim
Germany

Wyeth BioPharma Division of Wyeth Pharmaceuticals LLC
1 Burtt Road
Andover, MA 01810
USA

Name and address of the manufacturers responsible for batch release
BioNTech Manufacturing GmbH
Kupferbergterrasse 17 - 19
55116 Mainz
Germany

Pfizer Manufacturing Belgium NV
Rijksweg 12
2870 Puurs
Belgium

The printed package leaflet of the medicinal product must state the name and address of the manufacturer responsible for the release of the concerned batch.

In view of the declared Public Health Emergency of International Concern and in order to ensure early supply this medicinal product is subject to a time-limited exemption allowing reliance on batch control testing conducted in the registered site(s) that are located in a third country. This exemption ceases to be valid on 31 August 2021. Implementation of EU based batch control arrangements, including the necessary variations to the terms of the marketing authorisation, has to be completed by 31 August 2021 at the latest, in line with the agreed plan for this transfer of testing. Progress reports have to be submitted on 31 March 2021 and included in the annual renewal application.

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal product subject to medical prescription.

- **Official batch release**

In accordance with Article 114 of Directive 2001/83/EC, the official batch release will be undertaken by a state laboratory or a laboratory designated for that purpose.

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

- **Periodic safety update reports (PSURs)**

The requirements for submission of PSURs for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines web-portal.

The marketing authorisation holder (MAH) shall submit the first PSUR for this product within 6 months following authorisation.

D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

- **Risk management plan (RMP)**

The marketing authorisation holder (MAH) shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the marketing authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:

- At the request of the European Medicines Agency;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

E. SPECIFIC OBLIGATION TO COMPLETE POST-AUTHORISATION MEASURES FOR THE CONDITIONAL MARKETING AUTHORISATION

This being a conditional marketing authorisation and pursuant to Article 14-a of Regulation (EC) No 726/2004, the MAH shall complete, within the stated timeframe, the following measures:

Description	Due date
In order to complete the characterisation of the active substance and finished product, the MAH should provide additional data.	July 2021. Interim reports: 31 March 2021
In order to ensure consistent product quality, the MAH should provide additional information to enhance the control strategy, including the active substance and finished product specifications.	July 2021. Interim reports: March 2021
In order to confirm the consistency of the finished product manufacturing process, the MAH should provide additional validation data.	March 2021
In order to confirm the purity profile and ensure comprehensive quality control and batch-to-batch consistency throughout the lifecycle of the finished product, the MAH should provide additional information about the synthetic process and control strategy for the excipient ALC-0315.	July 2021. Interim reports: January 2021, April 2021
In order to confirm the purity profile and ensure comprehensive quality control and batch-to-batch consistency throughout the lifecycle of the finished product, the MAH should provide additional information about the synthetic process and control strategy for the excipient ALC-0159.	July 2021. Interim reports: January 2021, April 2021

Description	Due date
In order to confirm the efficacy and safety of Comirnaty, the MAH should submit the final Clinical Study Report for the randomized, placebo-controlled, observer-blind study C4591001.	December 2023

ANNEX III

LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

CARTON BOX LABEL

1. NAME OF THE MEDICINAL PRODUCT

COMIRNATY concentrate for dispersion for injection
COVID-19 mRNA Vaccine (nucleoside modified)

2. STATEMENT OF ACTIVE SUBSTANCE(S)

After dilution each vial contains 5 doses of 0.3 mL.

3. LIST OF EXCIPIENTS

Excipients: ALC-0315, ALC-0159, DSPC, cholesterol, potassium chloride, potassium dihydrogen phosphate, sodium chloride, disodium phosphate dihydrate, sucrose, water for injections

4. PHARMACEUTICAL FORM AND CONTENTS

Concentrate for dispersion for injection
195 multidose vials

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Intramuscular use after dilution.
Read the package leaflet before use.

Scan QR code for more information.

Dilute before use: Dilute each vial with 1.8 mL sodium chloride 9 mg/mL (0.9%) solution for injection.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Storage:
Prior to dilution, store at -90 °C to -60 °C in the original package in order to protect from light.
After dilution, store the vaccine at 2 °C to 30 °C and use within 6 hours. Discard any unused vaccine.

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

BioNTech Manufacturing GmbH
An der Goldgrube 12
55131 Mainz, Germany

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/20/1528

13. BATCH NUMBER

LOT

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

Justification for not including Braille accepted.

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC
SN
NN

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

VIAL LABEL

1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION

COMIRNATY sterile concentrate
COVID-19 mRNA Vaccine
IM

2. METHOD OF ADMINISTRATION

3. EXPIRY DATE

EXP

4. BATCH NUMBER

LOT

5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT

5 doses after dilution

6. OTHER

Discard date/time:

B. PACKAGE LEAFLET

Package leaflet: Information for the user

Comirnaty concentrate for dispersion for injection
COVID-19 mRNA Vaccine (nucleoside modified)

▼This medicine is subject to additional monitoring. This will allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

Read all of this leaflet carefully before you receive this vaccine because it contains important information for you.
- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

1. What Comirnaty is and what it is used for

Comirnaty is a vaccine used for preventing COVID-19 caused by SARS-CoV-2 virus.

Comirnaty is given to adults and adolescents from 16 years of age and older.

The vaccine causes the immune system (the body's natural defences) to produce antibodies and blood cells that work against the virus, so giving protection against COVID-19.

As Comirnaty does not contain the virus to produce immunity, it cannot give you COVID-19.

2. What you need to know before you receive Comirnaty

Comirnaty should not be given
- if you are allergic to the active substance or any of the other ingredients of this medicine (listed in section 6)

Warnings and precautions
Talk to your doctor, pharmacist or nurse before you are given the vaccine if:
- you have ever had a severe allergic reaction or breathing problems after any other vaccine injection or after you were given Comirnaty in the past.
- you have ever fainted following any needle injection.
- you have a severe illness or infection with high fever. However, you can have your vaccination if you have a mild fever or upper airway infection like a cold.
- you have a bleeding problem, you bruise easily or you use a medicine to prevent blood-clots.
- you have a weakened immune system, because of a disease such as HIV infection or a medicine such as corticosteroid that affects your immune system

As with any vaccine, the 2-dose vaccination course of Comirnaty may not fully protect all those who receive it and it is not known how long you will be protected.

Children and adolescents
Comirnaty is not recommended for children aged under 16 years.

Other medicines and Comirnaty
Tell your doctor or pharmacist if you are using, have recently used or might use any other medicines or have recently received any other vaccine.

Pregnancy and breast-feeding
If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before you receive this vaccine.

Driving and using machines
Some of the effects of vaccination mentioned in section 4 (Possible side effects) may temporarily affect your ability to drive or use machines. Wait until these effects have worn off before you drive or use machines.

Comirnaty contains potassium and sodium
This vaccine contains less than 1 mmol potassium (39 mg) per dose, that is to say essentially 'potassium-free'.

This vaccine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

3. How Comirnaty is given

Comirnaty is given after dilution as an injection of 0.3 mL into a muscle of your upper arm.

You will receive 2 injections, given at least 21 days apart.

After the first dose of Comirnaty, you should receive a second dose of the same vaccine after 21 days to complete the vaccination course.

If you have any further questions on the use of Comirnaty, ask your doctor, pharmacist or nurse.

4. Possible side effects

Like all vaccines, Comirnaty can cause side effects, although not everybody gets them.

Very common side effects: may affect more than 1 in 10 people
- injection site: pain, swelling
- tiredness
- headache
- muscle pain
- joint pain
- chills, fever

Common side effects: may affect up to 1 in 10 people
- injection site redness
- nausea

Uncommon side effects: may affect up to 1 in 100 people
- enlarged lymph nodes
- feeling unwell

- pain in limb
- insomnia
- injection site itching

Rare side effects: may affect up to 1 in 1,000 people
- temporary one sided facial drooping

Not known (cannot be estimated from the available data)
- severe allergic reaction

Reporting of side effects
If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system listed in Appendix V and include batch/Lot number if available. By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store Comirnaty

Keep this medicine out of the sight and reach of children.

The following information about storage, expiry and use and handling is intended for healthcare professionals.

Do not use this medicine after the expiry date which is stated on the carton and label after EXP. The expiry date refers to the last day of that month.

Store in freezer at -90 °C to -60 °C.

Store in the original package in order to protect from light.

After thawing, the vaccine should be diluted and used immediately. However, in-use stability data have demonstrated that once removed from freezer, the undiluted vaccine can be stored for up to 5 days at 2 °C to 8 °C, or up to 2 hours at temperatures up to 30 °C, prior to use.

After dilution, store the vaccine at 2 °C to 30 °C and use within 6 hours. Discard any unused vaccine.

Once removed from the freezer and diluted, the vials should be marked with the new discard date and time. Once thawed, the vaccine cannot be re-frozen.

Do not use this vaccine if you notice particulates in the dilution or discolouration.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

6. Contents of the pack and other information

What Comirnaty contains
- The active substance is COVID-19 mRNA Vaccine. After dilution, the vial contains 5 doses of 0.3 mL with 30 micrograms mRNA each.
- The other ingredients are:
  - ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate) (ALC-0315)
  - 2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide (ALC-0159)
  - 1,2-Distearoyl-sn-glycero-3-phosphocholine (DSPC)
  - cholesterol

- potassium chloride
- potassium dihydrogen phosphate
- sodium chloride
- disodium phosphate dihydrate
- sucrose
- water for injections

What Comirnaty looks like and contents of the pack
The vaccine is a white to off-white dispersion (pH: 6.9 - 7.9) provided in a multidose vial of 5 doses in a 2 mL clear vial (type I glass), with a rubber stopper and a flip-off plastic cap with aluminium seal.

Pack size: 195 vials

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Fax: +49 6131 9084390
info@biontech.de

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55116 Mainz
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Rijksweg 12
2870 Puurs
Belgium

For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

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Luxembourg/Luxemburg
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Slovenija
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Tel.: +386 (0) 1 52 11 400

Slovenská republika
Pfizer Luxembourg SARL,
organizačná zložka
Tel: +421 2 3355 5500

Suomi/Finland
Pfizer Oy
Puh/Tel: +358 (0)9 430 040

Sverige
Pfizer AB
Tel: +46 (0)8 550 520 00

United Kingdom
Pfizer Limited
Tel: +44 (0) 1304 616161

This leaflet was last revised in

This medicine has been given ‘conditional approval’. This means that there is more evidence to come about this medicine. The European Medicines Agency will review new information on this medicine at least every year and this leaflet will be updated as necessary.

Scan the code with a mobile device to get the package leaflet in different languages.

URL: www.comirnatyglobal.com

Detailed information on this medicine is available on the European Medicines Agency web site: http://www.ema.europa.eu.

This package leaflet is available in all EU/EEA languages on the European Medicines Agency website.

The following information is intended for healthcare professionals only:

Administer Comirnaty intramuscularly after dilution as a course of 2 doses (0.3 mL each) at least 21 days apart.

Traceability
In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded.

Handling instructions

- Comirnaty should be prepared by a healthcare professional using aseptic technique to ensure the sterility of the prepared dispersion.
- The multidose vial is stored frozen and must be thawed prior to dilution. Frozen vials should be transferred to an environment of 2 °C to 8 °C to thaw; a 195 vial pack may take 3 hours to thaw. Alternatively, frozen vials may also be thawed for 30 minutes at temperatures up to 30 °C for immediate use.
- Allow the thawed vial to come to room temperature and gently invert it 10 times prior to dilution. Do not shake.
- Prior to dilution, the thawed dispersion may contain white to off-white opaque amorphous particles.
- The thawed vaccine must be diluted in its original vial with 1.8 mL sodium chloride 9 mg/mL (0.9%) solution for injection, using a 21 gauge or narrower needle and aseptic techniques.
- Equalise vial pressure before removing the needle from the vial stopper by withdrawing 1.8 mL air into the empty diluent syringe.
- Gently invert the diluted dispersion 10 times. Do not shake.
- The diluted vaccine should present as an off-white dispersion with no particulates visible. Discard the diluted vaccine if particulates or discolouration are present.
- The diluted vials should be marked with the appropriate date and time.
- Do not freeze or shake the diluted dispersion. If refrigerated, allow the diluted dispersion to come to room temperature prior to use.
- After dilution, the vial contains 2.25 mL corresponding to 5 doses of 0.3 mL. Withdraw the required 0.3 mL dose of diluted vaccine using a sterile needle.
- Discard any unused vaccine within 6 hours after dilution.

Disposal
Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

Annex IV

Conclusions on the granting of the conditional marketing authorisation presented by the European Medicines Agency

Conclusions presented by the European Medicines Agency on:

- **Conditional marketing authorisation**

The CHMP having considered the application is of the opinion that the risk-benefit balance is favourable to recommend the granting of the conditional marketing authorisation as further explained in the European Public Assessment Report.

FACT SHEET FOR HEALTHCARE PROVIDERS ADMINISTERING VACCINE (VACCINATION PROVIDERS)

EMERGENCY USE AUTHORIZATION (EUA) OF THE PFIZER-BIONTECH COVID-19 VACCINE TO PREVENT CORONAVIRUS DISEASE 2019 (COVID-19)

The U.S. Food and Drug Administration (FDA) has issued an Emergency Use Authorization (EUA) to permit the emergency use of the unapproved product, **Pfizer-BioNTech COVID-19 Vaccine**, for active immunization to prevent COVID-19 in individuals 16 years of age and older.

SUMMARY OF INSTRUCTIONS FOR COVID-19 VACCINATION PROVIDERS

Vaccination providers enrolled in the federal COVID-19 Vaccination Program must report all vaccine administration errors, all serious adverse events, cases of Multisystem Inflammatory Syndrome (MIS) in adults and children, and cases of COVID-19 that result in hospitalization or death following administration of Pfizer-BioNTech COVID-19 Vaccine. See "MANDATORY REQUIREMENTS FOR PFIZER-BIONTECH COVID-19 VACCINE ADMINISTRATION UNDER EMERGENCY USE AUTHORIZATION" for reporting requirements.

The Pfizer-BioNTech COVID-19 Vaccine is a suspension for intramuscular injection administered as a series of two doses (0.3 mL each) 3 weeks apart.

See this Fact Sheet for instructions for preparation and administration. This Fact Sheet may have been updated. For the most recent Fact Sheet, please see www.cvdvaccine.com.

For information on clinical trials that are testing the use of the Pfizer-BioNTech COVID-19 Vaccine for active immunization against COVID-19, please see www.clinicaltrials.gov.

DESCRIPTION OF COVID-19

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by the novel coronavirus, SARS-CoV-2, that appeared in late 2019. It is predominantly a respiratory illness that can affect other organs. People with COVID-19 have reported a wide range of symptoms, ranging from mild symptoms to severe illness. Symptoms may appear 2 to 14 days after exposure to the virus. Symptoms may include: fever or chills; cough; shortness of breath; fatigue; muscle or body aches; headache; new loss of taste or smell; sore throat; congestion or runny nose; nausea or vomiting; diarrhea.

DOSAGE AND ADMINISTRATION

Storage and Handling

During storage, minimize exposure to room light, and avoid exposure to direct sunlight and ultraviolet light.

Do not refreeze thawed vials.

Frozen Vials Prior to Use

Cartons of Pfizer-BioNTech COVID-19 Vaccine Multiple Dose Vials arrive in thermal containers with dry ice. Once received, remove the vial cartons immediately from the thermal container and store in an ultra-low temperature freezer between -80ºC to -60ºC (-112ºF to -76ºF). Vials must be kept frozen between -80ºC to -60ºC (-112ºF to -76ºF) and protected from light until ready to use.

If an ultra-low temperature freezer is not available, the thermal container in which the Pfizer-BioNTech COVID-19 Vaccine arrives may be used as temporary storage when consistently re-filled to the top of the container with dry ice. Refer to the re-icing guidelines packed in the original thermal container for instructions regarding the use of the thermal container for temporary storage. The thermal container maintains a temperature range of -90ºC to -60ºC (-130ºF to -76ºF). Storage within this temperature range is not considered an excursion from the recommended storage condition.

Thawed Vials Before Dilution

Thawed Under Refrigeration
Thaw and then store undiluted vials in the refrigerator [2ºC to 8ºC (35ºF to 46ºF)] for up to 5 days (120 hours). A carton of 25 vials or 195 vials may take up to 2 or 3 hours, respectively, to thaw in the refrigerator, whereas a fewer number of vials will thaw in less time.

Thawed at Room Temperature
For immediate use, thaw undiluted vials at room temperature [up to 25ºC (77ºF)] for 30 minutes. Thawed vials can be handled in room light conditions. Vials must reach room temperature before dilution.

Undiluted vials may be stored at room temperature for no more than 2 hours.

Vials After Dilution

- After dilution, store vials between 2°C to 25°C (35°F to 77°F) and use within 6 hours from the time of dilution.
- During storage, minimize exposure to room light, and avoid exposure to direct sunlight and ultraviolet light.
- Any vaccine remaining in vials must be discarded after 6 hours.
- Do not refreeze.

Dosing and Schedule

The Pfizer-BioNTech COVID-19 Vaccine is administered intramuscularly as a series of two doses (0.3 mL each) 3 weeks apart.

There are no data available on the interchangeability of the Pfizer-BioNTech COVID-19 Vaccine with other COVID-19 vaccines to complete the vaccination series. Individuals who have received one dose of Pfizer-BioNTech COVID-19 Vaccine should receive a second dose of Pfizer-BioNTech COVID-19 Vaccine to complete the vaccination series.

Dose Preparation

Prior to Dilution

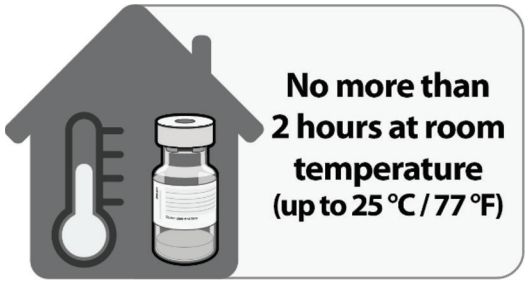
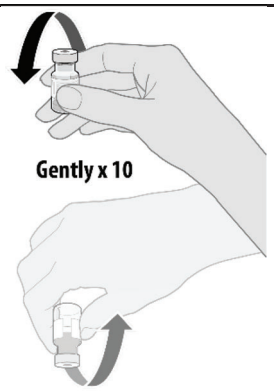
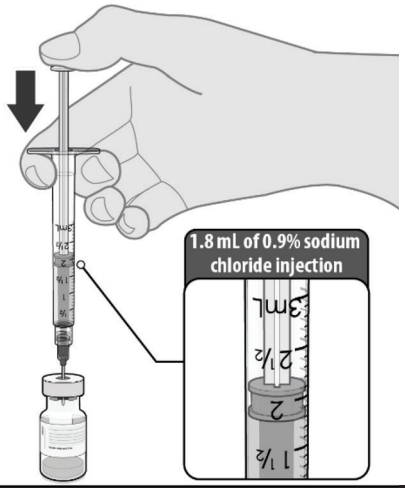
- The Pfizer-BioNTech COVID-19 Vaccine Multiple Dose Vial contains a volume of 0.45 mL, supplied as a frozen suspension that does not contain preservative. Each vial must be thawed and diluted prior to administration.
- Vials may be thawed in the refrigerator [2ºC to 8ºC (35ºF to 46ºF)] or at room temperature [up to 25ºC (77ºF)] *(see Storage and Handling)*.
- Refer to thawing instructions in the panels below.

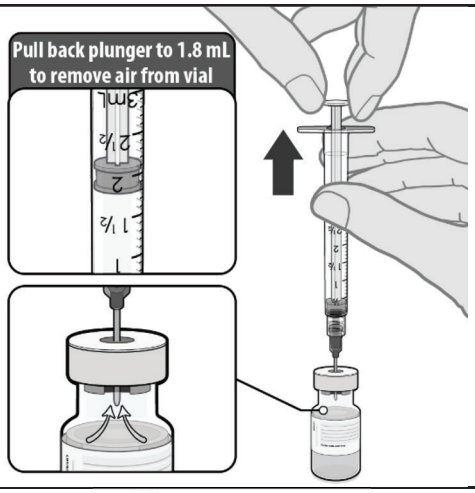
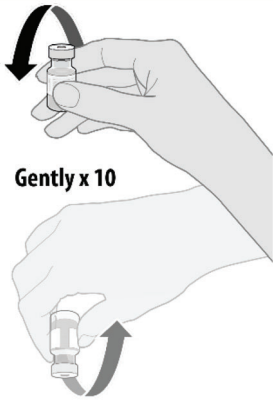
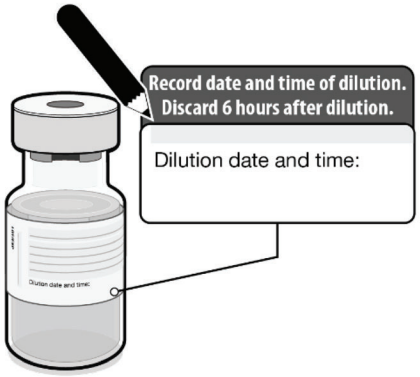
Dilution

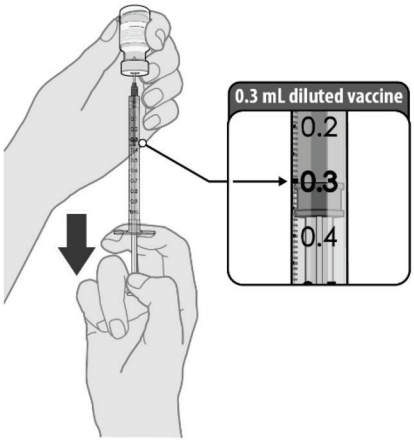
Dilute the vial contents using 1.8 mL of 0.9% Sodium Chloride Injection, USP (not provided) to form the Pfizer-BioNTech COVID-19 Vaccine. ONLY use 0.9% Sodium Chloride Injection, USP as the diluent. This diluent is not packaged with the vaccine and must be sourced separately. Do not use bacteriostatic 0.9% Sodium Chloride Injection or any other diluent. Do not use more than 1.8 mL of diluent.

After dilution, one vial contains up to 6 doses of 0.3 mL. Vial labels and cartons may state that after dilution, a vial contains 5 doses of 0.3 mL. The information on the number of doses per vial after dilution in this Fact Sheet supersedes the number of doses stated on vial labels and cartons.

- Refer to dilution and dose preparation instructions in the panels below.

THAWING PRIOR TO DILUTION	
	• Thaw vial(s) of Pfizer-BioNTech COVID-19 Vaccine before use either by: ○ Allowing vial(s) to thaw in the refrigerator [2ºC to 8ºC (35ºF to 46ºF)]. A carton of vials may take up to 3 hours to thaw, and thawed vials can be stored in the refrigerator for up to five days (120 hours). ○ Allowing vial(s) to sit at room temperature [up to 25ºC (77ºF)] for 30 minutes. • Using either thawing method, vials must reach room temperature before dilution and must be diluted within 2 hours.
	• Before dilution invert vaccine vial gently 10 times. • Do not shake. • Inspect the liquid in the vial prior to dilution. The liquid is a white to off-white suspension and may contain white to off-white opaque amorphous particles. • Do not use if liquid is discolored or if other particles are observed.
DILUTION	
	• Obtain sterile 0.9% Sodium Chloride Injection, USP. Use only this as the diluent. • Using aseptic technique, withdraw 1.8 mL of diluent into a transfer syringe (21-gauge or narrower needle). • Cleanse the vaccine vial stopper with a single-use antiseptic swab. • Add 1.8 mL of 0.9% Sodium Chloride Injection, USP into the vaccine vial.

	• Equalize vial pressure before removing the needle from the vial by withdrawing 1.8 mL air into the empty diluent syringe.
	• Gently invert the vial containing the Pfizer-BioNTech COVID-19 Vaccine 10 times to mix. • Do not shake. • Inspect the vaccine in the vial. • The vaccine will be an off-white suspension. Do not use if vaccine is discolored or contains particulate matter.
	• Record the date and time of dilution on the Pfizer-BioNTech COVID-19 Vaccine vial label. • Store between 2°C to 25°C (35°F to 77°F). • Discard any unused vaccine 6 hours after dilution.

PREPARATION OF INDIVIDUAL 0.3 mL DOSES OF PFIZER-BIONTECH COVID-19 VACCINE	
	• Using aseptic technique, cleanse the vial stopper with a single-use antiseptic swab, and withdraw 0.3 mL of the Pfizer-BioNTech COVID-19 Vaccine preferentially using a low dead-volume syringe and/or needle. • Administer immediately.

Administration

Visually inspect each dose in the dosing syringe prior to administration. The vaccine will be an off-white suspension. During the visual inspection,

- verify the final dosing volume of 0.3 mL.
- confirm there are no particulates and that no discoloration is observed.
- do not administer if vaccine is discolored or contains particulate matter.

Administer the Pfizer-BioNTech COVID-19 Vaccine intramuscularly.

After preparation, vials of Pfizer-BioNTech COVID-19 Vaccine contain up to six doses of 0.3mL. Low dead-volume syringes and/or needles can be used to extract up to six doses from a single vial. If standard syringes and needles are used, there may not be sufficient volume to extract a sixth dose from a single vial. Irrespective of the type of syringe and needle:

- Each dose must contain 0.3 mL of vaccine.
- If the amount of vaccine remaining in the vial cannot provide a full dose of 0.3 mL, discard the vial and content.
- Do not pool excess vaccine from multiple vials.

Contraindications

Do not administer Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine *(see Full EUA Prescribing Information)*.

Warnings

Appropriate medical treatment used to manage immediate allergic reactions must be immediately available in the event an acute anaphylactic reaction occurs following administration of Pfizer-BioNTech COVID-19 Vaccine.

Monitor Pfizer-BioNTech COVID-19 Vaccine recipients for the occurrence of immediate adverse reactions according to the Centers for Disease Control and Prevention guidelines (https://www.cdc.gov/vaccines/covid-19/).

Immunocompromised persons, including individuals receiving immunosuppressant therapy, may have a diminished immune response to the Pfizer-BioNTech COVID-19 Vaccine.

Pfizer-BioNTech COVID-19 Vaccine may not protect all vaccine recipients.

Adverse Reactions

Adverse reactions following the Pfizer-BioNTech COVID-19 Vaccine that have been reported in clinical trials include injection site pain, fatigue, headache, muscle pain, chills, joint pain, fever, injection site swelling, injection site redness, nausea, malaise, and lymphadenopathy *(see Full EUA Prescribing Information)*.

Severe allergic reactions have been reported following the Pfizer-BioNTech COVID-19 Vaccine during mass vaccination outside of clinical trials.

Additional adverse reactions, some of which may be serious, may become apparent with more widespread use of the Pfizer-BioNTech COVID-19 Vaccine.

Use with Other Vaccines

There is no information on the co-administration of the Pfizer-BioNTech COVID-19 Vaccine with other vaccines.

INFORMATION TO PROVIDE TO VACCINE RECIPIENTS/CAREGIVERS

As the vaccination provider, you must communicate to the recipient or their caregiver, information consistent with the "Fact Sheet for Recipients and Caregivers" (and provide a copy or direct the individual to the website www.cvdvaccine.com to obtain the Fact Sheet) prior to the individual receiving Pfizer-BioNTech COVID-19 Vaccine, including:

- FDA has authorized the emergency use of the Pfizer-BioNTech COVID-19 Vaccine, which is not an FDA-approved vaccine.
- The recipient or their caregiver has the option to accept or refuse Pfizer-BioNTech COVID-19 Vaccine.
- The significant known and potential risks and benefits of Pfizer-BioNTech COVID-19 Vaccine, and the extent to which such risks and benefits are unknown.
- Information about available alternative vaccines and the risks and benefits of those alternatives.

For information on clinical trials that are testing the use of the Pfizer-BioNTech COVID-19 Vaccine to prevent COVID-19, please see www.clinicaltrials.gov.

Provide a vaccination card to the recipient or their caregiver with the date when the recipient needs to return for the second dose of Pfizer-BioNTech COVID-19 Vaccine.

Provide the **v-safe** information sheet to vaccine recipients/caregivers and encourage vaccine recipients to participate in **v-safe**. **V-safe** is a new voluntary smartphone-based tool that uses text messaging and web surveys to check in with people who have been vaccinated to identify potential side effects after COVID-19 vaccination. **V-safe** asks questions that help CDC monitor the safety of COVID-19 vaccines. **V-safe** also provides second-dose reminders if needed and live telephone follow-up by CDC if participants report a significant health impact following COVID-19 vaccination. For more information, visit: www.cdc.gov/vsafe.

MANDATORY REQUIREMENTS FOR PFIZER-BIONTECH COVID-19 VACCINE ADMINISTRATION UNDER EMERGENCY USE AUTHORIZATION

In order to mitigate the risks of using this unapproved product under EUA and to optimize the potential benefit of Pfizer-BioNTech COVID-19 Vaccine, the following items are required. Use of unapproved Pfizer-BioNTech COVID-19 Vaccine for active immunization to prevent COVID-19 under this EUA is limited to the following (all requirements **must** be met):

1. Pfizer-BioNTech COVID-19 Vaccine is authorized for use in individuals 16 years of age and older.

2. The vaccination provider must communicate to the individual receiving the Pfizer-BioNTech COVID-19 Vaccine or their caregiver, information consistent with the "Fact Sheet for Recipients and Caregivers" prior to the individual receiving Pfizer-BioNTech COVID-19 Vaccine.

3. The vaccination provider must include vaccination information in the state/local jurisdiction's Immunization Information System (IIS) or other designated system.

4. The vaccination provider is responsible for mandatory reporting of the following to the Vaccine Adverse Event Reporting System (VAERS):
    - vaccine administration errors whether or not associated with an adverse event,
    - serious adverse events* (irrespective of attribution to vaccination),
    - cases of Multisystem Inflammatory Syndrome (MIS) in adults and children, and
    - cases of COVID-19 that result in hospitalization or death.

    Complete and submit reports to VAERS online at https://vaers.hhs.gov/reportevent.html. For further assistance with reporting to VAERS call 1-800-822-7967. The reports should include the words

"Pfizer-BioNTech COVID-19 Vaccine EUA" in the description section of the report.

5. The vaccination provider is responsible for responding to FDA requests for information about vaccine administration errors, adverse events, cases of MIS in adults and children, and cases of COVID-19 that result in hospitalization or death following administration of Pfizer-BioNTech COVID-19 Vaccine to recipients.

* Serious adverse events are defined as:
- Death;
- A life-threatening adverse event;
- Inpatient hospitalization or prolongation of existing hospitalization;
- A persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions;
- A congenital anomaly/birth defect;
- An important medical event that based on appropriate medical judgement may jeopardize the individual and may require medical or surgical intervention to prevent one of the outcomes listed above.

OTHER ADVERSE EVENT REPORTING TO VAERS AND PFIZER INC.

Vaccination providers may report to VAERS other adverse events that are not required to be reported using the contact information above.

To the extent feasible, report adverse events to Pfizer Inc. using the contact information below or by providing a copy of the VAERS form to Pfizer Inc.

Website	Fax number	Telephone number
www.pfizersafetyreporting.com	1-866-635-8337	1-800-438-1985

ADDITIONAL INFORMATION

For general questions, visit the website or call the telephone number provided below.

To access the most recent Pfizer-BioNTech COVID-19 Vaccine Fact Sheets, please scan the QR code provided below.

Global website	Telephone number
www.cvdvaccine.com	1-877-829-2619 (1-877-VAX-CO19)

AVAILABLE ALTERNATIVES

There is no approved alternative vaccine to prevent COVID-19. There may be clinical trials or availability under EUA of other COVID-19 vaccines.

AUTHORITY FOR ISSUANCE OF THE EUA

The Secretary of Health and Human Services (HHS) has declared a public health emergency that justifies the emergency use of drugs and biological products during the COVID-19 pandemic. In response, FDA has issued an EUA for the unapproved product, Pfizer-BioNTech COVID-19 Vaccine, for active immunization against COVID-19 in individuals 16 years of age and older.

FDA issued this EUA, based on Pfizer-BioNTech's request and submitted data.

Although limited scientific information is available, based on the totality of the scientific evidence available to date, it is reasonable to believe that the Pfizer-BioNTech COVID-19 Vaccine may be effective for the prevention of COVID-19 in individuals as specified in the *Full EUA Prescribing Information*.

This EUA for the Pfizer-BioNTech COVID-19 Vaccine will end when the Secretary of HHS determines that the circumstances justifying the EUA no longer exist or when there is a change in the approval status of the product such that an EUA is no longer needed.

For additional information about Emergency Use Authorization visit FDA at: https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/emergency-use-authorization.

The Countermeasures Injury Compensation Program

The Countermeasures Injury Compensation Program (CICP) is a federal program that has been created to help pay for related costs of medical care and other specific expenses to compensate people injured after use of certain medical countermeasures. Medical countermeasures are specific vaccines, medications, devices, or other items used to prevent, diagnose, or treat the public during a public health emergency or a security threat. For more information about CICP regarding the Pfizer-BioNTech COVID-19 Vaccine used to prevent COVID-19, visit www.hrsa.gov/cicp, email cicp@hrsa.gov, or call: 1-855-266-2427.

Manufactured by
Pfizer Inc., New York, NY 10017

BIONTECH
Manufactured for
BioNTech Manufacturing GmbH
An der Goldgrube 12
55131 Mainz, Germany

LAB-1450-3.0

Revised: December 2020

END SHORT VERSION FACT SHEET
Long Version (Full EUA Prescribing Information) Begins On Next Page

FULL EMERGENCY USE AUTHORIZATION (EUA) PRESCRIBING INFORMATION

PFIZER-BIONTECH COVID-19 VACCINE

FULL EMERGENCY USE AUTHORIZATION PRESCRIBING INFORMATION: CONTENTS*

* Sections or subsections omitted from the full emergency use authorization prescribing information are not listed.

FULL EMERGENCY USE AUTHORIZATION (EUA) PRESCRIBING INFORMATION

1 AUTHORIZED USE

Pfizer-BioNTech COVID-19 Vaccine is authorized for use under an Emergency Use Authorization (EUA) for active immunization to prevent coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in individuals 16 years of age and older.

2 DOSAGE AND ADMINISTRATION

For intramuscular injection only.

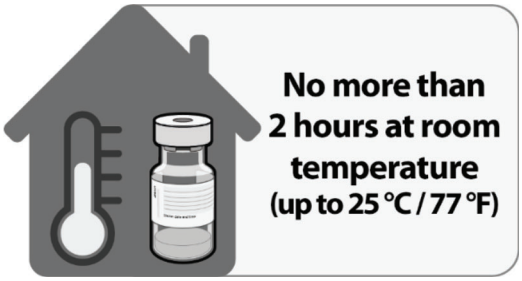
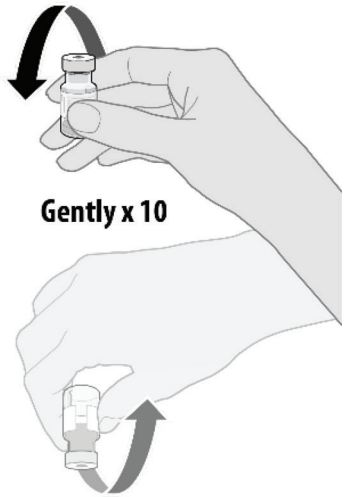
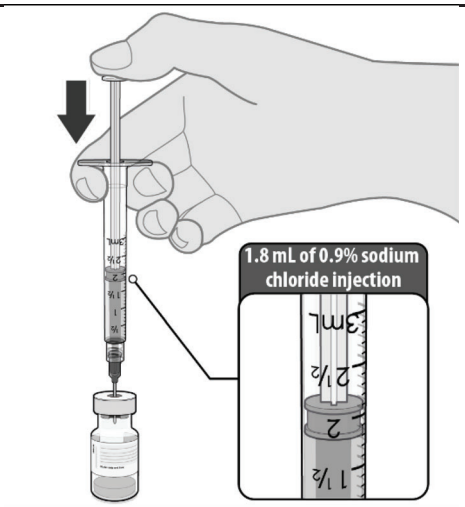
2.1 Preparation for Administration

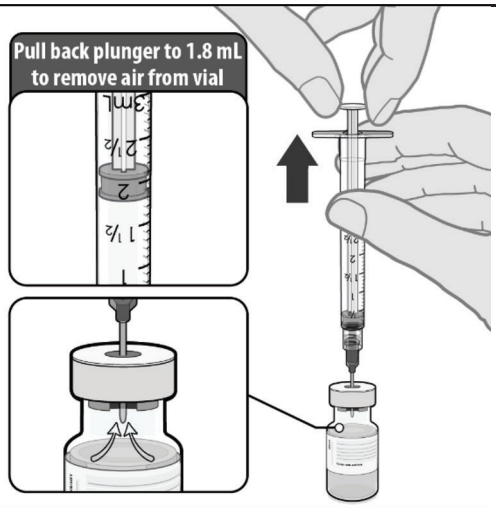
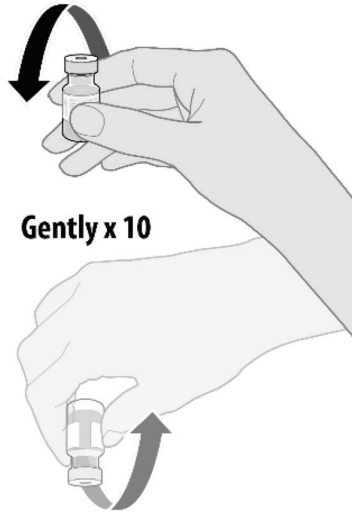
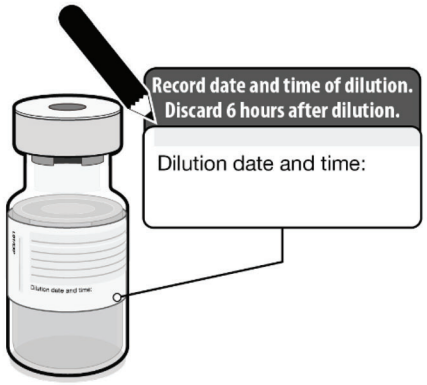
Prior to Dilution

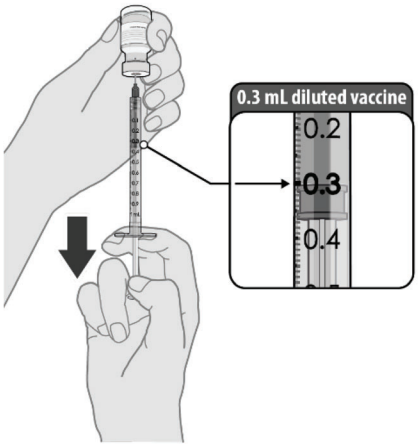
- The Pfizer-BioNTech COVID-19 Vaccine Multiple Dose Vial contains a volume of 0.45 mL, supplied as a frozen suspension that does not contain preservative. Each vial must be thawed and diluted prior to administration.
- Vials may be thawed in the refrigerator [2ºC to 8ºC (35ºF to 46ºF)] or at room temperature [up to 25ºC (77ºF)] *[see How Supplied/Storage and Handling (19)]*.
- Refer to thawing instructions in the panels below.

Dilution

- Dilute the vial contents using 1.8 mL of 0.9% Sodium Chloride Injection, USP (not provided) to form the Pfizer-BioNTech COVID-19 Vaccine. Do not use more than 1.8 mL of diluent.
- ONLY use 0.9% Sodium Chloride Injection, USP as the diluent. This diluent is not packaged with the vaccine and must be sourced separately. Do not use bacteriostatic 0.9% Sodium Chloride Injection or any other diluent.
- After dilution, one vial contains up to 6 doses of 0.3 mL. Vial labels and cartons may state that after dilution, a vial contains 5 doses of 0.3 mL. The information on the number of doses per vial after dilution in this Fact Sheet supersedes the number of doses stated on vial labels and cartons.
- Refer to dilution and dose preparation instructions in the panels below.

THAWING PRIOR TO DILUTION	
	• Thaw vial(s) of Pfizer-BioNTech COVID-19 Vaccine before use either by: o Allowing vial(s) to thaw in the refrigerator [2ºC to 8ºC (35ºF to 46ºF)]. A carton of vials may take up to 3 hours to thaw, and thawed vials can be stored in the refrigerator for up to five days (120 hours). o Allowing vial(s) to sit at room temperature [up to 25ºC (77ºF)] for 30 minutes. • Using either thawing method, vials must reach room temperature before dilution and must be diluted within 2 hours.
	• Before dilution invert vaccine vial gently 10 times. • Do not shake. • Inspect the liquid in the vial prior to dilution. The liquid is a white to off-white suspension and may contain white to off-white opaque amorphous particles. • Do not use if liquid is discolored or if other particles are observed.
DILUTION	
	• Obtain sterile 0.9% Sodium Chloride Injection, USP. Use only this as the diluent. • Using aseptic technique, withdraw 1.8 mL of diluent into a transfer syringe (21-gauge or narrower needle). • Cleanse the vaccine vial stopper with a single-use antiseptic swab. • Add 1.8 mL of 0.9% Sodium Chloride Injection, USP into the vaccine vial.

	• Equalize vial pressure before removing the needle from the vial by withdrawing 1.8 mL air into the empty diluent syringe.
	• Gently invert the vial containing the Pfizer-BioNTech COVID-19 Vaccine 10 times to mix. • Do not shake. • Inspect the vaccine in the vial. • The vaccine will be an off-white suspension. Do not use if vaccine is discolored or contains particulate matter.
	• Record the date and time of dilution on the Pfizer-BioNTech COVID-19 Vaccine vial label. • Store between 2°C to 25°C (35°F to 77°F). • Discard any unused vaccine 6 hours after dilution.

PREPARATION OF INDIVIDUAL 0.3 mL DOSES OF PFIZER-BIONTECH COVID-19 VACCINE	
	• Using aseptic technique, cleanse the vial stopper with a single-use antiseptic swab, and withdraw 0.3 mL of the Pfizer-BioNTech COVID-19 Vaccine preferentially using low dead-volume syringes and/or needles. • Administer immediately.

2.2 Administration Information

Visually inspect each dose in the dosing syringe prior to administration. The vaccine will be an off-white suspension. During the visual inspection,

- verify the final dosing volume of 0.3 mL.
- confirm there are no particulates and that no discoloration is observed.
- do not administer if vaccine is discolored or contains particulate matter.

Administer the Pfizer-BioNTech COVID-19 Vaccine intramuscularly.

After preparation, vials of Pfizer-BioNTech COVID-19 Vaccine contain up to six doses of 0.3 mL. Low dead-volume syringes and/or needles can be used to extract up to six doses from a single vial. If standard syringes and needles are used, there may not be sufficient volume to extract a sixth dose from a single vial. Irrespective of the type of syringe and needle:

- Each dose must contain 0.3 mL of vaccine.
- If the amount of vaccine remaining in the vial cannot provide a full dose of 0.3 mL, discard the vial and any excess volume.
- Do not pool excess vaccine from multiple vials.

2.3 Vaccination Schedule for Individuals 16 Years of Age and Older

The Pfizer-BioNTech COVID-19 Vaccine is administered intramuscularly as a series of two doses (0.3 mL each) three weeks apart.

There are no data available on the interchangeability of the Pfizer-BioNTech COVID-19 Vaccine with other COVID-19 vaccines to complete the vaccination series. Individuals who have received one dose of Pfizer-BioNTech COVID-19 Vaccine should receive a second dose of Pfizer-BioNTech COVID-19 Vaccine to complete the vaccination series.

3 DOSAGE FORMS AND STRENGTHS

Pfizer-BioNTech COVID-19 Vaccine is a suspension for injection. After preparation, a single dose is 0.3 mL.

4 CONTRAINDICATIONS

Do not administer Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine *[see Description (13)]*.

5 WARNINGS AND PRECAUTIONS

5.1 Management of Acute Allergic Reactions

Appropriate medical treatment used to manage immediate allergic reactions must be immediately available in the event an acute anaphylactic reaction occurs following administration of Pfizer-BioNTech COVID-19 Vaccine.

Monitor Pfizer-BioNTech COVID-19 Vaccine recipients for the occurrence of immediate adverse reactions according to the Centers for Disease Control and Prevention guidelines (https://www.cdc.gov/vaccines/covid-19/).

5.2 Altered Immunocompetence

Immunocompromised persons, including individuals receiving immunosuppressant therapy, may have a diminished immune response to the Pfizer-BioNTech COVID-19 Vaccine.

5.3 Limitation of Effectiveness

The Pfizer-BioNTech COVID-19 Vaccine may not protect all vaccine recipients.

6 OVERALL SAFETY SUMMARY

It is MANDATORY for vaccination providers to report to the Vaccine Adverse Event Reporting System (VAERS) all vaccine administration errors, all serious adverse events, cases of Multisystem Inflammatory Syndrome (MIS) in adults and children, and hospitalized or fatal cases of COVID-19 following vaccination with the Pfizer-BioNTech COVID-19 Vaccine. To the extent feasible, provide a copy of the VAERS form to Pfizer Inc. Please see the REQUIREMENTS AND INSTRUCTIONS FOR REPORTING ADVERSE EVENTS AND VACCINE ADMINISTRATION ERRORS section for details on reporting to VAERS and Pfizer Inc.

In clinical studies, adverse reactions in participants 16 years of age and older included pain at the injection site (84.1%), fatigue (62.9%), headache (55.1%), muscle pain (38.3%), chills (31.9%), joint pain (23.6%), fever (14.2%), injection site swelling (10.5%), injection site redness (9.5%), nausea (1.1%), malaise (0.5%), and lymphadenopathy (0.3%).

Severe allergic reactions have been reported following the Pfizer-BioNTech COVID-19 Vaccine during mass vaccination outside of clinical trials.

6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

The safety of Pfizer-BioNTech COVID-19 Vaccine was evaluated in participants 16 years of age and older in two clinical studies conducted in the United States, Europe, Turkey, South Africa, and South America. Study BNT162-01 (Study 1) was a Phase 1/2, two-part, dose-escalation trial that enrolled 60 participants, 18 through 55 years of age. Study C4591001 (Study 2) is a Phase 1/2/3, multicenter, multinational, randomized, saline placebo-controlled, observer-blind, dose-finding, vaccine candidate-selection (Phase 1) and efficacy (Phase 2/3) study that has enrolled approximately 44,000 participants, 12 years of age or older. Of these, approximately 43,448 participants (21,720 Pfizer-BioNTech COVID-19 Vaccine; 21,728 placebo) in Phase 2/3 are 16 years of age or older (including 138 and 145 adolescents 16 and 17 years of age in the vaccine and placebo groups, respectively).

At the time of the analysis of Study 2 for the EUA, 37,586 (18,801 Pfizer-BioNTech COVID-19 Vaccine and 18,785 placebo) participants 16 years of age or older have been followed for a median of 2 months after the second dose of Pfizer-BioNTech COVID-19 Vaccine.

The safety evaluation in Study 2 is ongoing. The safety population includes participants enrolled by October 9, 2020, and includes safety data accrued through November 14, 2020. Participants 18 years and older in the reactogenicity subset are monitored for solicited local and systemic reactions and use of antipyretic medication after each vaccination in an electronic diary. Participants are being monitored for unsolicited adverse events, including serious adverse events, throughout the study [from Dose 1 through 1 month (all unsolicited adverse events) or 6 months (serious adverse events) after the last vaccination].

Demographic characteristics in Study 2 were generally similar with regard to age, gender, race, and ethnicity among participants who received Pfizer-BioNTech COVID-19 Vaccine and those who received placebo. Overall, among the total participants who received either the Pfizer-BioNTech COVID-19 Vaccine or placebo, 50.6% were male and 49.4% were female, 83.1% were White, 9.1% were Black or African American, 28.0% were Hispanic/Latino, 4.3% were Asian, and 0.5% were American Indian/Alaska Native.

Local and Systemic Adverse Reactions Solicited in the Study 2

Table 1 and Table 2 present the frequency and severity of solicited local and systemic reactions, respectively, within 7 days following each dose of Pfizer-BioNTech COVID-19 Vaccine and placebo in the subset of participants 18 to 55 years of age included in the EUA safety population who were monitored for reactogenicity with an electronic diary.

Table 3 and Table 4 present the frequency and severity of reported solicited local and systemic reactions, respectively, within 7 days of each dose of Pfizer-BioNTech COVID-19 Vaccine and placebo for participants 56 years of age and older.

Across both age groups, the mean duration of pain at the injection site after Dose 2 was 2.5 days (range 1 to 36 days), for redness 2.6 days (range 1 to 34 days), and for swelling 2.3 days (range 1 to 34 days) for participants in the Pfizer-BioNTech COVID-19 Vaccine group.

Solicited reactogenicity data in 16 and 17 year-old participants are limited.

Table 1: Study 2 – Frequency and Percentages of Participants with Solicited Local Reactions, by Maximum Severity, Within 7 Days After Each Dose – Participants 18-55 Years of Age‡ – Reactogenicity Subset of the Safety Population*

	Pfizer-BioNTech COVID-19 Vaccine Dose 1 N[a]=2291 n[b] (%)	Placebo Dose 1 N[a]=2298 n[b] (%)	Pfizer-BioNTech COVID-19 Vaccine Dose 2 N[a]=2098 n[b] (%)	Placebo Dose 2 N[a]=2103 n[b] (%)
Redness[c]				
Any (>2 cm)	104 (4.5)	26 (1.1)	123 (5.9)	14 (0.7)
Mild	70 (3.1)	16 (0.7)	73 (3.5)	8 (0.4)
Moderate	28 (1.2)	6 (0.3)	40 (1.9)	6 (0.3)
Severe	6 (0.3)	4 (0.2)	10 (0.5)	0 (0.0)
Swelling[c]				
Any (>2 cm)	132 (5.8)	11 (0.5)	132 (6.3)	5 (0.2)
Mild	88 (3.8)	3 (0.1)	80 (3.8)	3 (0.1)
Moderate	39 (1.7)	5 (0.2)	45 (2.1)	2 (0.1)
Severe	5 (0.2)	3 (0.1)	7 (0.3)	0 (0.0)
Pain at the injection site[d]				
Any	1904 (83.1)	322 (14.0)	1632 (77.8)	245 (11.7)
Mild	1170 (51.1)	308 (13.4)	1039 (49.5)	225 (10.7)
Moderate	710 (31.0)	12 (0.5)	568 (27.1)	20 (1.0)
Severe	24 (1.0)	2 (0.1)	25 (1.2)	0 (0.0)

Note: Reactions were collected in the electronic diary (e-diary) from Day 1 to Day 7 after vaccination.
a. N = Number of participants reporting at least 1 yes or no response for the specified reaction after the specified dose.
b. n = Number of participants with the specified reaction.
c. Mild: >2.0 to ≤5.0 cm; Moderate: >5.0 to ≤10.0 cm; Severe: >10.0 cm.
d. Mild: does not interfere with activity; Moderate: interferes with activity; Severe: prevents daily activity.
‡ Eight participants were between 16 and 17 years of age.
* Randomized participants in the safety analysis population who received at least 1 dose of the study intervention.

Table 2: Study 2 – Frequency and Percentages of Participants with Solicited Systemic Reactions, by Maximum Severity, Within 7 Days After Each Dose – Participants 18-55 Years of Age‡ – Safety Population*

	Pfizer-BioNTech COVID-19 Vaccine Dose 1 N[a]=2291 n[b] (%)	Placebo Dose 1 N[a]=2298 n[b] (%)	Pfizer-BioNTech COVID-19 Vaccine Dose 2 N[a]=2098 n[b] (%)	Placebo Dose 2 N[a]=2103 n[b] (%)
Fever				
≥38.0°C	85 (3.7)	20 (0.9)	331 (15.8)	10 (0.5)
≥38.0°C to 38.4°C	64 (2.8)	10 (0.4)	194 (9.2)	5 (0.2)
>38.4°C to 38.9°C	15 (0.7)	5 (0.2)	110 (5.2)	3 (0.1)
>38.9°C to 40.0°C	6 (0.3)	3 (0.1)	26 (1.2)	2 (0.1)
>40.0°C	0 (0.0)	2 (0.1)	1 (0.0)	0 (0.0)
Fatigue[c]				
Any	1085 (47.4)	767 (33.4)	1247 (59.4)	479 (22.8)
Mild	597 (26.1)	467 (20.3)	442 (21.1)	248 (11.8)
Moderate	455 (19.9)	289 (12.6)	708 (33.7)	217 (10.3)
Severe	33 (1.4)	11 (0.5)	97 (4.6)	14 (0.7)
Headache[c]				

	Pfizer-BioNTech COVID-19 Vaccine Dose 1 N[a]=2291 n[b] (%)	Placebo Dose 1 N[a]=2298 n[b] (%)	Pfizer-BioNTech COVID-19 Vaccine Dose 2 N[a]=2098 n[b] (%)	Placebo Dose 2 N[a]=2103 n[b] (%)
Any	959 (41.9)	775 (33.7)	1085 (51.7)	506 (24.1)
Mild	628 (27.4)	505 (22.0)	538 (25.6)	321 (15.3)
Moderate	308 (13.4)	251 (10.9)	480 (22.9)	170 (8.1)
Severe	23 (1.0)	19 (0.8)	67 (3.2)	15 (0.7)
Chills[c]				
Any	321 (14.0)	146 (6.4)	737 (35.1)	79 (3.8)
Mild	230 (10.0)	111 (4.8)	359 (17.1)	65 (3.1)
Moderate	82 (3.6)	33 (1.4)	333 (15.9)	14 (0.7)
Severe	9 (0.4)	2 (0.1)	45 (2.1)	0 (0.0)
Vomiting[d]				
Any	28 (1.2)	28 (1.2)	40 (1.9)	25 (1.2)
Mild	24 (1.0)	22 (1.0)	28 (1.3)	16 (0.8)
Moderate	4 (0.2)	5 (0.2)	8 (0.4)	9 (0.4)
Severe	0 (0.0)	1 (0.0)	4 (0.2)	0 (0.0)
Diarrhea[e]				
Any	255 (11.1)	270 (11.7)	219 (10.4)	177 (8.4)
Mild	206 (9.0)	217 (9.4)	179 (8.5)	144 (6.8)
Moderate	46 (2.0)	52 (2.3)	36 (1.7)	32 (1.5)
Severe	3 (0.1)	1 (0.0)	4 (0.2)	1 (0.0)
New or worsened muscle pain[c]				
Any	487 (21.3)	249 (10.8)	783 (37.3)	173 (8.2)
Mild	256 (11.2)	175 (7.6)	326 (15.5)	111 (5.3)
Moderate	218 (9.5)	72 (3.1)	410 (19.5)	59 (2.8)
Severe	13 (0.6)	2 (0.1)	47 (2.2)	3 (0.1)
New or worsened joint pain[c]				
Any	251 (11.0)	138 (6.0)	459 (21.9)	109 (5.2)
Mild	147 (6.4)	95 (4.1)	205 (9.8)	54 (2.6)
Moderate	99 (4.3)	43 (1.9)	234 (11.2)	51 (2.4)
Severe	5 (0.2)	0 (0.0)	20 (1.0)	4 (0.2)
Use of antipyretic or pain medication[f]	638 (27.8)	332 (14.4)	945 (45.0)	266 (12.6)

Note: Events and use of antipyretic or pain medication were collected in the electronic diary (e-diary) from Day 1 to Day 7 after each dose.

a. N = Number of participants reporting at least 1 yes or no response for the specified event after the specified dose.
b. n = Number of participants with the specified reaction.
c. Mild: does not interfere with activity; Moderate: some interference with activity; Severe: prevents daily activity.
d. Mild: 1 to 2 times in 24 hours; Moderate: >2 times in 24 hours; Severe: requires intravenous hydration.
e. Mild: 2 to 3 loose stools in 24 hours; Moderate: 4 to 5 loose stools in 24 hours; Severe: 6 or more loose stools in 24 hours.
f. Severity was not collected for use of antipyretic or pain medication.
‡ Eight participants were between 16 and 17 years of age.
* Randomized participants in the safety analysis population who received at least 1 dose of the study intervention.

Table 3: Study 2 – Frequency and Percentages of Participants with Solicited Local Reactions, by Maximum Severity, Within 7 Days After Each Dose – Participants 56 Years of Age and Older – Safety Population*

	Pfizer-BioNTech COVID-19 Vaccine Dose 1 N[a]=1802 n[b] (%)	Placebo Dose 1 N[a]=1792 n[b] (%)	Pfizer-BioNTech COVID-19 Vaccine Dose 2 N[a]=1660 n[b] (%)	Placebo Dose 2 N[a]=1646 n[b] (%)
Redness[c]				
Any (>2 cm)	85 (4.7)	19 (1.1)	120 (7.2)	12 (0.7)
Mild	55 (3.1)	12 (0.7)	59 (3.6)	8 (0.5)
Moderate	27 (1.5)	5 (0.3)	53 (3.2)	3 (0.2)
Severe	3 (0.2)	2 (0.1)	8 (0.5)	1 (0.1)
Swelling[c]				
Any (>2 cm)	118 (6.5)	21 (1.2)	124 (7.5)	11 (0.7)
Mild	71 (3.9)	10 (0.6)	68 (4.1)	5 (0.3)
Moderate	45 (2.5)	11 (0.6)	53 (3.2)	5 (0.3)
Severe	2 (0.1)	0 (0.0)	3 (0.2)	1 (0.1)
Pain at the injection site[d]				
Any (>2 cm)	1282 (71.1)	166 (9.3)	1098 (66.1)	127 (7.7)
Mild	1008 (55.9)	160 (8.9)	792 (47.7)	125 (7.6)
Moderate	270 (15.0)	6 (0.3)	298 (18.0)	2 (0.1)
Severe	4 (0.2)	0 (0.0)	8 (0.5)	0 (0.0)

Note: Reactions were collected in the electronic diary (e-diary) from Day 1 to Day 7 after vaccination.
a. N = Number of participants reporting at least 1 yes or no response for the specified reaction after the specified dose.
b. n = Number of participants with the specified reaction.
c. Mild: >2.0 to ≤5.0 cm; Moderate: >5.0 to ≤10.0 cm; Severe: >10.0 cm.
d. Mild: does not interfere with activity; Moderate: interferes with activity; Severe: prevents daily activity.
* Randomized participants in the safety analysis population who received at least 1 dose of the study intervention.

Table 4: Study 2 – Frequency and Percentages of Participants with Solicited Systemic Reactions, by Maximum Severity, Within 7 Days After Each Dose – Participants 56 Years of Age and Older – Reactogenicity Subset of the Safety Population*

	Pfizer-BioNTech COVID-19 Vaccine Dose 1 N[a]=1802 n[b] (%)	Placebo Dose 1 N[a]=1792 n[b] (%)	Pfizer-BioNTech COVID-19 Vaccine Dose 2 N[a]=1660 n[b] (%)	Placebo Dose 2 N[a]=1646 n[b] (%)
Fever				
≥38.0°C	26 (1.4)	7 (0.4)	181 (10.9)	4 (0.2)
≥38.0°C to 38.4°C	23 (1.3)	2 (0.1)	131 (7.9)	2 (0.1)
>38.4°C to 38.9°C	1 (0.1)	3 (0.2)	45 (2.7)	1 (0.1)
>38.9°C to 40.0°C	1 (0.1)	2 (0.1)	5 (0.3)	1 (0.1)
>40.0°C	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)
Fatigue[c]				
Any	615 (34.1)	405 (22.6)	839 (50.5)	277 (16.8)
Mild	373 (20.7)	252 (14.1)	351 (21.1)	161 (9.8)
Moderate	240 (13.3)	150 (8.4)	442 (26.6)	114 (6.9)
Severe	2 (0.1)	3 (0.2)	46 (2.8)	2 (0.1)

	Pfizer-BioNTech COVID-19 Vaccine Dose 1 N[a]=1802 n[b] (%)	Placebo Dose 1 N[a]=1792 n[b] (%)	Pfizer-BioNTech COVID-19 Vaccine Dose 2 N[a]=1660 n[b] (%)	Placebo Dose 2 N[a]=1646 n[b] (%)
Headache[c]				
Any	454 (25.2)	325 (18.1)	647 (39.0)	229 (13.9)
Mild	348 (19.3)	242 (13.5)	422 (25.4)	165 (10.0)
Moderate	104 (5.8)	80 (4.5)	216 (13.0)	60 (3.6)
Severe	2 (0.1)	3 (0.2)	9 (0.5)	4 (0.2)
Chills[c]				
Any	113 (6.3)	57 (3.2)	377 (22.7)	46 (2.8)
Mild	87 (4.8)	40 (2.2)	199 (12.0)	35 (2.1)
Moderate	26 (1.4)	16 (0.9)	161 (9.7)	11 (0.7)
Severe	0 (0.0)	1 (0.1)	17 (1.0)	0 (0.0)
Vomiting[d]				
Any	9 (0.5)	9 (0.5)	11 (0.7)	5 (0.3)
Mild	8 (0.4)	9 (0.5)	9 (0.5)	5 (0.3)
Moderate	1 (0.1)	0 (0.0)	1 (0.1)	0 (0.0)
Severe	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)
Diarrhea[e]				
Any	147 (8.2)	118 (6.6)	137 (8.3)	99 (6.0)
Mild	118 (6.5)	100 (5.6)	114 (6.9)	73 (4.4)
Moderate	26 (1.4)	17 (0.9)	21 (1.3)	22 (1.3)
Severe	3 (0.2)	1 (0.1)	2 (0.1)	4 (0.2)
New or worsened muscle pain[c]				
Any	251 (13.9)	149 (8.3)	477 (28.7)	87 (5.3)
Mild	168 (9.3)	100 (5.6)	202 (12.2)	57 (3.5)
Moderate	82 (4.6)	46 (2.6)	259 (15.6)	29 (1.8)
Severe	1 (0.1)	3 (0.2)	16 (1.0)	1 (0.1)
New or worsened joint pain[c]				
Any	155 (8.6)	109 (6.1)	313 (18.9)	61 (3.7)
Mild	101 (5.6)	68 (3.8)	161 (9.7)	35 (2.1)
Moderate	52 (2.9)	40 (2.2)	145 (8.7)	25 (1.5)
Severe	2 (0.1)	1 (0.1)	7 (0.4)	1 (0.1)
Use of antipyretic or pain medication	358 (19.9)	213 (11.9)	625 (37.7)	161 (9.8)

Note: Events and use of antipyretic or pain medication were collected in the electronic diary (e-diary) from Day 1 to Day 7 after each dose.

a. N = Number of participants reporting at least 1 yes or no response for the specified event after the specified dose.
b. n = Number of participants with the specified reaction.
c. Mild: does not interfere with activity; Moderate: some interference with activity; Severe: prevents daily activity.
d. Mild: 1 to 2 times in 24 hours; Moderate: >2 times in 24 hours; Severe: requires intravenous hydration.
e. Mild: 2 to 3 loose stools in 24 hours; Moderate: 4 to 5 loose stools in 24 hours; Severe: 6 or more loose stools in 24 hours.
* Randomized participants in the safety analysis population who received at least 1 dose of the study intervention.

Unsolicited Adverse Events

Serious Adverse Events

In Study 2, among participants 16 to 55 years of age who had received at least 1 dose of vaccine or placebo (Pfizer-BioNTech COVID-19 Vaccine = 10,841; placebo = 10,851), serious adverse events from Dose 1 through up to 30 days after Dose 2 in ongoing follow-up were reported by 0.4% of Pfizer-BioNTech COVID-19 Vaccine recipients and by 0.3% of placebo recipients. In a similar analysis, in participants 56 years of age and older (Pfizer-BioNTech COVID-19 Vaccine = 7960, placebo = 7934), serious adverse events were reported by 0.8% of Pfizer-BioNTech COVID-19 Vaccine recipients and by 0.6% of placebo recipients who received at least 1 dose of Pfizer-BioNTech COVID-19 Vaccine or placebo, respectively. In these analyses, 91.6% of study participants had at least 30 days of follow-up after Dose 2. Appendicitis was reported as a serious adverse event for 12 participants, and numerically higher in the vaccine group, 8 vaccine participants and 4 placebo participants. Currently available information is insufficient to determine a causal relationship with the vaccine. There were no other notable patterns or numerical imbalances between treatment groups for specific categories of serious adverse events (including neurologic, neuro-inflammatory, and thrombotic events) that would suggest a causal relationship to Pfizer-BioNTech COVID-19 Vaccine.

Non-Serious Adverse Events

Overall in Study 2 in which 10,841 participants 16 to 55 years of age received Pfizer-BioNTech COVID-19 Vaccine and 10,851 participants received placebo, non-serious adverse events from Dose 1 through up to 30 days after Dose 2 in ongoing follow-up were reported in 29.3% of participants who received Pfizer-BioNTech COVID-19 Vaccine and 13.2% of participants in the placebo group, for participants who received at least 1 dose. Overall in a similar analysis in which 7960 participants 56 years of age and older received Pfizer-BioNTech COVID-19 Vaccine, non-serious adverse events within 30 days were reported in 23.8% of participants who received Pfizer-BioNTech COVID-19 Vaccine and 11.7% of participants in the placebo group, for participants who received at least 1 dose. In these analyses, 91.6% of study participants had at least 30 days of follow-up after Dose 2. The higher frequency of reported unsolicited non-serious adverse events among Pfizer BioNTech COVID-19 Vaccine recipients compared to placebo recipients was primarily attributed to local and systemic adverse events reported during the first 7 days following vaccination that are consistent with adverse reactions solicited among participants in the reactogenicity subset and presented in Tables 3 and 4. From Dose 1 through 30 days after Dose 2, reports of lymphadenopathy were imbalanced with notably more cases in the Pfizer-BioNTech COVID-19 Vaccine group (64) vs. the placebo group (6), which is plausibly related to vaccination. Throughout the safety follow-up period to date, Bell's palsy (facial paralysis) was reported by four participants in the Pfizer-BioNTech COVID-19 Vaccine group. Onset of facial paralysis was Day 37 after Dose 1 (participant did not receive Dose 2) and Days 3, 9, and 48 after Dose 2. No cases of Bell's palsy were reported in the placebo group. Currently available information is insufficient to determine a causal relationship with the vaccine. There were no other notable patterns or numerical imbalances between treatment groups for specific categories of non-serious adverse events (including other neurologic or neuro-inflammatory, and thrombotic events) that would suggest a causal relationship to Pfizer-BioNTech COVID-19 Vaccine.

8 REQUIREMENTS AND INSTRUCTIONS FOR REPORTING ADVERSE EVENTS AND VACCINE ADMINISTRATION ERRORS

See Overall Safety Summary (Section 6) for additional information.

The vaccination provider enrolled in the federal COVID-19 Vaccination Program is responsible for MANDATORY reporting of the listed events following Pfizer-BioNTech COVID-19 Vaccine to the Vaccine Adverse Event Reporting System (VAERS):

- Vaccine administration errors whether or not associated with an adverse event
- Serious adverse events* (irrespective of attribution to vaccination)
- Cases of Multisystem Inflammatory Syndrome (MIS) in children and adults
- Cases of COVID-19 that result in hospitalization or death

*Serious adverse events are defined as:

- Death
- A life-threatening adverse event
- Inpatient hospitalization or prolongation of existing hospitalization
- A persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions
- A congenital anomaly/birth defect
- An important medical event that based on appropriate medical judgement may jeopardize the individual and may require medical or surgical intervention to prevent one of the outcomes listed above

Instructions for Reporting to VAERS

The vaccination provider enrolled in the federal COVID-19 Vaccination Program should complete and submit a VAERS form to FDA using one of the following methods:

- Complete and submit the report online: https://vaers.hhs.gov/reportevent.html, or
- If you are unable to submit this form electronically, you may fax it to VAERS at 1-877-721-0366. If you need additional help submitting a report you may call the VAERS toll-free information line at 1-800-822-7967 or send an email to info@vaers.org.

IMPORTANT: When reporting adverse events or vaccine administration errors to VAERS, please complete the entire form with detailed information. It is important that the information reported to FDA be as detailed and complete as possible. Information to include:

- Patient demographics (e.g., patient name, date of birth)
- Pertinent medical history
- Pertinent details regarding admission and course of illness
- Concomitant medications
- Timing of adverse event(s) in relationship to administration of the Pfizer-BioNTech COVID-19 Vaccine
- Pertinent laboratory and virology information
- Outcome of the event and any additional follow-up information if it is available at the time of the VAERS report. Subsequent reporting of follow-up information should be completed if additional details become available.

The following steps are highlighted to provide the necessary information for safety tracking:

1. In Box 17, provide information on Pfizer-BioNTech COVID-19 Vaccine and any other vaccines administered on the same day; and in Box 22, provide information on any other vaccines received within one month prior.
2. In Box 18, description of the event:
    a. Write “Pfizer-BioNTech COVID-19 Vaccine EUA” as the first line.
    b. Provide a detailed report of vaccine administration error and/or adverse event. It is important to provide detailed information regarding the patient and adverse event/medication error for ongoing safety evaluation of this unapproved vaccine. Please see information to include listed above.

3. Contact information:
    a. In Box 13, provide the name and contact information of the prescribing healthcare provider or institutional designee who is responsible for the report.
    b. In Box 14, provide the name and contact information of the best doctor/healthcare professional to contact about the adverse event.
    c. In Box 15, provide the address of the facility where vaccine was given (NOT the healthcare provider's office address).

Other Reporting Instructions

Vaccination providers may report to VAERS other adverse events that are not required to be reported using the contact information above.

To the extent feasible, report adverse events to Pfizer Inc. using the contact information below or by providing a copy of the VAERS form to Pfizer Inc.

Website	Fax number	Telephone number
www.pfizersafetyreporting.com	1-866-635-8337	1-800-438-1985

10 DRUG INTERACTIONS

There are no data to assess the concomitant administration of the Pfizer-BioNTech COVID-19 Vaccine with other vaccines.

11 USE IN SPECIFIC POPULATIONS

11.1 Pregnancy

Risk Summary

All pregnancies have a risk of birth defect, loss, or other adverse outcomes. In the US general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2% to 4% and 15% to 20%, respectively. Available data on Pfizer-BioNTech COVID-19 Vaccine administered to pregnant women are insufficient to inform vaccine-associated risks in pregnancy.

11.2 Lactation

Risk Summary

Data are not available to assess the effects of Pfizer-BioNTech COVID-19 Vaccine on the breastfed infant or on milk production/excretion.

11.3 Pediatric Use

Emergency Use Authorization of Pfizer-BioNTech COVID-19 Vaccine in adolescents 16 and 17 years of age is based on extrapolation of safety and effectiveness from adults 18 years of age and older. Emergency Use Authorization of Pfizer BioNTech COVID-19 Vaccine does not include use in individuals younger than 16 years of age.

11.4 Geriatric Use

Clinical studies of Pfizer-BioNTech COVID-19 Vaccine include participants 65 years of age and older and their data contributes to the overall assessment of safety and efficacy *[see Overall Safety Summary (6.1) and Clinical Trial Results and Supporting Data for EUA (18.1)]*. Of the total number of Pfizer-BioNTech COVID-19 Vaccine recipients in Study 2 (N=20,033), 21.4% (n=4,294) were 65 years of age and older and 4.3% (n=860) were 75 years of age and older.

13 DESCRIPTION

The Pfizer-BioNTech COVID-19 Vaccine is supplied as a frozen suspension in multiple dose vials; each vial must be diluted with 1.8 mL of sterile 0.9% Sodium Chloride Injection, USP prior to use to form the vaccine. Each dose of the Pfizer-BioNTech COVID-19 Vaccine contains 30 mcg of a nucleoside-modified messenger RNA (modRNA) encoding the viral spike (S) glycoprotein of SARS-CoV-2.

Each dose of the Pfizer-BioNTech COVID-19 Vaccine also includes the following ingredients: lipids (0.43 mg (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate), 0.05 mg 2[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide, 0.09 mg 1,2-distearoyl-sn-glycero-3-phosphocholine, and 0.2 mg cholesterol), 0.01 mg potassium chloride, 0.01 mg monobasic potassium phosphate, 0.36 mg sodium chloride, 0.07 mg dibasic sodium phosphate dihydrate, and 6 mg sucrose. The diluent (0.9% Sodium Chloride Injection, USP) contributes an additional 2.16 mg sodium chloride per dose.

The Pfizer-BioNTech COVID-19 Vaccine does not contain preservative. The vial stoppers are not made with natural rubber latex.

14 CLINICAL PHARMACOLOGY

14.1 Mechanism of Action

The modRNA in the Pfizer-BioNTech COVID-19 Vaccine is formulated in lipid particles, which enable delivery of the RNA into host cells to allow expression of the SARS-CoV-2 S antigen. The vaccine elicits an immune response to the S antigen, which protects against COVID-19.

18 CLINICAL TRIAL RESULTS AND SUPPORTING DATA FOR EUA

18.1 Efficacy in Participants 16 Years of Age and Older

Study 2 is a multicenter, multinational, Phase 1/2/3, randomized, placebo-controlled, observer-blind, dose-finding, vaccine candidate–selection, and efficacy study in participants 12 years of age and older. Randomization was stratified by age: 12 through 15 years of age, 16 through 55 years of age, or 56 years of age and older, with a minimum of 40% of participants in the ≥56-year stratum. The study excluded participants who were immunocompromised and those who had previous clinical or microbiological diagnosis of COVID-19. Participants with preexisting stable disease, defined as disease not requiring significant change in therapy or hospitalization for worsening disease during the 6 weeks before enrollment, were included as were participants with known stable infection with human immunodeficiency virus (HIV), hepatitis C virus (HCV), or hepatitis B virus (HBV).

In the Phase 2/3 portion approximately 44,000 participants 12 years of age and older were randomized equally and received 2 doses of Pfizer-BioNTech COVID-19 Vaccine or placebo separated by 21 days. Participants are planned to be followed for up to 24 months, for assessments of safety and efficacy against COVID-19.

The population for the analysis of the primary efficacy endpoint included, 36,621 participants 12 years of age and older (18,242 in the Pfizer-BioNTech COVID-19 Vaccine group and 18,379 in the placebo group) who did not have evidence of prior infection with SARS-CoV-2 through 7 days after the second dose. Table 5 presents the specific demographic characteristics in the studied population.

Table 5: Demographics (population for the primary efficacy endpoint)[a]

	Pfizer-BioNTech COVID-19 Vaccine (N=18,242) n (%)	Placebo (N=18,379) n (%)
Sex		
Male	9318 (51.1)	9225 (50.2)
Female	8924 (48.9)	9154 (49.8)
Age (years)		
Mean (SD)	50.6 (15.70)	50.4 (15.81)
Median	52.0	52.0
Min, max	(12, 89)	(12, 91)
Age group		
≥12 through 15 years	46 (0.3)	42 (0.2)
≥16 through 17 years	66 (0.4)	68 (0.4)
≥16 through 64 years	14,216 (77.9)	14,299 (77.8)
≥65 through 74 years	3176 (17.4)	3226 (17.6)
≥75 years	804 (4.4)	812 (4.4)
Race		
White	15,110 (82.8)	15,301 (83.3)
Black or African American	1617 (8.9)	1617 (8.8)
American Indian or Alaska Native	118 (0.6)	106 (0.6)
Asian	815 (4.5)	810 (4.4)
Native Hawaiian or other Pacific Islander	48 (0.3)	29 (0.2)
Other[b]	534 (2.9)	516 (2.8)
Ethnicity		
Hispanic or Latino	4886 (26.8)	4857 (26.4)
Not Hispanic or Latino	13,253 (72.7)	13,412 (73.0)
Not reported	103 (0.6)	110 (0.6)
Comorbidities[c]		
Yes	8432 (46.2)	8450 (46.0)
No	9810 (53.8)	9929 (54.0)

a. All eligible randomized participants who receive all vaccination(s) as randomized within the predefined window, have no other important protocol deviations as determined by the clinician, and have no evidence of SARS-CoV-2 infection prior to 7 days after Dose 2.
b. Includes multiracial and not reported.
c. Number of participants who have 1 or more comorbidities that increase the risk of severe COVID-19 disease
- Chronic lung disease (e.g., emphysema and chronic bronchitis, idiopathic pulmonary fibrosis, and cystic fibrosis) or moderate to severe asthma
- Significant cardiac disease (e.g., heart failure, coronary artery disease, congenital heart disease, cardiomyopathies, and pulmonary hypertension)
- Obesity (body mass index ≥ 30 kg/m^2)
- Diabetes (Type 1, Type 2 or gestational)
- Liver disease
- Human Immunodeficiency Virus (HIV) infection (not included in the efficacy evaluation)

Efficacy Against COVID-19

The population in the primary efficacy analysis included all participants 12 years of age and older who had been enrolled from July 27, 2020, and followed for the development of COVID-19 through November 14, 2020. Participants 18 to 55 years of age and 56 years of age and older began enrollment from July 27,2020, 16 to 17 years of age began enrollment from September 16, 2020 and 12 to 15 years of age began enrollment from October 15, 2020.

The vaccine efficacy information is presented in Table 6.

Table 6: Vaccine Efficacy – First COVID-19 Occurrence From 7 Days After Dose 2, by Age Subgroup – Participants Without Evidence of Infection and Participants With or Without Evidence of Infection Prior to 7 Days After Dose 2 – Evaluable Efficacy (7 Days) Population

First COVID-19 occurrence from 7 days after Dose 2 in participants without evidence of prior SARS-CoV-2 infection*			
Subgroup	**Pfizer-BioNTech COVID-19 Vaccine N[a]=18,198 Cases n1[b] Surveillance Time[c] (n2[d])**	**Placebo N[a]=18,325 Cases n1[b] Surveillance Time[c] (n2[d])**	**Vaccine Efficacy % (95% CI)**
All subjects[e]	8 2.214 (17,411)	162 2.222 (17,511)	95.0 (90.3, 97.6)[f]
16 to 64 years	7 1.706 (13,549)	143 1.710 (13,618)	95.1 (89.6, 98.1)[g]
65 years and older	1 0.508 (3848)	19 0.511 (3880)	94.7 (66.7, 99.9)[g]
First COVID-19 occurrence from 7 days after Dose 2 in participants with or without evidence of prior SARS-CoV-2 infection			
Subgroup	**Pfizer-BioNTech COVID-19 Vaccine N[a]=19,965 Cases n1[b] Surveillance Time[c] (n2[d])**	**Placebo N[a]=20,172 Cases n1[b] Surveillance Time[c] (n2[d])**	**Vaccine Efficacy % (95% CI)**
All subjects[e]	9 2.332 (18,559)	169 2.345 (18,708)	94.6 (89.9, 97.3)[f]
16 to 64 years	8 1.802 (14,501)	150 1.814 (14,627)	94.6 (89.1, 97.7)[g]
65 years and older	1 0.530 (4044)	19 0.532 (4067)	94.7 (66.8, 99.9)[g]

Note: Confirmed cases were determined by Reverse Transcription-Polymerase Chain Reaction (RT-PCR) and at least 1 symptom consistent with COVID-19 (symptoms included: fever; new or increased cough; new or increased shortness of breath; chills; new or increased muscle pain; new loss of taste or smell; sore throat; diarrhea; vomiting).

* Participants who had no evidence of past SARS-CoV-2 infection (i.e., N-binding antibody [serum] negative at Visit 1 and SARS-CoV-2 not detected by NAAT [nasal swab] at Visits 1 and 2), and had negative NAAT (nasal swab) at any unscheduled visit prior to 7 days after Dose 2 were included in the analysis.

a. N = number of participants in the specified group.

b. n1 = Number of participants meeting the endpoint definition.

c. Total surveillance time in 1000 person-years for the given endpoint across all participants within each group at risk for the endpoint. Time period for COVID-19 case accrual is from 7 days after Dose 2 to the end of the surveillance period.

d. n2 = Number of participants at risk for the endpoint.

e. No confirmed cases were identified in participants 12 to 15 years of age.
f. Credible interval for VE was calculated using a beta-binomial model with a beta (0.700102, 1) prior for θ=r(1-VE)/(1+r(1-VE)), where r is the ratio of surveillance time in the active vaccine group over that in the placebo group.
g. Confidence interval (CI) for vaccine efficacy is derived based on the Clopper and Pearson method adjusted to the surveillance time.

19 HOW SUPPLIED/STORAGE AND HANDLING

Pfizer-BioNTech COVID-19 Vaccine Suspension for Intramuscular Injection, Multiple Dose Vials are supplied in a carton containing 25 multiple dose vials (NDC 59267-1000-3) or 195 multiple dose vials (NDC 59267-1000-2). After dilution, one vial contains up to 6 doses of 0.3 mL. Vial labels and cartons may state that after dilution, a vial contains 5 doses of 0.3 mL. The information on the number of doses per vial after dilution in this Fact Sheet supersedes the number of doses stated on vial labels and cartons.

During storage, minimize exposure to room light, and avoid exposure to direct sunlight and ultraviolet light.

Do not refreeze thawed vials.

Frozen Vials Prior to Use

Cartons of Pfizer-BioNTech COVID-19 Vaccine Multiple Dose Vials arrive in thermal containers with dry ice. Once received, remove the vial cartons immediately from the thermal container and store in an ultra-low temperature freezer between -80ºC to -60ºC (-112ºF to -76ºF). Vials must be kept frozen between -80ºC to -60ºC (-112ºF to -76ºF) and protected from light, in the original cartons, until ready to use.

If an ultra-low temperature freezer is not available, the thermal container in which the Pfizer-BioNTech COVID-19 Vaccine arrives may be used as temporary storage when consistently re-filled to the top of the container with dry ice. Refer to the re-icing guidelines packed in the original thermal container for instructions regarding the use of the thermal container for temporary storage. The thermal container maintains a temperature range of -90ºC to -60ºC (-130ºF to -76ºF). Storage within this temperature range is not considered an excursion from the recommended storage condition.

Thawed Vials Before Dilution

Thawed Under Refrigeration
Thaw and then store undiluted vials in the refrigerator [2ºC to 8ºC (35ºF to 46ºF)] for up to 5 days (120 hours). A carton of 25 vials or 195 vials may take up to 2 or 3 hours, respectively, to thaw in the refrigerator, whereas a fewer number of vials will thaw in less time.

Thawed at Room Temperature
For immediate use, thaw undiluted vials at room temperature [up to 25ºC (77ºF)] for 30 minutes. Thawed vials can be handled in room light conditions.

Vials must reach room temperature before dilution.

Undiluted vials may be stored at room temperature for no more than 2 hours.

Vials After Dilution

After dilution, store vials between 2°C to 25°C (35°F to 77°F) and use within 6 hours from the time of dilution. During storage, minimize exposure to room light, and avoid exposure to direct sunlight and ultraviolet light. Any vaccine remaining in vials must be discarded after 6 hours. Do not refreeze.

20 PATIENT COUNSELING INFORMATION

Advise the recipient or caregiver to read the Fact Sheet for Recipients and Caregivers.

The vaccination provider must include vaccination information in the state/local jurisdiction's Immunization Information System (IIS) or other designated system. Advise recipient or caregiver that more information about IISs can be found at: https://www.cdc.gov/vaccines/programs/iis/about.html.

21 CONTACT INFORMATION

For general questions, visit the website or call the telephone number provided below.

Website	Telephone number
www.cvdvaccine.com	1-877-829-2619 (1-877-VAX-CO19)

This Full EUA Prescribing Information may have been updated. For the most recent Full EUA Prescribing Information, please see www.cvdvaccine.com.

Manufactured by
Pfizer Inc., New York, NY 10017

Manufactured for
BioNTech Manufacturing GmbH
An der Goldgrube 12
55131 Mainz, Germany

LAB-1457-3.0

Revised: December 2020

GLOBAL LABELING MANAGEMENT
EUA Fact Sheet for HCP and Full EUA PI Safety Updates Log

PRODUCT NAME: Pfizer-BioNTech COVID-19 Vaccine

Emergency Use Authorization (EUA) Fact Sheet for Healthcare Providers and Full EUA Prescribing Information Version History for the Reporting Period 1 December 2020 to 31 December 2020:

Version number	Effective Date	Sections Changed
Emergency Use Authorization (EUA) Fact Sheet for Healthcare Providers		
LAB-1450-3.0	23-Dec-2020	Warnings INFORMATION TO PROVIDE TO VACCINE RECIPIENTS/CAREGIVERS
Full EUA Prescribing Information		
LAB-1457-3.0	23-Dec-2020	WARNINGS AND PRECAUTIONS

Emergency Use Authorization Fact Sheet for Healthcare Providers

EMERGENCY USE AUTHORIZATION (EUA) OF THE PFIZER-BIONTECH COVID-19 VACCINE TO PREVENT CORONAVIRUS DISEASE 2019 (COVID-19)

No safety changes during the reporting period

SUMMARY OF INSTRUCTIONS FOR COVID-19 VACCINATION PROVIDER

No safety changes during the reporting period

DESCRIPTION OF COVID-19

No safety changes during the reporting period

DOSAGE AND ADMINISTRATION - Storage and Handling

No safety changes during the reporting period

DOSAGE AND ADMINISTRATION - Dosing and Schedule

No safety changes during the reporting period

DOSAGE AND ADMINISTRATION - Administration

No safety changes during the reporting period

Contraindications

No safety changes during the reporting period

PRODUCT NAME: Pfizer-BioNTech COVID-19 Vaccine

Warnings

LAB-1450-3.0	23-Dec-2020	2020-0066762

Safety/Non-safety: **Safety**

Content change:

Monitor Pfizer-BioNTech COVID-19 Vaccine recipients for the occurrence of immediate adverse reactions according to the Centers for Disease Control and Prevention guidelines (https://www.cdc.gov/vaccines/covid-19/).

Adverse Reactions

No safety changes during the reporting period

Use with Other Vaccines

No safety changes during the reporting period

INFORMATION TO PROVIDE TO VACCINE RECIPIENTS/CAREGIVERS

LAB-1450-3.0	23-Dec-2020	2020-0066762

Safety/Non-safety: **Safety (included per local Health Authority requirement for COVID-19 Vaccines)**

Content change:

Provide the **v-safe** information sheet to vaccine recipients/caregivers and encourage vaccine recipients to participate in **v-safe**. **V-safe** is a new voluntary smartphone-based tool that uses text messaging and web surveys to check in with people who have been vaccinated to identify potential side effects after COVID-19 vaccination. **V-safe** asks questions that help CDC monitor the safety of COVID-19 vaccines. **V-safe** also provides second-dose reminders if needed and live telephone follow-up by CDC if participants report a significant health impact following COVID-19 vaccination. For more information, visit: www.cdc.gov/vsafe.

MANDATORY REQUIREMENTS FOR PFIZER-BIONTECH COVID-19 VACCINE ADMINISTRATION UNDER EMERGENCY USE AUTHORIZATION

No safety changes during the reporting period

PRODUCT NAME: Pfizer-BioNTech COVID-19 Vaccine

OTHER ADVERSE EVENT REPORTING TO VAERS AND PFIZER INC.
No safety changes during the reporting period

ADDITIONAL INFORMATION
No safety changes during the reporting period

AVAILABLE ALTERNATIVES
No safety changes during the reporting period

AUTHORITY FOR ISSUANCE OF THE EUA
No safety changes during the reporting period

The Countermeasures Injury Compensation Program
No safety changes during the reporting period

Full Emergency Use Authorization Prescribing Information

1 AUTHORIZED USE
No safety changes during the reporting period

2 DOSAGE AND ADMINISTRATION
No safety changes during the reporting period

3 DOSAGE FORMS AND STRENGTHS
No safety changes during the reporting period

4 CONTRAINDICATIONS
No safety changes during the reporting period

5 WARNINGS AND PRECAUTIONS

LAB-1457-3.0	**23-Dec-2020**	**2020-0066762**

Safety/Non-safety: **Safety**

Content change:

5.1 Management of Acute Allergic Reactions

PRODUCT NAME: Pfizer-BioNTech COVID-19 Vaccine

Appropriate medical treatment used to manage immediate allergic reactions must be immediately available in the event an acute anaphylactic reaction occurs following administration of Pfizer-BioNTech COVID-19 Vaccine.

Monitor Pfizer-BioNTech COVID-19 Vaccine recipients for the occurrence of immediate adverse reactions according to the Centers for Disease Control and Prevention guidelines (https://www.cdc.gov/vaccines/covid-19/).

6 OVERALL SAFETY SUMMARY

No safety changes during the reporting period

8 REQUIREMENTS AND INSTRUCTIONS FOR REPORTING ADVERSE EVENTS AND VACCINE ADMINISTRATION ERROR

No safety changes during the reporting period

10 DRUG INTERACTIONS

No safety changes during the reporting period

11 USE IN SPECIFIC POPULATION

No safety changes during the reporting period

13 DESCRIPTION

No safety changes during the reporting period

14 CLINICAL PHARMACOLOGY

No safety changes during the reporting period

18 CLINICAL TRIAL RESULTS AND SUPPORTING DATA FOR EUA

No safety changes during the reporting period

19 HOW SUPPLIED/STORAGE AND HANDLING

No safety changes during the reporting period

20 PATIENT COUNSELING INFORMATION

No safety changes during the reporting period

21 CONTACT INFORMATION

No safety changes during the reporting period

APPENDIX 2 Interval Number of Case Reports (Serious and Non-Serious, Medically Confirmed and Non-Medically Confirmed) from Post-Marketing Data Sources, Overall, by Sex, Country, Age Groups and in Special Populations

PF-07302048 - ALL

Reporting Period: 01-DEC-2020 Through 31-DEC-2020

Total Number of Cases: 3615 (100%) (ALL) / 3615 (OVERALL)

Total Number of Adverse Events (PT): 11828 (ALL)

NON CT

Total Number of Cases: 3615

Total Number of Adverse Events (PT): 11828

		Number of Cases	Percentage (%)
Sex			
	FEMALE	2478	68.5 %
	MALE	679	18.8 %
	NO DATA	458	12.7 %
Age Range			
Min = 0.12 Years	0 to 27 days	1	0.0 %
Max = 98.0 Years	28 days to 23 months	15	0.4 %
	2 to 11 years	3	0.1 %
Mean = 44.5	12 to 17 years	3	0.1 %
Median = 43.0	18 - 30 years	480	13.3 %
Standard Deviation = 15.17	31 - 50 years	1299	35.9 %
n = 2703	51 - 64 years	685	18.9 %
	65 - 74 years	112	3.1 %
	Greater than or equal to 75 years	113	3.1 %
	Unknown	904	25.0 %
Country Where Event Occured			
	UNITED STATES	2526	69.9 %
	UNITED KINGDOM	891	24.6 %
	ISRAEL	81	2.2 %
	GERMANY	19	0.5 %
	ROMANIA	17	0.5 %
	CANADA	14	0.4 %
	PUERTO RICO	14	0.4 %
	CHILE	8	0.2 %
	MEXICO	6	0.2 %
	CROATIA	5	0.1 %
	ITALY	5	0.1 %
	POLAND	3	0.1 %
	PORTUGAL	3	0.1 %
	SPAIN	3	0.1 %
	BULGARIA	2	0.1 %
	GREECE	2	0.1 %
	HUNGARY	2	0.1 %
	INDIA	2	0.1 %
	QATAR	2	0.1 %
	AFGHANISTAN	1	0.0 %
	CYPRUS	1	0.0 %

		Number of Cases	Percentage (%)
Country Where Event Occured			
	MALTA	1	0.0 %
	OMAN	1	0.0 %
	SLOVAKIA	1	0.0 %
	SLOVENIA	1	0.0 %
	SWEDEN	1	0.0 %
	SWITZERLAND	1	0.0 %
	UNITED ARAB EMIRATES	1	0.0 %
	UNITED STATES MINOR OUTLYING ISLANDS	1	0.0 %
Source			
	Spontaneous	3615	100.0 %
Case Seriousness			
	SERIOUS	654	18.1 %
	NONSERIOUS	2961	81.9 %
HP/Medically Confirmed			
	Yes	2588	71.6 %
	No	1027	28.4 %
Special Populations	**Pregnant/Breastfeeding Women**		
	Yes	68	1.9 %
	Pediatric Non EIU		
	Yes	7	0.2 %
	Elderly		
	Yes	225	6.2 %
	Race/Ethnicity		
	ASIAN - HISPANIC OR LATINO	2	0.1 %
	ASIAN - NO DATA	110	3.0 %
	ASIAN - NOT HISPANIC OR LATINO	75	2.1 %
	BLACK - HISPANIC OR LATINO	3	0.1 %
	BLACK - NO DATA	50	1.4 %
	BLACK - NOT HISPANIC OR LATINO	29	0.8 %
	BLACK - OTHER	1	0.0 %
	CAUCASIAN - HISPANIC OR LATINO	66	1.8 %
	CAUCASIAN - NO DATA	634	17.5 %
	CAUCASIAN - NOT HISPANIC OR LATINO	479	13.3 %
	NATIVE AMERICAN - HISPANIC OR LATINO	1	0.0 %
	NATIVE AMERICAN - NO DATA	14	0.4 %
	NATIVE AMERICAN - NOT HISPANIC OR LATINO	5	0.1 %
	NATIVE HAWAIIAN / OTHER PACIFIC ISLANDER - HISPANIC OR LATINO	1	0.0 %
	NATIVE HAWAIIAN / OTHER PACIFIC ISLANDER - NO DATA	2	0.1 %
	NATIVE HAWAIIAN / OTHER PACIFIC ISLANDER - NOT HISPANIC OR LATINO	5	0.1 %
	NO DATA - HISPANIC OR LATINO	93	2.6 %
	NO DATA - NO DATA	2022	55.9 %
	NO DATA - NOT HISPANIC OR LATINO	17	0.5 %
	NO DATA - OTHER	6	0.2 %

APPENDIX 2.1 Cumulative Number of Case Reports (Serious and Non-Serious, Medically Confirmed and Non Medically-Confirmed) from Post-Marketing Data Sources, Overall, by Sex, Country, Age Groups and in Special Populations

PF-07302048 - ALL

Reporting Period: Through 31-DEC-2020

Total Number of Cases: 3615 (100%) (ALL) / 3615 (OVERALL)

Total Number of Adverse Events (PT): 11828 (ALL)

NON CT

Total Number of Cases: 3615

Total Number of Adverse Events (PT): 11828

		Number of Cases	Percentage (%)
Sex			
	FEMALE	2478	68.5 %
	MALE	679	18.8 %
	NO DATA	458	12.7 %
Age Range			
Min = 0.12 Years Max = 98.0 Years Mean = 44.5 Median = 43.0 Standard Deviation = 15.17 n = 2703	0 to 27 days	1	0.0 %
	28 days to 23 months	15	0.4 %
	2 to 11 years	3	0.1 %
	12 to 17 years	3	0.1 %
	18 - 30 years	480	13.3 %
	31 - 50 years	1299	35.9 %
	51 - 64 years	685	18.9 %
	65 - 74 years	112	3.1 %
	Greater than or equal to 75 years	113	3.1 %
	Unknown	904	25.0 %
Country Where Event Occured			
	UNITED STATES	2526	69.9 %
	UNITED KINGDOM	891	24.6 %
	ISRAEL	81	2.2 %
	GERMANY	19	0.5 %
	ROMANIA	17	0.5 %
	CANADA	14	0.4 %
	PUERTO RICO	14	0.4 %
	CHILE	8	0.2 %
	MEXICO	6	0.2 %
	CROATIA	5	0.1 %
	ITALY	5	0.1 %
	POLAND	3	0.1 %
	PORTUGAL	3	0.1 %
	SPAIN	3	0.1 %
	BULGARIA	2	0.1 %
	GREECE	2	0.1 %
	HUNGARY	2	0.1 %
	INDIA	2	0.1 %
	QATAR	2	0.1 %
	AFGHANISTAN	1	0.0 %

		Number of Cases	Percentage (%)
Country Where Event Occured			
	CYPRUS	1	0.0 %
	MALTA	1	0.0 %
	OMAN	1	0.0 %
	SLOVAKIA	1	0.0 %
	SLOVENIA	1	0.0 %
	SWEDEN	1	0.0 %
	SWITZERLAND	1	0.0 %
	UNITED ARAB EMIRATES	1	0.0 %
	UNITED STATES MINOR OUTLYING ISLANDS	1	0.0 %
Source			
	Spontaneous	3615	100.0 %
Case Seriousness			
	SERIOUS	654	18.1 %
	NONSERIOUS	2961	81.9 %
HP/Medically Confirmed			
	Yes	2588	71.6 %
	No	1027	28.4 %
Special Populations	**Pregnant/Breastfeeding Women**		
	Yes	68	1.9 %
	Pediatric Non EIU		
	Yes	7	0.2 %
	Elderly		
	Yes	225	6.2 %

		Number of Cases	Percentage (%)
	Race/Ethnicity		
	ASIAN - HISPANIC OR LATINO	2	0.1 %
	ASIAN - NO DATA	110	3.0 %
	ASIAN - NOT HISPANIC OR LATINO	75	2.1 %
	BLACK - HISPANIC OR LATINO	3	0.1 %
	BLACK - NO DATA	50	1.4 %
	BLACK - NOT HISPANIC OR LATINO	29	0.8 %
	BLACK - OTHER	1	0.0 %
	CAUCASIAN - HISPANIC OR LATINO	66	1.8 %
	CAUCASIAN - NO DATA	634	17.5 %
	CAUCASIAN - NOT HISPANIC OR LATINO	479	13.3 %
	NATIVE AMERICAN - HISPANIC OR LATINO	1	0.0 %
	NATIVE AMERICAN - NO DATA	14	0.4 %
	NATIVE AMERICAN - NOT HISPANIC OR LATINO	5	0.1 %
	NATIVE HAWAIIAN / OTHER PACIFIC ISLANDER - HISPANIC OR LATINO	1	0.0 %
	NATIVE HAWAIIAN / OTHER PACIFIC ISLANDER - NO DATA	2	0.1 %
	NATIVE HAWAIIAN / OTHER PACIFIC ISLANDER - NOT HISPANIC OR LATINO	5	0.1 %
	NO DATA - HISPANIC OR LATINO	93	2.6 %
	NO DATA - NO DATA	2022	55.9 %
	NO DATA - NOT HISPANIC OR LATINO	17	0.5 %
	NO DATA - OTHER	6	0.2 %

Appendix 2.2 Interval Summary Tabulation of Case Reports with DME Events from Post-Marketing Data Sources

PF-07302048 - ALL

Interval Reporting Period: 01-DEC-2020 Through 31-DEC-2020

Total Number of Cases: 3,615 (Interval)

Total Number of Cases with DME 76 (Interval)

Total Number of Adverse Events (PT) (DME only) 84 (Interval)

MedDRA Version: v.23.1J

SOC and PT	Number of Events	Percentage (%)
Gastrointestinal disorders	1	
Pancreatitis	1	0.0 %
General disorders and administration site conditions	2	
Face oedema	2	0.1 %
Immune system disorders	41	
Anaphylactic reaction	32	0.9 %
Anaphylactic shock	4	0.1 %
Anaphylactoid reaction	5	0.1 %
Investigations	1	
Electrocardiogram QT prolonged	1	0.0 %
Respiratory, thoracic and mediastinal disorders	28	
Laryngeal oedema	2	0.1 %
Pharyngeal swelling	26	0.7 %
Skin and subcutaneous tissue disorders	11	
Angioedema	11	0.3 %

Multiple adverse event coding to the same Preferred Term (DME) may have been reported in some cases. Counts are provided for the number of unique Preferred Terms Reported.

APPENDIX 2.3: Cumulative and Interval Summary Tabulation of Serious and Non-Serious Case Reports From Post-Marketing Data Sources by Medically Confirmed and Non Medically Confirmed, Region and Country

Cumulative Reporting Period: Through 31-DEC-2020

Interval Reporting Period: 01-DEC-2020 Through 31-DEC-2020

Total Number of Cases: 3,615 (Interval) / 3,615 (Cumulative)

MedDRA Version: v.23.1J

Medically Confirmed

Region : European Countries (27 EU)

Country where Event Occurred	*Interval Total # Spontaneous Cases*	*Cumulative Total # Spontaneous Cases*	Spontaneous					
			Nonserious		Serious Fatal		Serious Non Fatal	
			I	C	I	C	I	C
BULGARIA	2	2	2	2				
CROATIA	4	4	4	4				
GERMANY	16	16	11	11			5	5
GREECE	2	2	1	1			1	1
HUNGARY	2	2	1	1			1	1
ITALY	5	5	5	5				
MALTA	1	1					1	1
POLAND	3	3	3	3				
PORTUGAL	3	3	3	3				
ROMANIA	17	17	17	17				
SLOVENIA	1	1	1	1				
SPAIN	3	3	2	2			1	1
SWEDEN	1	1			1	1		
	60	60	50	50	1	1	9	9

* I=Interval, C=Cumulative

Medically Confirmed

Region : Non-European Countries

Country where Event Occurred	*Interval Total # Spontaneous Cases*	*Cumulative Total # Spontaneous Cases*	Spontaneous					
			Nonserious		Serious Fatal		Serious Non Fatal	
			I	C	I	C	I	C
AFGHANISTAN	1	1					1	1
CANADA	10	10	8	8			2	2
CHILE	8	8	8	8				
INDIA	1	1	1	1				
ISRAEL	41	41	36	36	2	2	3	3
MEXICO	5	5	4	4			1	1
PUERTO RICO	11	11	11	11				
QATAR	2	2	1	1			1	1
SWITZERLAND	1	1			1	1		
UNITED KINGDOM	624	624	464	464	2	2	158	158
UNITED STATES	1,823	1,823	1564	1564	1	1	258	258
UNITED STATES MINOR OUTLYING ISLANDS	1	1	1	1				
	2,528	2,528	2098	2098	6	6	424	424

* I=Interval, C=Cumulative

Non Medically Confirmed

Region : European Countries (27 EU)

Country where Event Occurred	*Interval Total # Spontaneous Cases*	*Cumulative Total # Spontaneous Cases*	Spontaneous			
			Nonserious		Serious Non Fatal	
			I	C	I	C
CROATIA	1	1	1	1		
GERMANY	3	3	1	1	2	2
SLOVAKIA	1	1	1	1		
	5	5	3	3	2	2

Region : Non-European Countries

Country where Event Occurred	*Interval Total # Spontaneous Cases*	*Cumulative Total # Spontaneous Cases*	Spontaneous					
			Nonserious		Serious Fatal		Serious Non Fatal	
			I	C	I	C	I	C
CANADA	4	4	3	3			1	1
CYPRUS	1	1			1	1		
INDIA	1	1	1	1				
ISRAEL	40	40	36	36	1	1	3	3
MEXICO	1	1	1	1				
OMAN	1	1	1	1				
PUERTO RICO	3	3	3	3				
UNITED ARAB EMIRATES	1	1	1	1				
UNITED KINGDOM	267	267	141	141			126	126
UNITED STATES	703	703	623	623	1	1	79	79
	1,022	1,022	810	810	3	3	209	209

* I=Interval, C=Cumulative

Appendix 2.4: Cumulative and Interval Summary Tabulation of Fatal Case Reports From Post-Marketing Data Sources by Country

Cumulative Reporting Period: Through 31-DEC-2020

Interval Reporting Period: 01-DEC-2020 Through 31-DEC-2020

Total Number of Cases: 10 (Interval) / 10 (Cumulative)

MedDRA Version: v.23.1J

Country where Event Occurred	*Interval Total # Spontaneous Cases*	*Cumulative Total # Spontaneous Cases*	Spontaneous Serious Fatal	
			I	C
CYPRUS	1	1	1	1
ISRAEL	3	3	3	3
SWEDEN	1	1	1	1
SWITZERLAND	1	1	1	1
UNITED KINGDOM	2	2	2	2
UNITED STATES	2	2	2	2
	10	10	10	10

* I=Interval, C=Cumulative

APPENDIX 2.5: Cumulative and Interval Summary Tabulation of Serious and Non-Serious Adverse Reactions From Post-Marketing Data Sources Organized per MedDRA System Organ Class by Preferred Term

Cumulative Reporting Period: Through 31-DEC-2020

Interval Reporting Period: 01-DEC-2020 Through 31-DEC-2020

Total Number of Cases: 3,615 (Interval) / 3,615 (Cumulative)

Total Number of Adverse Events (PT): 11,824 (Interval) / 11,824 (Cumulative)

MedDRA Version: v.23.1J

System Organ Class

Blood and lymphatic system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Leukopenia	1	1	1	1		
Lymphadenitis	2	2	2	2		
Lymphadenopathy	118	118	95	95	23	23
Lymph node pain	25	25	20	20	5	5
Thrombotic thrombocytopenic purpura	1	1			1	1
	147	147	118	118	29	29

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acute myocardial infarction	2	2			2	2
Arrhythmia	2	2	1	1	1	1
Atrial f brillation	1	1			1	1
Bradycardia	1	1			1	1
Cardiac arrest	5	5			5	5
Cardiac discomfort	1	1	1	1		
Cardiac disorder	2	2	2	2		
Cardiac failure	1	1			1	1
Cardiac flutter	1	1			1	1
Extrasystoles	1	1			1	1
Myocardial infarction	2	2	1	1	1	1
Palpitations	71	71	54	54	17	17
Pericarditis	2	2	2	2		
Sinus bradycardia	1	1			1	1
Sinus tachycardia	4	4	3	3	1	1
Supraventricular tachycardia	4	4			4	4
Tachycardia	78	78	59	59	19	19
Ventricular extrasystoles	5	5	3	3	2	2
Ventricular fibrillation	1	1			1	1
Ventricular tachycardia	1	1	1	1		
	186	186	127	127	59	59

System Organ Class

Congenital, familial and genetic disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Congenital anomaly	1	1			1	1
Muscular dystrophy	1	1	1	1		
	2	2	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Ear and labyrinth disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Deafness	4	4	3	3	1	1
Deafness neurosensory	2	2			2	2
Deafness unilateral	1	1			1	1
Ear discomfort	6	6	5	5	1	1
Ear disorder	1	1	1	1		
Ear pain	18	18	14	14	4	4
Ear swelling	4	4	3	3	1	1
Hyperacusis	2	2	1	1	1	1
Hypoacusis	4	4	3	3	1	1
Motion sickness	2	2	2	2		
Paraesthesia ear	1	1	1	1		
Tinnitus	26	26	18	18	8	8
Vertigo	21	21	16	16	5	5
	92	92	67	67	25	25

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Eye disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abnormal sensation in eye	1	1	1	1		
Asthenopia	3	3	3	3		
Blepharospasm	1	1	1	1		
Blindness transient	1	1			1	1
Conjunctival haemorrhage	1	1			1	1
Diplopia	2	2	2	2		
Dry eye	1	1	1	1		
Erythema of eyelid	1	1	1	1		
Eye discharge	2	2	2	2		
Eye disorder	5	5	5	5		
Eye haemorrhage	2	2			2	2
Eye inflammation	1	1	1	1		
Eye irritation	3	3	3	3		
Eyelids pruritus	2	2	2	2		
Eye pain	17	17	15	15	2	2
Eye pruritus	9	9	7	7	2	2
Eye swelling	19	19	17	17	2	2
Lacrimation increased	2	2	2	2		
Maculopathy	1	1			1	1
Metamorphopsia	1	1			1	1
Ocular discomfort	3	3	3	3		
Ocular hyperaemia	7	7	7	7		
Periorbital discomfort	1	1	1	1		
Periorbital oedema	1	1	1	1		
Periorbital swelling	9	9	7	7	2	2
Photophobia	13	13	8	8	5	5
Photopsia	1	1	1	1		
Swelling of eyelid	10	10	9	9	1	1
Vision blurred	22	22	17	17	5	5
Visual impairment	9	9	7	7	2	2
Vitreous floaters	1	1	1	1		
	152	152	125	125	27	27

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abdominal discomfort	16	16	16	16		
Abdominal distension	5	5	4	4	1	1
Abdominal pain	30	30	26	26	4	4
Abdominal pain lower	6	6	4	4	2	2
Abdominal pain upper	26	26	21	21	5	5
Abdominal rigidity	1	1			1	1
Abnormal faeces	1	1	1	1		
Anaesthesia oral	1	1	1	1		
Anal haemorrhage	1	1			1	1
Aptyalism	1	1	1	1		
Cheilitis	1	1	1	1		
Constipation	1	1	1	1		
Defaecation urgency	2	2	1	1	1	1
Dental paraesthesia	2	2	2	2		
Diarrhoea	134	134	111	111	23	23
Diarrhoea haemorrhagic	2	2	1	1	1	1
Dry mouth	30	30	24	24	6	6
Dyspepsia	5	5	5	5		
Dysphagia	12	12	9	9	3	3
Enlarged uvula	1	1			1	1
Enteritis	1	1	1	1		
Faeces discoloured	1	1	1	1		
Faeces pale	1	1	1	1		
Flatulence	2	2	2	2		
Food poisoning	1	1	1	1		
Frequent bowel movements	3	3	2	2	1	1
Gastritis	2	2	2	2		
Gastrointestinal disorder	6	6	6	6		
Gastrointestinal hypermotility	1	1			1	1
Gastrointestinal pain	2	2	1	1	1	1
Gingival bleeding	2	2	2	2		
Gingival discolouration	1	1			1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Gingival discomfort	1	1			1	1
Gingival pain	3	3	1	1	2	2
Glossodynia	4	4	3	3	1	1
Haematemesis	1	1			1	1
Haematochezia	1	1			1	1
Hypoaesthesia oral	38	38	33	33	5	5
Infantile vomiting	1	1	1	1		
Lip blister	2	2	1	1	1	1
Lip disorder	3	3	3	3		
Lip dry	1	1	1	1		
Lip erythema	2	2	2	2		
Lip oedema	2	2	1	1	1	1
Lip pain	3	3	2	2	1	1
Lip pruritus	3	3	2	2	1	1
Lip swelling	31	31	20	20	11	11
Mouth swelling	6	6	4	4	2	2
Mouth ulceration	5	5	5	5		
Mucous stools	1	1	1	1		
Nausea	407	407	349	349	58	58
Odynophagia	2	2	2	2		
Oral discomfort	5	5	4	4	1	1
Oral disorder	2	2	2	2		
Oral mucosa erosion	1	1	1	1		
Oral mucosal blistering	1	1	1	1		
Oral mucosal eruption	3	3	3	3		
Oral mucosal erythema	1	1	1	1		
Oral pain	5	5	4	4	1	1
Oral pruritus	3	3	3	3		
Palatal swelling	1	1			1	1
Pancreatitis	1	1			1	1
Paraesthesia oral	78	78	65	65	13	13
Retching	3	3	3	3		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Salivary hypersecretion	3	3	3	3		
Small intestinal obstruction	1	1			1	1
Stiff tongue	1	1	1	1		
Stomatitis	1	1	1	1		
Strawberry tongue	1	1	1	1		
Swollen tongue	27	27	16	16	11	11
Tongue coated	1	1	1	1		
Tongue discolouration	1	1	1	1		
Tongue discomfort	4	4	4	4		
Tongue disorder	3	3	3	3		
Tongue dry	2	2	2	2		
Tongue haematoma	1	1	1	1		
Tongue pruritus	3	3	2	2	1	1
Toothache	6	6	6	6		
Vomiting	118	118	103	103	15	15
Vomiting projectile	1	1	1	1		
	1,096	1,096	912	912	184	184

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Administration site pain	3	3	3	3		
Alcohol interaction	1	1			1	1
Asthenia	104	104	91	91	13	13
Axillary pain	19	19	15	15	4	4
Chest discomfort	59	59	43	43	16	16
Chest pain	42	42	32	32	10	10
Chills	435	435	401	401	34	34
Chronic fatigue syndrome	1	1	1	1		
Condition aggravated	28	28	23	23	5	5
Crying	2	2	2	2		
Death	5	5			5	5
Discomfort	12	12	11	11	1	1
Disease recurrence	4	4	4	4		
Drug ineffective	132	132	42	42	90	90
Enanthema	1	1	1	1		
Energy increased	1	1	1	1		
Face oedema	2	2	1	1	1	1
Facial discomfort	3	3	2	2	1	1
Facial pain	5	5	4	4	1	1
Fatigue	566	566	506	506	60	60
Feeling abnormal	85	85	74	74	11	11
Feeling cold	30	30	24	24	6	6
Feeling drunk	3	3			3	3
Feeling hot	93	93	76	76	17	17
Feeling jittery	5	5	3	3	2	2
Feeling of body temperature change	14	14	13	13	1	1
Gait disturbance	12	12	10	10	2	2
General physical health deterioration	2	2	1	1	1	1
Glassy eyes	1	1	1	1		
Hangover	1	1	1	1		
Hunger	2	2	2	2		
Illness	34	34	29	29	5	5

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Induration	2	2	2	2		
Inflammation	7	7	6	6	1	1
Influenza like illness	49	49	42	42	7	7
Injection site bruising	2	2	2	2		
Injection site coldness	1	1	1	1		
Injection site discomfort	2	2	2	2		
Injection site erythema	13	13	13	13		
Injection site extravasation	1	1	1	1		
Injection site haemorrhage	2	2	2	2		
Injection site hypersensitivity	1	1	1	1		
Injection site hypoaesthesia	4	4	4	4		
Injection site induration	2	2	2	2		
Injection site inflammation	1	1	1	1		
Injection site mass	2	2	2	2		
Injection site oedema	1	1	1	1		
Injection site pain	81	81	79	79	2	2
Injection site pruritus	5	5	5	5		
Injection site rash	4	4	4	4		
Injection site reaction	1	1	1	1		
Injection site swelling	14	14	14	14		
Injection site urticaria	1	1	1	1		
Injection site warmth	4	4	4	4		
Injury associated with device	1	1	1	1		
Localised oedema	1	1	1	1		
Local reaction	3	3	3	3		
Malaise	197	197	170	170	27	27
Mass	2	2	2	2		
Mucosal dryness	1	1			1	1
No adverse event	1	1	1	1		
Nodule	2	2	2	2		
Nonspecific reaction	1	1			1	1
Oedema	1	1	1	1		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Oedema peripheral	1	1	1	1		
Pain	343	343	317	317	26	26
Peripheral swelling	51	51	44	44	7	7
Potentiating drug interaction	1	1	1	1		
Pre-existing condition improved	1	1	1	1		
Pyrexia	503	503	434	434	69	69
Secretion discharge	1	1	1	1		
Sensation of foreign body	6	6	4	4	2	2
Sluggishness	1	1	1	1		
Swelling	26	26	23	23	3	3
Swelling face	37	37	29	29	8	8
Symptom recurrence	1	1	1	1		
Tenderness	12	12	12	12		
Therapeutic product ineffective	1	1	1	1		
Therapeutic response unexpected	1	1	1	1		
Thirst	5	5	4	4	1	1
Vaccination site bruising	5	5	4	4	1	1
Vaccination site coldness	1	1	1	1		
Vaccination site discomfort	11	11	11	11		
Vaccination site erythema	55	55	48	48	7	7
Vaccination site haemorrhage	7	7	7	7		
Vaccination site hypersensitivity	1	1	1	1		
Vaccination site hypoaesthesia	3	3	3	3		
Vaccination site induration	8	8	8	8		
Vaccination site inflammation	3	3	2	2	1	1
Vaccination site joint discomfort	1	1	1	1		
Vaccination site joint erythema	1	1			1	1
Vaccination site joint movement impairment	1	1			1	1
Vaccination site joint pain	4	4	2	2	2	2
Vaccination site macule	1	1	1	1		
Vaccination site mass	7	7	6	6	1	1
Vaccination site movement impairment	12	12	10	10	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Vaccination site nodule	2	2	2	2		
Vaccination site oedema	1	1	1	1		
Vaccination site pain	401	401	370	370	31	31
Vaccination site paraesthesia	10	10	8	8	2	2
Vaccination site pruritus	17	17	15	15	2	2
Vaccination site rash	11	11	10	10	1	1
Vaccination site reaction	4	4	4	4		
Vaccination site swelling	60	60	51	51	9	9
Vaccination site urticaria	5	5	5	5		
Vaccination site vesicles	2	2	2	2		
Vaccination site warmth	23	23	20	20	3	3
Vessel puncture site haemorrhage	1	1	1	1		
Vessel puncture site injury	1	1	1	1		
	3,767	3,767	3258	3258	509	509

System Organ Class

Hepatobiliary disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Gal bladder disorder	1	1	1	1
Hepatic pain	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Immune system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Allergy to vaccine	16	16	13	13	3	3
Anaphylactic reaction	32	32	3	3	29	29
Anaphylactic shock	4	4	1	1	3	3
Anaphylactoid reaction	5	5	1	1	4	4
Autoimmune disorder	2	2			2	2
Drug hypersensitivity	13	13	11	11	2	2
Food allergy	1	1	1	1		
Hypersensitivity	42	42	28	28	14	14
Immune-mediated adverse reaction	1	1	1	1		
Immune system disorder	2	2			2	2
Immunodeficiency	1	1			1	1
Reaction to excipient	1	1	1	1		
Serum sickness	1	1			1	1
Type IV hypersensitivity reaction	1	1			1	1
	122	122	60	60	62	62

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Infections and infestations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Appendicitis	2	2	1	1	1	1
Asymptomatic COVID-19	3	3			3	3
Bronchitis	1	1			1	1
Cellulitis	4	4	1	1	3	3
Conjunctivitis	1	1	1	1		
Coronavirus infection	4	4	1	1	3	3
COVID-19	71	71	20	20	51	51
Ear infection	1	1	1	1		
Eye infection	1	1	1	1		
Folliculitis	1	1	1	1		
Gastroenteritis	1	1	1	1		
Gastroenteritis viral	1	1			1	1
Herpes simplex	1	1	1	1		
Herpes virus infection	2	2	1	1	1	1
Herpes zoster	9	9	9	9		
Hordeolum	3	3	3	3		
Infection	2	2	2	2		
Influenza	12	12	11	11	1	1
Labyrinthitis	1	1			1	1
Laryngitis	1	1	1	1		
Mastitis	1	1			1	1
Meningitis	1	1			1	1
Nasopharyngitis	23	23	22	22	1	1
Oral candidiasis	1	1	1	1		
Oral herpes	9	9	6	6	3	3
Oral viral infection	1	1	1	1		
Pertussis	1	1			1	1
Pharyngitis	1	1	1	1		
Pneumonia	3	3			3	3
Pustule	1	1	1	1		
Rash pustular	1	1	1	1		
Rhinitis	2	2	2	2		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Infections and infestations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Sinusitis	6	6	6	6		
Sputum purulent	1	1			1	1
Streptococcal infection	1	1			1	1
Suspected COVID-19	11	11	5	5	6	6
Sweating fever	1	1			1	1
Tonsillitis	1	1			1	1
Tuberculosis	1	1	1	1		
Upper respiratory tract infection	1	1	1	1		
Urinary tract infection	2	2	2	2		
Vaccination site cellulitis	2	2	1	1	1	1
Vaginal infection	1	1	1	1		
Varicella	1	1	1	1		
Varicella zoster virus infection	1	1	1	1		
Vestibular neuronitis	1	1			1	1
	198	198	110	110	88	88

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Accidental exposure to product	4	4	4	4		
Accidental overdose	25	25	23	23	2	2
Accidental underdose	6	6	6	6		
Circumstance or information capable of leading to medication error	37	37	36	36	1	1
Contusion	5	5	4	4	1	1
Counterfeit product administered	1	1	1	1		
Expired product administered	1	1	1	1		
Exposure during pregnancy	3	3	3	3		
Exposure to SARS-CoV-2	11	11	11	11		
Exposure via breast milk	33	33	33	33		
Exposure via eye contact	1	1	1	1		
Exposure via skin contact	2	2	2	2		
Face injury	1	1			1	1
Fall	6	6	4	4	2	2
Foetal exposure timing unspecified	2	2	2	2		
Fracture	1	1			1	1
Inappropriate schedule of product administration	7	7	7	7		
Incision site pain	1	1			1	1
Incorrect dose administered	6	6	6	6		
Incorrect route of product administration	28	28	27	27	1	1
Joint dislocation	1	1			1	1
Limb injury	2	2	2	2		
Maternal exposure during breast feeding	4	4	4	4		
Maternal exposure during pregnancy	21	21	21	21		
Maternal exposure timing unspecified	2	2	2	2		
Medication error	1	1	1	1		
Muscle strain	2	2	2	2		
Neck injury	1	1	1	1		
Nerve injury	1	1	1	1		
Occupational exposure to product	1	1	1	1		
Occupational exposure to SARS-CoV-2	1	1	1	1		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Off label use	77	77	77	77		
Overdose	15	15	15	15		
Poor quality product administered	136	136	135	135	1	1
Product administered at inappropriate site	11	11	11	11		
Product administered to patient of inappropriate age	2	2	2	2		
Product administration error	1	1	1	1		
Product label confusion	4	4	4	4		
Product preparation error	28	28	27	27	1	1
Product preparation issue	13	13	12	12	1	1
Product prescribing error	2	2	2	2		
Product storage error	2	2	2	2		
Product use issue	75	75	75	75		
Stoma site discharge	1	1			1	1
Stoma site extravasation	1	1	1	1		
Stoma site haemorrhage	1	1	1	1		
Thermal burns of eye	1	1	1	1		
Underdose	27	27	27	27		
Vaccination failure	1	1			1	1
Wrong technique in product usage process	37	37	37	37		
	653	653	637	637	16	16

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Blood glucose decreased	1	1	1	1		
Blood glucose increased	2	2	2	2		
Blood pressure abnormal	6	6	6	6		
Blood pressure decreased	9	9	6	6	3	3
Blood pressure diastolic increased	2	2	1	1	1	1
Blood pressure increased	50	50	35	35	15	15
Blood pressure systolic increased	2	2	1	1	1	1
Blood test abnormal	1	1			1	1
Blood urine present	1	1	1	1		
Body temperature abnormal	3	3	3	3		
Body temperature decreased	2	2	2	2		
Body temperature fluctuation	2	2	2	2		
Body temperature increased	25	25	22	22	3	3
Capillary nail refill test abnormal	1	1	1	1		
Coronavirus test positive	5	5	5	5		
Drug level increased	1	1			1	1
Ejection fraction abnormal	1	1	1	1		
Electrocardiogram QT prolonged	1	1			1	1
Epinephrine increased	1	1	1	1		
Fibrin D dimer increased	1	1	1	1		
Grip strength decreased	1	1	1	1		
Heart rate abnormal	4	4	4	4		
Heart rate decreased	5	5	3	3	2	2
Heart rate increased	103	103	86	86	17	17
Heart rate irregular	2	2	1	1	1	1
Influenza virus test positive	1	1	1	1		
Lipids increased	1	1	1	1		
Myocardial necrosis marker increased	1	1			1	1
Oxygen saturation decreased	5	5	1	1	4	4
Platelet count decreased	1	1	1	1		
Pulse abnormal	3	3	3	3		
Respiratory rate decreased	1	1			1	1

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Respiratory rate increased	5	5	4	4	1	1
SARS-CoV-2 ant body test positive	3	3	3	3		
SARS-CoV-2 test false positive	1	1	1	1		
SARS-CoV-2 test negative	2	2	2	2		
SARS-CoV-2 test positive	89	89	55	55	34	34
Sinus rhythm	1	1	1	1		
Streptococcus test positive	1	1	1	1		
Weight decreased	3	3	3	3		
Weight increased	1	1	1	1		
	351	351	264	264	87	87

System Organ Class

Metabolism and nutrition disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Appetite disorder	1	1	1	1		
Decreased appetite	31	31	22	22	9	9
Dehydration	8	8	8	8		
Diabetes mellitus	1	1			1	1
Diabetes mellitus inadequate control	1	1			1	1
Diabetic ketoacidosis	1	1			1	1
Feeding disorder	1	1	1	1		
Fluid retention	2	2	2	2		
Hyperglycaemia	2	2	1	1	1	1
Hypoglycaemia	3	3	2	2	1	1
	51	51	37	37	14	14

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Arthralgia	203	203	176	176	27	27
Arthritis	1	1	1	1		
Arthritis reactive	1	1			1	1
Arthropathy	2	2	2	2		
Axillary mass	2	2	2	2		
Back disorder	1	1	1	1		
Back pain	48	48	44	44	4	4
Bone pain	11	11	10	10	1	1
Bone swelling	2	2	2	2		
Facial asymmetry	1	1	1	1		
Flank pain	1	1	1	1		
Joint instability	1	1			1	1
Joint range of motion decreased	10	10	9	9	1	1
Joint stiffness	4	4	3	3	1	1
Joint swelling	13	13	12	12	1	1
Joint warmth	1	1	1	1		
Limb discomfort	46	46	37	37	9	9
Mobility decreased	11	11	9	9	2	2
Muscle discomfort	1	1	1	1		
Muscle fatigue	7	7	4	4	3	3
Muscle spasms	19	19	16	16	3	3
Muscle tightness	9	9	8	8	1	1
Muscle twitching	3	3	3	3		
Muscular weakness	24	24	20	20	4	4
Musculoskeletal chest pain	7	7	7	7		
Musculoskeletal discomfort	8	8	8	8		
Musculoskeletal disorder	1	1	1	1		
Musculoskeletal pain	4	4	3	3	1	1
Musculoskeletal stiffness	20	20	14	14	6	6
Myalgia	315	315	274	274	41	41
Myofascial pain syndrome	1	1	1	1		
Neck pain	52	52	45	45	7	7

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Pain in extremity	343	343	311	311	32	32
Pain in jaw	11	11	11	11		
Sjogren's syndrome	1	1			1	1
Soft tissue swelling	1	1	1	1		
Spinal pain	3	3	3	3		
Tendonitis	1	1	1	1		
Tenosynovitis	1	1	1	1		
	1,191	1,191	1044	1044	147	147

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acoustic neuritis	1	1			1	1
Ageusia	30	30	28	28	2	2
Amnesia	1	1	1	1		
Anaesthesia	2	2	2	2		
Anosmia	31	31	28	28	3	3
Aphasia	2	2	2	2		
Ataxia	1	1			1	1
Balance disorder	12	12	8	8	4	4
Basal ganglia haemorrhage	1	1			1	1
Burning sensation	20	20	16	16	4	4
Cataplexy	1	1			1	1
Cerebellar infarction	1	1			1	1
Cerebral disorder	1	1	1	1		
Cerebral infarction	1	1			1	1
Cerebrovascular accident	5	5	1	1	4	4
Cognitive disorder	2	2	2	2		
Depressed level of consciousness	1	1	1	1		
Disturbance in attention	10	10	8	8	2	2
Dizziness	342	342	283	283	59	59
Dizziness postural	8	8	5	5	3	3
Dysaesthesia	1	1	1	1		
Dysarthria	4	4	4	4		
Dysgeusia	54	54	50	50	4	4
Dyskinesia	2	2	2	2		
Dyslexia	1	1	1	1		
Dysstasia	1	1			1	1
Epilepsy	2	2			2	2
Facial paralysis	23	23	8	8	15	15
Facial paresis	2	2	2	2		
Facial spasm	1	1	1	1		
Fine motor skill dysfunction	1	1	1	1		
Formication	1	1			1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Freezing phenomenon	1	1	1	1		
Generalised tonic-clonic seizure	2	2			2	2
Guillain-Barre syndrome	2	2	1	1	1	1
Headache	753	753	660	660	93	93
Head discomfort	9	9	8	8	1	1
Hemiparesis	2	2			2	2
Hyperaesthesia	4	4	4	4		
Hypersomnia	6	6	6	6		
Hypertonia	1	1	1	1		
Hypoaesthesia	106	106	93	93	13	13
Hypogeusia	1	1	1	1		
Hypokinesia	1	1	1	1		
Hyposmia	1	1	1	1		
Infant irritability	1	1	1	1		
Irregular sleep wake rhythm disorder	1	1	1	1		
Ischaemic stroke	2	2			2	2
Lethargy	31	31	22	22	9	9
Loss of consciousness	10	10	1	1	9	9
Memory impairment	4	4	3	3	1	1
Mental impairment	6	6	4	4	2	2
Migraine	26	26	23	23	3	3
Migraine with aura	1	1	1	1		
Movement disorder	4	4	4	4		
Myelitis transverse	1	1			1	1
Neuralgia	4	4	3	3	1	1
Neuropathy peripheral	1	1			1	1
Paraesthesia	137	137	119	119	18	18
Paraesthesia mucosal	1	1	1	1		
Paralysis	2	2			2	2
Paresis	1	1	1	1		
Parosmia	7	7	6	6	1	1
Peroneal nerve palsy	1	1	1	1		

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System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Poor quality sleep	8	8	8	8		
Postictal state	1	1	1	1		
Presyncope	20	20	14	14	6	6
Reduced facial expression	1	1	1	1		
Sedation	1	1	1	1		
Seizure	6	6	1	1	5	5
Sensory disturbance	4	4	3	3	1	1
Sensory loss	2	2	2	2		
Sinus headache	3	3	3	3		
Slow response to stimuli	1	1	1	1		
Somnolence	35	35	32	32	3	3
Speech disorder	8	8	7	7	1	1
Syncope	28	28	6	6	22	22
Taste disorder	17	17	16	16	1	1
Tension headache	1	1	1	1		
Transient ischaemic attack	2	2			2	2
Tremor	44	44	31	31	13	13
Tunnel vision	1	1			1	1
Unresponsive to stimuli	2	2	1	1	1	1
	1,881	1,881	1553	1553	328	328

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Product issues

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Liquid product physical issue	8	8	8	8		
Needle issue	3	3	3	3		
Product complaint	4	4	4	4		
Product counterfeit	1	1	1	1		
Product formulation issue	1	1	1	1		
Product leakage	4	4	4	4		
Product packaging quantity issue	18	18	18	18		
Product physical issue	2	2	2	2		
Product quality issue	8	8	7	7	1	1
Product temperature excursion issue	90	90	90	90		
Suspected counterfeit product	1	1	1	1		
Syringe issue	1	1	1	1		
	141	141	140	140	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Psychiatric disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abnormal dreams	5	5	5	5		
Agitation	5	5	5	5		
Anxiety	28	28	24	24	4	4
Confusional state	9	9	5	5	4	4
Delirium	1	1			1	1
Depressed mood	3	3	3	3		
Depression	1	1			1	1
Disorientation	6	6	5	5	1	1
Dissociation	1	1	1	1		
Eating disorder	5	5	5	5		
Emotional disorder	2	2	2	2		
Fear	2	2	1	1	1	1
Hallucination	1	1			1	1
Hallucination, olfactory	1	1	1	1		
Initial insomnia	2	2	2	2		
Insomnia	26	26	24	24	2	2
Irritability	2	2	2	2		
Laziness	1	1	1	1		
Mental status changes	1	1	1	1		
Middle insomnia	1	1	1	1		
Nervousness	15	15	12	12	3	3
Nightmare	3	3	3	3		
Panic attack	4	4	3	3	1	1
Panic reaction	1	1			1	1
Paranoia	1	1	1	1		
Post-traumatic stress disorder	1	1	1	1		
Restlessness	6	6	4	4	2	2
Sleep disorder	11	11	9	9	2	2
Sleep disorder due to a general medical condition	1	1	1	1		
Sleep disorder due to general medical condition, insomnia type	1	1	1	1		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Psychiatric disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Somatic symptom disorder	1	1			1	1
Staring	1	1			1	1
Stress	2	2	2	2		
Terminal insomnia	1	1	1	1		
Thinking abnormal	4	4	4	4		
	156	156	130	130	26	26

System Organ Class

Renal and urinary disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Chromaturia	1	1	1	1		
Dysuria	1	1	1	1		
Haematuria	2	2	1	1	1	1
Hypertonic bladder	1	1	1	1		
Incontinence	1	1			1	1
Pollakiuria	1	1	1	1		
Renal pain	1	1	1	1		
Urethral pain	1	1	1	1		
Urinary incontinence	1	1	1	1		
	10	10	8	8	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Reproductive system and breast disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breast pain	1	1	1	1		
Breast swelling	1	1	1	1		
Breast tenderness	1	1			1	1
Dysmenorrhoea	2	2	2	2		
Menorrhagia	2	2	2	2		
Menstrual disorder	1	1	1	1		
Metrorrhagia	2	2	2	2		
Nipple pain	2	2	2	2		
Nipple swelling	3	3	3	3		
Scrotal erythema	1	1			1	1
Scrotal exfoliation	1	1			1	1
Scrotal pain	1	1			1	1
Scrotal swelling	1	1			1	1
	19	19	14	14	5	5

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Aphonia	4	4	3	3	1	1
Asthma	4	4	3	3	1	1
Bronchospasm	1	1	1	1		
Catarrh	1	1	1	1		
Choking	1	1	1	1		
Cough	100	100	84	84	16	16
Dry throat	10	10	8	8	2	2
Dysphonia	14	14	7	7	7	7
Dyspnoea	119	119	75	75	44	44
Dyspnoea exertional	4	4	4	4		
Epistaxis	8	8	5	5	3	3
Hiccups	1	1	1	1		
Hyperventilation	4	4	2	2	2	2
Hypoxia	2	2			2	2
Increased upper airway secretion	2	2	1	1	1	1
Intranasal paraesthesia	1	1	1	1		
Laryngeal oedema	2	2	2	2		
Laryngospasm	1	1	1	1		
Lower respiratory tract congestion	1	1	1	1		
Lung infiltration	1	1			1	1
Nasal congestion	51	51	49	49	2	2
Nasal discomfort	4	4	3	3	1	1
Nasal disorder	1	1	1	1		
Nasal dryness	1	1	1	1		
Nasal oedema	2	2	1	1	1	1
Obstructive airways disorder	1	1			1	1
Organising pneumonia	1	1	1	1		
Oropharyngeal discomfort	11	11	8	8	3	3
Oropharyngeal pain	95	95	87	87	8	8
Painful respiration	2	2	1	1	1	1
Paranasal sinus discomfort	2	2	2	2		
Pharyngeal disorder	1	1	1	1		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Pharyngeal hypoaesthesia	5	5	5	5		
Pharyngeal mass	2	2	2	2		
Pharyngeal paraesthesia	10	10	9	9	1	1
Pharyngeal swelling	26	26	16	16	10	10
Pleuritic pain	1	1	1	1		
Productive cough	3	3	3	3		
Pulmonary congestion	1	1			1	1
Pulmonary embolism	1	1			1	1
Pulmonary oedema	1	1	1	1		
Pulmonary pain	2	2	1	1	1	1
Respiration abnormal	2	2	1	1	1	1
Respiratory distress	4	4			4	4
Respiratory tract congestion	3	3	3	3		
Rhinalgia	2	2	2	2		
Rhinorrhoea	30	30	29	29	1	1
Sinus congestion	4	4	4	4		
Sinus disorder	2	2	2	2		
Sinus pain	3	3	2	2	1	1
Sneezing	10	10	10	10		
Suffocation feeling	1	1	1	1		
Tachypnoea	1	1	1	1		
Throat clearing	1	1			1	1
Throat irritation	36	36	29	29	7	7
Throat tightness	38	38	20	20	18	18
Tonsillar hypertrophy	2	2	1	1	1	1
Tracheomalacia	1	1			1	1
Upper-airway cough syndrome	5	5	5	5		
Upper respiratory tract congestion	5	5	5	5		
Wheezing	20	20	13	13	7	7
	675	675	522	522	153	153

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acne	1	1	1	1		
Angioedema	11	11	6	6	5	5
Blister	6	6	6	6		
Cold sweat	21	21	12	12	9	9
Dermatitis allergic	12	12	10	10	2	2
Drug eruption	1	1	1	1		
Dry skin	1	1	1	1		
Eczema	2	2	2	2		
Erythema	76	76	66	66	10	10
Hidradenitis	1	1	1	1		
Hyperhidrosis	67	67	59	59	8	8
Idiopathic urticaria	1	1	1	1		
Livedo reticularis	2	2	1	1	1	1
Mechanical urticaria	1	1	1	1		
Miliaria	2	2			2	2
Night sweats	11	11	9	9	2	2
Pain of skin	6	6	4	4	2	2
Palmar erythema	1	1	1	1		
Papule	2	2	2	2		
Petechiae	1	1	1	1		
Photosensitivity reaction	4	4	3	3	1	1
Piloerection	3	3	2	2	1	1
Pruritus	146	146	125	125	21	21
Pseudofolliculitis	1	1	1	1		
Psoriasis	1	1	1	1		
Rash	127	127	103	103	24	24
Rash erythematous	31	31	22	22	9	9
Rash macular	19	19	15	15	4	4
Rash maculo-papular	3	3	2	2	1	1
Rash papular	7	7	6	6	1	1
Rash pruritic	17	17	14	14	3	3
Scab	1	1	1	1		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Skin burning sensation	2	2	2	2		
Skin discolouration	6	6	4	4	2	2
Skin disorder	4	4	3	3	1	1
Skin irritation	1	1	1	1		
Skin mass	1	1	1	1		
Skin reaction	2	2	2	2		
Skin swelling	1	1	1	1		
Skin tightness	3	3	2	2	1	1
Skin warm	4	4	1	1	3	3
Urticaria	93	93	83	83	10	10
	703	703	580	580	123	123

System Organ Class

Social circumstances

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Impaired driving ability	1	1	1	1		
Impaired work ability	3	3	3	3		
Loss of personal independence in daily activities	9	9	8	8	1	1
	13	13	12	12	1	1

System Organ Class

SOC Not Yet Coded

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Surgical and medical procedures

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
COVID-19 immunisation	1	1	1	1
	1	1	1	1

System Organ Class

Vascular disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Blood pressure fluctuation	1	1	1	1		
Bloody discharge	1	1	1	1		
Circulatory collapse	1	1			1	1
Cyanosis	1	1	1	1		
Diastolic hypotension	1	1			1	1
Flushing	90	90	73	73	17	17
Haemorrhage	2	2	1	1	1	1
Hot flush	30	30	23	23	7	7
Hyperaemia	2	2	2	2		
Hypertension	34	34	21	21	13	13
Hypertensive crisis	1	1	1	1		
Hypertensive emergency	2	2			2	2
Hypotension	8	8	4	4	4	4
Pallor	16	16	9	9	7	7
Peripheral circulatory failure	1	1			1	1
Peripheral coldness	19	19	15	15	4	4
Poor peripheral circulation	1	1	1	1		
Raynaud's phenomenon	1	1	1	1		
Shock symptom	1	1			1	1
Vasodilatation	1	1	1	1		
	214	214	155	155	59	59

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

APPENDIX 2.5.1: Cumulative and Interval Summary Tabulation of Serious and Non-Serious Adverse Reactions From Post-Marketing Data Sources Organized per MedDRA System Organ Class by Preferred Term per Country

Cumulative Reporting Period: Through 31-DEC-2020

Interval Reporting Period: 01-DEC-2020 Through 31-DEC-2020

Total Number of Cases: 3,615 (Interval) / 3,615 (Cumulative)

Total Number of Adverse Events (PT): 11,824 (Interval) / 11,824 (Cumulative)

MedDRA Version: v.23.1J

Country Where Event Occurred

AFGHANISTAN

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Chills	1	1	1	1
Feeling of body temperature change	1	1	1	1
Swelling face	1	1	1	1
	3	3	3	3

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Muscle tightness	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Facial paralysis	1	1			1	1
Paraesthesia	1	1	1	1		
	2	2	1	1	1	1

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Erythema	1	1	1	1
Pruritus	1	1	1	1
Rash	1	1	1	1
	3	3	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

BULGARIA

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Chills	1	1	1	1
	1	1	1	1

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
SARS-CoV-2 test positive	1	1	1	1
	1	1	1	1

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Pain in extremity	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Ageusia	1	1	1	1
Anosmia	1	1	1	1
	2	2	2	2

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Hyperhidrosis	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

CANADA

System Organ Class

Blood and lymphatic system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Lymphadenopathy	1	1	1	1
	1	1	1	1

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Diarrhoea	2	2	2	2
Dysphagia	1	1	1	1
Nausea	2	2	2	2
Odynophagia	1	1	1	1
Paraesthesia oral	2	2	2	2
Swollen tongue	1	1	1	1
Tongue pruritus	1	1	1	1
	10	10	10	10

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenia	1	1	1	1
Chills	2	2	2	2
Drug ineffective	1	1	1	1
Fatigue	2	2	2	2
Pain	1	1	1	1
Pyrexia	2	2	2	2
Swelling	1	1	1	1
Thirst	1	1	1	1
Vaccination site pain	1	1	1	1
	12	12	12	12

System Organ Class

Immune system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Drug hypersensitivity	1	1	1	1
Hypersensitivity	1	1	1	1
	2	2	2	2

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Heart rate increased	1	1	1	1
SARS-CoV-2 test positive	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Metabolism and nutrition disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Decreased appetite	1	1	1	1
Fluid retention	1	1	1	1
	2	2	2	2

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Myalgia	1	1	1	1
Pain in extremity	1	1	1	1
	2	2	2	2

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Disturbance in attention	1	1	1	1		
Dysgeusia	1	1	1	1		
Facial paralysis	1	1			1	1
Headache	3	3	3	3		
Hypersomnia	1	1	1	1		
Paraesthesia	1	1	1	1		
Syncope	2	2			2	2
	10	10	7	7	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Oropharyngeal pain	1	1	1	1
	1	1	1	1

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Urticaria	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

CHILE

System Organ Class

Blood and lymphatic system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Lymphadenopathy	1	1	1	1
	1	1	1	1

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Dry mouth	1	1	1	1
Nausea	1	1	1	1
	2	2	2	2

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Crying	1	1	1	1
Fatigue	1	1	1	1
Malaise	1	1	1	1
Pain	1	1	1	1
Pyrexia	1	1	1	1
Vaccination site pain	1	1	1	1
	6	6	6	6

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Myalgia	1	1	1	1
	1	1	1	1

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Dizziness	1	1	1	1
Headache	1	1	1	1
Paraesthesia	1	1	1	1
	3	3	3	3

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Dermatitis allergic	4	4	4	4
	4	4	4	4

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

CROATIA

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Fatigue	2	2	2	2
Vaccination site pain	2	2	2	2
	4	4	4	4

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product administration error	1	1	1	1
	1	1	1	1

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Body temperature increased	3	3	3	3
	3	3	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Pain in extremity	1	1	1	1
	1	1	1	1

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headache	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

CYPRUS

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Death	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

GERMANY

System Organ Class

Blood and lymphatic system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Leukopenia	1	1	1	1
	1	1	1	1

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Palpitations	1	1	1	1		
Tachycardia	1	1			1	1
	2	2	1	1	1	1

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Nausea	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Asthenia	3	3	2	2	1	1
Fatigue	1	1	1	1		
Malaise	1	1			1	1
Pain	1	1			1	1
Pyrexia	1	1	1	1		
Vaccination site pain	3	3	3	3		
Vaccination site swelling	2	2	2	2		
	12	12	9	9	3	3

System Organ Class

Immune system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Anaphylactic reaction	1	1	1	1
	1	1	1	1

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Accidental overdose	9	9	8	8	1	1
Circumstance or information capable of leading to medication error	2	2	2	2		
Product storage error	1	1	1	1		
	12	12	11	11	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Heart rate increased	1	1	1	1
	1	1	1	1

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Muscular weakness	1	1	1	1
Pain in extremity	2	2	2	2
	3	3	3	3

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Dizziness	2	2	2	2		
Epilepsy	1	1			1	1
Facial paralysis	2	2			2	2
Headache	6	6	5	5	1	1
Movement disorder	1	1	1	1		
Paresis	1	1	1	1		
Seizure	2	2			2	2
	15	15	9	9	6	6

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Product issues

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product complaint	1	1	1	1
	1	1	1	1

System Organ Class

Psychiatric disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Agitation	1	1	1	1
	1	1	1	1

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Cough	1	1			1	1
Dyspnoea	2	2	1	1	1	1
	3	3	1	1	2	2

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Hyperhidrosis	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Vascular disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Flushing	1	1	1	1
Hypertension	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

GREECE

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Tachycardia	1	1	1	1
	1	1	1	1

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Defaecation urgency	1	1	1	1
Gastrointestinal hypermotility	1	1	1	1
	2	2	2	2

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Mucosal dryness	1	1			1	1
Vaccination site discomfort	1	1	1	1		
	2	2	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Immune system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Anaphylactic reaction	1	1	1	1
	1	1	1	1

System Organ Class

Vascular disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Flushing	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

HUNGARY

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Dry mouth	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Feeling hot	1	1	1	1
Nonspecific reaction	1	1	1	1
Thirst	1	1	1	1
	3	3	3	3

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Blood pressure increased	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Paraesthesia	1	1	1	1
Tremor	1	1	1	1
	2	2	2	2

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Urticaria	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

INDIA

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Off label use	1	1	1	1
Product administered to patient of inappropriate age	1	1	1	1
	2	2	2	2

System Organ Class

Product issues

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Suspected counterfeit product	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

ISRAEL

System Organ Class

Blood and lymphatic system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Lymphadenopathy	1	1	1	1
	1	1	1	1

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Cardiac arrest	1	1			1	1
Cardiac failure	1	1			1	1
Pericarditis	1	1	1	1		
	3	3	1	1	2	2

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Abdominal pain	2	2	2	2
Anaesthesia oral	1	1	1	1
Hypoaesthesia oral	2	2	2	2
Lip pruritus	1	1	1	1
Nausea	3	3	3	3
Paraesthesia oral	2	2	2	2
Swollen tongue	1	1	1	1
Vomiting	1	1	1	1
	13	13	13	13

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Asthenia	6	6	6	6		
Chest discomfort	1	1	1	1		
Chills	1	1	1	1		
Death	2	2			2	2
Drug ineffective	1	1			1	1
Fatigue	7	7	7	7		
Feeling abnormal	2	2	1	1	1	1
Feeling cold	2	2	2	2		
Feeling hot	2	2	2	2		
Feeling of body temperature change	1	1	1	1		
Injection site pain	1	1	1	1		
Local reaction	1	1	1	1		
Malaise	2	2	2	2		
Pain	1	1	1	1		
Pyrexia	2	2	2	2		
Vaccination site erythema	1	1	1	1		
Vaccination site hypersensitivity	1	1	1	1		
Vaccination site movement impairment	1	1	1	1		
Vaccination site pain	14	14	14	14		
Vaccination site swelling	2	2	2	2		
	51	51	47	47	4	4

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Infections and infestations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Coronavirus infection	1	1			1	1
Eye infection	1	1	1	1		
Influenza	1	1	1	1		
	3	3	2	2	1	1

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Exposure via breast milk	2	2	2	2		
Maternal exposure during pregnancy	1	1	1	1		
Overdose	2	2	2	2		
Poor quality product administered	25	25	24	24	1	1
Product preparation error	2	2	2	2		
Underdose	1	1	1	1		
Wrong technique in product usage process	2	2	2	2		
	35	35	34	34	1	1

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Blood pressure increased	1	1	1	1
Heart rate increased	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Arthralgia	1	1	1	1		
Bone pain	1	1	1	1		
Mobility decreased	1	1			1	1
Myalgia	2	2	2	2		
Neck pain	1	1	1	1		
Pain in extremity	3	3	3	3		
	9	9	8	8	1	1

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Anosmia	1	1	1	1		
Balance disorder	1	1	1	1		
Dizziness	6	6	6	6		
Dysgeusia	1	1	1	1		
Facial paralysis	1	1			1	1
Headache	2	2	2	2		
Hypoaesthesia	4	4	4	4		
Loss of consciousness	1	1			1	1
Paraesthesia	4	4	4	4		
Paralysis	1	1			1	1
Poor quality sleep	1	1	1	1		
Sensory loss	1	1	1	1		
Syncope	1	1	1	1		
Tremor	1	1	1	1		
	26	26	23	23	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Product issues

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Liquid product physical issue	6	6	6	6		
Product complaint	2	2	2	2		
Product packaging quantity issue	11	11	11	11		
Product physical issue	2	2	2	2		
Product quality issue	6	6	5	5	1	1
	27	27	26	26	1	1

System Organ Class

Psychiatric disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Initial insomnia	1	1	1	1
Insomnia	1	1	1	1
Sleep disorder due to general medical condition, insomnia type	1	1	1	1
	3	3	3	3

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Dyspnoea	2	2	2	2
Oropharyngeal discomfort	1	1	1	1
Pharyngeal paraesthesia	1	1	1	1
Pharyngeal swelling	1	1	1	1
Rhinalgia	1	1	1	1
	6	6	6	6

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Erythema	1	1	1	1
Rash	2	2	2	2
Urticaria	1	1	1	1
	4	4	4	4

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

ITALY

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Abdominal pain	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenia	1	1	1	1
Influenza like illness	1	1	1	1
Injection site pain	1	1	1	1
Pyrexia	1	1	1	1
	4	4	4	4

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Circumstance or information capable of leading to medication error	1	1	1	1
Medication error	1	1	1	1
Product label confusion	2	2	2	2
	4	4	4	4

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headache	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

MALTA

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Palpitations	1	1	1	1
	1	1	1	1

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Blood pressure increased	1	1	1	1
Heart rate increased	1	1	1	1
	2	2	2	2

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Dizziness	1	1	1	1
Lethargy	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Vascular disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Hot flush	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

MEXICO

System Organ Class

Eye disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Eye swelling	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Fatigue	1	1	1	1
Vaccination site pain	1	1	1	1
	2	2	2	2

System Organ Class

Immune system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Anaphylactic shock	1	1			1	1
Hypersensitivity	1	1	1	1		
	2	2	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Muscle spasms	1	1			1	1
Pain in extremity	1	1	1	1		
	2	2	1	1	1	1

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Guillain-Barre syndrome	1	1			1	1
Headache	1	1	1	1		
Myelitis transverse	1	1			1	1
Paraesthesia	1	1			1	1
Paralysis	1	1			1	1
Seizure	1	1			1	1
	6	6	1	1	5	5

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Dyspnoea	1	1	1	1		
Laryngospasm	1	1	1	1		
Nasal congestion	1	1	1	1		
Respiratory distress	1	1			1	1
Sneezing	1	1	1	1		
Throat irritation	1	1	1	1		
	6	6	5	5	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Angioedema	1	1			1	1
Pruritus	1	1	1	1		
Rash	1	1			1	1
	3	3	1	1	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

OMAN

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Diarrhoea	1	1	1	1
Gastritis	1	1	1	1
	2	2	2	2

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Fatigue	1	1	1	1
Pain	1	1	1	1
Pyrexia	1	1	1	1
	3	3	3	3

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headache	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

POLAND

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Toothache	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenia	1	1	1	1
Pyrexia	1	1	1	1
Vaccination site pain	1	1	1	1
	3	3	3	3

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product label confusion	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Arthralgia	1	1	1	1
Pain in extremity	1	1	1	1
	2	2	2	2

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headache	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

PORTUGAL

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Sinus tachycardia	1	1	1	1
	1	1	1	1

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Odynophagia	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Malaise	1	1	1	1
	1	1	1	1

System Organ Class

Immune system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Hypersensitivity	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Exposure via breast milk	1	1	1	1
	1	1	1	1

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Dizziness	1	1	1	1
Headache	1	1	1	1
	2	2	2	2

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Erythema	1	1	1	1
Pruritus	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

PUERTO RICO

System Organ Class

Blood and lymphatic system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Lymphadenopathy	1	1	1	1
Lymph node pain	1	1	1	1
	2	2	2	2

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Palpitations	1	1	1	1
Tachycardia	1	1	1	1
	2	2	2	2

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Abdominal pain	1	1	1	1
Diarrhoea	1	1	1	1
Nausea	3	3	3	3
	5	5	5	5

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenia	1	1	1	1
Fatigue	1	1	1	1
Gait disturbance	1	1	1	1
Malaise	1	1	1	1
Pain	2	2	2	2
Pyrexia	2	2	2	2
Swelling face	1	1	1	1
Vaccination site discomfort	1	1	1	1
Vaccination site induration	1	1	1	1
Vaccination site pain	2	2	2	2
Vaccination site swelling	1	1	1	1
	14	14	14	14

System Organ Class

Metabolism and nutrition disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Decreased appetite	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Arthralgia	2	2	2	2
Joint range of motion decreased	1	1	1	1
Limb discomfort	1	1	1	1
Musculoskeletal stiffness	1	1	1	1
Pain in extremity	4	4	4	4
	9	9	9	9

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headache	4	4	4	4
Hypoaesthesia	3	3	3	3
Neuralgia	1	1	1	1
Paraesthesia	1	1	1	1
Speech disorder	1	1	1	1
Taste disorder	1	1	1	1
	11	11	11	11

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Dysphonia	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Vascular disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Hypertension	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

QATAR

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Nausea	1	1	1	1
	1	1	1	1

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Myalgia	1	1	1	1
	1	1	1	1

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Dizziness	1	1	1	1
	1	1	1	1

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Erythema	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

ROMANIA

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Chills	1	1	1	1
General physical health deterioration	1	1	1	1
Vaccination site pain	2	2	2	2
	4	4	4	4

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product preparation error	4	4	4	4
Product preparation issue	1	1	1	1
Wrong technique in product usage process	1	1	1	1
	6	6	6	6

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Blood pressure increased	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Myalgia	1	1	1	1
Pain in extremity	6	6	6	6
	7	7	7	7

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headache	1	1	1	1
	1	1	1	1

System Organ Class

Product issues

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product quality issue	1	1	1	1
	1	1	1	1

System Organ Class

Psychiatric disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Panic attack	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Erythema	1	1	1	1
Urticaria	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

SLOVAKIA

System Organ Class

Surgical and medical procedures

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
COVID-19 immunisation	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

SLOVENIA

System Organ Class

Product issues

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product counterfeit	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

SPAIN

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Diarrhoea	1	1	1	1
Vomiting	1	1	1	1
	2	2	2	2

System Organ Class

Immune system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Anaphylactic reaction	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

SWEDEN

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Cardiac arrest	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

SWITZERLAND

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Abdominal pain	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Death	1	1	1	1
General physical health deterioration	1	1	1	1
	2	2	2	2

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Blood pressure decreased	1	1	1	1
Heart rate increased	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Psychiatric disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Restlessness	1	1	1	1
	1	1	1	1

System Organ Class

Renal and urinary disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Urethral pain	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

UNITED ARAB EMIRATES

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Off label use	1	1	1	1
Product use issue	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

UNITED KINGDOM

System Organ Class

Blood and lymphatic system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Lymphadenopathy	45	45	28	28	17	17
Lymph node pain	13	13	8	8	5	5
	58	58	36	36	22	22

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acute myocardial infarction	2	2			2	2
Arrhythmia	1	1			1	1
Atrial f brillation	1	1			1	1
Bradycardia	1	1			1	1
Cardiac arrest	3	3			3	3
Extrasystoles	1	1			1	1
Palpitations	17	17	10	10	7	7
Sinus bradycardia	1	1			1	1
Sinus tachycardia	3	3	2	2	1	1
Supraventricular tachycardia	2	2			2	2
Tachycardia	23	23	16	16	7	7
Ventricular fibrillation	1	1			1	1
	56	56	28	28	28	28

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Ear and labyrinth disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Ear pain	4	4	1	1	3	3
Ear swelling	1	1			1	1
Hyperacusis	1	1	1	1		
Hypoacusis	1	1			1	1
Motion sickness	1	1	1	1		
Tinnitus	8	8	4	4	4	4
Vertigo	6	6	3	3	3	3
	22	22	10	10	12	12

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Eye disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Asthenopia	1	1	1	1		
Conjunctival haemorrhage	1	1			1	1
Diplopia	2	2	2	2		
Dry eye	1	1	1	1		
Eye disorder	1	1	1	1		
Eye irritation	1	1	1	1		
Eye pain	5	5	3	3	2	2
Eye pruritus	2	2	1	1	1	1
Eye swelling	5	5	3	3	2	2
Maculopathy	1	1			1	1
Metamorphopsia	1	1			1	1
Ocular hyperaemia	1	1	1	1		
Periorbital swelling	2	2	2	2		
Photophobia	7	7	2	2	5	5
Photopsia	1	1	1	1		
Swelling of eyelid	3	3	2	2	1	1
Vision blurred	8	8	5	5	3	3
Visual impairment	1	1			1	1
Vitreous floaters	1	1	1	1		
	45	45	27	27	18	18

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abdominal discomfort	3	3	3	3		
Abdominal distension	2	2	1	1	1	1
Abdominal pain	10	10	8	8	2	2
Abdominal pain lower	1	1	1	1		
Abdominal pain upper	13	13	8	8	5	5
Abnormal faeces	1	1	1	1		
Anal haemorrhage	1	1			1	1
Diarrhoea	48	48	28	28	20	20
Diarrhoea haemorrhagic	1	1			1	1
Dry mouth	10	10	6	6	4	4
Dysphagia	2	2	1	1	1	1
Enteritis	1	1	1	1		
Faeces discoloured	1	1	1	1		
Faeces pale	1	1	1	1		
Frequent bowel movements	3	3	2	2	1	1
Gastritis	1	1	1	1		
Gastrointestinal pain	1	1			1	1
Gingival pain	1	1	1	1		
Glossodynia	2	2	1	1	1	1
Haematemesis	1	1			1	1
Hypoaesthesia oral	10	10	7	7	3	3
Lip blister	1	1			1	1
Lip disorder	2	2	2	2		
Lip dry	1	1	1	1		
Lip pain	1	1	1	1		
Lip swelling	15	15	10	10	5	5
Mouth swelling	1	1	1	1		
Mouth ulceration	4	4	4	4		
Nausea	139	139	97	97	42	42
Oral mucosa erosion	1	1	1	1		
Oral pain	1	1			1	1
Paraesthesia oral	33	33	25	25	8	8

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Retching	1	1	1	1		
Salivary hypersecretion	3	3	3	3		
Swollen tongue	7	7	3	3	4	4
Tongue discomfort	1	1	1	1		
Tongue dry	1	1	1	1		
Vomiting	40	40	28	28	12	12
	366	366	251	251	115	115

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Alcohol interaction	1	1			1	1
Asthenia	14	14	6	6	8	8
Axillary pain	13	13	9	9	4	4
Chest discomfort	15	15	8	8	7	7
Chest pain	11	11	6	6	5	5
Chills	81	81	59	59	22	22
Chronic fatigue syndrome	1	1	1	1		
Condition aggravated	4	4	3	3	1	1
Discomfort	1	1			1	1
Drug ineffective	14	14	3	3	11	11
Facial discomfort	1	1			1	1
Facial pain	1	1			1	1
Fatigue	159	159	105	105	54	54
Feeling abnormal	8	8	4	4	4	4
Feeling cold	10	10	6	6	4	4
Feeling drunk	3	3			3	3
Feeling hot	35	35	26	26	9	9
Feeling jittery	2	2	1	1	1	1
Feeling of body temperature change	8	8	7	7	1	1
Gait disturbance	2	2	1	1	1	1
Illness	6	6	2	2	4	4
Influenza like illness	16	16	10	10	6	6
Injection site erythema	1	1	1	1		
Injection site inflammation	1	1	1	1		
Injection site pain	9	9	8	8	1	1
Injection site pruritus	1	1	1	1		
Injection site reaction	1	1	1	1		
Injection site swelling	1	1	1	1		
Injury associated with device	1	1	1	1		
Local reaction	1	1	1	1		
Malaise	60	60	35	35	25	25
Nodule	1	1	1	1		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Pain	48	48	31	31	17	17
Peripheral swelling	15	15	11	11	4	4
Pre-existing condition improved	1	1	1	1		
Pyrexia	132	132	80	80	52	52
Swelling	4	4	4	4		
Swelling face	7	7	2	2	5	5
Tenderness	3	3	3	3		
Thirst	1	1	1	1		
Vaccination site bruising	1	1			1	1
Vaccination site discomfort	1	1	1	1		
Vaccination site erythema	21	21	14	14	7	7
Vaccination site haemorrhage	1	1	1	1		
Vaccination site hypoaesthesia	2	2	2	2		
Vaccination site induration	2	2	2	2		
Vaccination site inflammation	3	3	2	2	1	1
Vaccination site joint erythema	1	1			1	1
Vaccination site joint movement impairment	1	1			1	1
Vaccination site joint pain	4	4	2	2	2	2
Vaccination site mass	6	6	5	5	1	1
Vaccination site movement impairment	4	4	2	2	2	2
Vaccination site oedema	1	1	1	1		
Vaccination site pain	106	106	75	75	31	31
Vaccination site paraesthesia	1	1			1	1
Vaccination site pruritus	5	5	3	3	2	2
Vaccination site rash	3	3	2	2	1	1
Vaccination site reaction	3	3	3	3		
Vaccination site swelling	28	28	19	19	9	9
Vaccination site urticaria	1	1	1	1		
Vaccination site warmth	16	16	13	13	3	3
	905	905	589	589	316	316

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Immune system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Allergy to vaccine	5	5	4	4	1	1
Anaphylactic reaction	5	5			5	5
Anaphylactic shock	1	1			1	1
Anaphylactoid reaction	3	3			3	3
Drug hypersensitivity	1	1	1	1		
Hypersensitivity	16	16	9	9	7	7
Immune-mediated adverse reaction	1	1	1	1		
Type IV hypersensitivity reaction	1	1			1	1
	33	33	15	15	18	18

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Infections and infestations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Cellulitis	2	2			2	2
Coronavirus infection	2	2			2	2
COVID-19	7	7	1	1	6	6
Folliculitis	1	1	1	1		
Gastroenteritis	1	1	1	1		
Herpes virus infection	1	1			1	1
Herpes zoster	2	2	2	2		
Infection	1	1	1	1		
Influenza	4	4	4	4		
Labyrinthitis	1	1			1	1
Nasopharyngitis	6	6	5	5	1	1
Oral herpes	2	2			2	2
Pneumonia	2	2			2	2
Rhinitis	1	1	1	1		
Sputum purulent	1	1			1	1
Suspected COVID-19	4	4	2	2	2	2
Sweating fever	1	1			1	1
Tonsillitis	1	1			1	1
Vaccination site cellulitis	2	2	1	1	1	1
Vestibular neuronitis	1	1			1	1
	43	43	19	19	24	24

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Circumstance or information capable of leading to medication error	2	2	2	2		
Contusion	2	2	1	1	1	1
Expired product administered	1	1	1	1		
Inappropriate schedule of product administration	1	1	1	1		
Incision site pain	1	1			1	1
Incorrect dose administered	1	1	1	1		
Incorrect route of product administration	4	4	4	4		
Maternal exposure during pregnancy	1	1	1	1		
Occupational exposure to product	1	1	1	1		
Off label use	13	13	13	13		
Overdose	2	2	2	2		
Poor quality product administered	8	8	8	8		
Product administered to patient of inappropriate age	1	1	1	1		
Product label confusion	1	1	1	1		
Product preparation error	3	3	3	3		
Product use issue	12	12	12	12		
Stoma site discharge	1	1			1	1
Stoma site extravasation	1	1	1	1		
Stoma site haemorrhage	1	1	1	1		
Underdose	4	4	4	4		
	61	61	58	58	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Blood pressure abnormal	1	1	1	1		
Blood pressure decreased	3	3	1	1	2	2
Blood pressure increased	9	9	5	5	4	4
Blood pressure systolic increased	1	1	1	1		
Blood test abnormal	1	1			1	1
Body temperature abnormal	1	1	1	1		
Body temperature fluctuation	2	2	2	2		
Body temperature increased	7	7	4	4	3	3
Heart rate increased	9	9	5	5	4	4
Oxygen saturation decreased	4	4			4	4
Respiratory rate increased	1	1	1	1		
SARS-CoV-2 test positive	6	6	3	3	3	3
	45	45	24	24	21	21

System Organ Class

Metabolism and nutrition disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Decreased appetite	10	10	3	3	7	7
Dehydration	1	1	1	1		
Diabetes mellitus inadequate control	1	1			1	1
Diabetic ketoacidosis	1	1			1	1
Fluid retention	1	1	1	1		
Hyperglycaemia	2	2	1	1	1	1
Hypoglycaemia	2	2	1	1	1	1
	18	18	7	7	11	11

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Arthralgia	59	59	38	38	21	21
Arthritis reactive	1	1			1	1
Axillary mass	1	1	1	1		
Back pain	9	9	8	8	1	1
Bone pain	2	2	1	1	1	1
Flank pain	1	1	1	1		
Joint range of motion decreased	1	1			1	1
Joint stiffness	2	2	1	1	1	1
Joint swelling	3	3	2	2	1	1
Joint warmth	1	1	1	1		
Limb discomfort	22	22	14	14	8	8
Mobility decreased	2	2	1	1	1	1
Muscle fatigue	5	5	2	2	3	3
Muscle spasms	4	4	2	2	2	2
Muscle tightness	1	1			1	1
Muscle twitching	1	1	1	1		
Muscular weakness	9	9	7	7	2	2
Musculoskeletal discomfort	1	1	1	1		
Musculoskeletal stiffness	9	9	4	4	5	5
Myalgia	112	112	76	76	36	36
Myofascial pain syndrome	1	1	1	1		
Neck pain	21	21	16	16	5	5
Pain in extremity	96	96	69	69	27	27
Pain in jaw	1	1	1	1		
Sjogren's syndrome	1	1			1	1
	366	366	248	248	118	118

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Ageusia	6	6	5	5	1	1
Anosmia	3	3	3	3		
Balance disorder	3	3	1	1	2	2
Burning sensation	3	3	1	1	2	2
Cataplexy	1	1			1	1
Cerebellar infarction	1	1			1	1
Cerebral infarction	1	1			1	1
Cerebrovascular accident	2	2			2	2
Disturbance in attention	2	2	1	1	1	1
Dizziness	84	84	53	53	31	31
Dizziness postural	7	7	4	4	3	3
Dysgeusia	22	22	18	18	4	4
Epilepsy	1	1			1	1
Facial paralysis	2	2	1	1	1	1
Facial paresis	2	2	2	2		
Facial spasm	1	1	1	1		
Formication	1	1			1	1
Generalised tonic-clonic seizure	2	2			2	2
Headache	210	210	136	136	74	74
Head discomfort	1	1	1	1		
Hemiparesis	1	1			1	1
Hypersomnia	1	1	1	1		
Hypoaesthesia	22	22	17	17	5	5
Ischaemic stroke	2	2			2	2
Lethargy	17	17	9	9	8	8
Memory impairment	1	1	1	1		
Mental impairment	1	1	1	1		
Migraine	8	8	6	6	2	2
Migraine with aura	1	1	1	1		
Neuralgia	1	1			1	1
Paraesthesia	31	31	25	25	6	6
Poor quality sleep	1	1	1	1		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Presyncope	9	9	5	5	4	4
Sensory disturbance	2	2	1	1	1	1
Sinus headache	1	1	1	1		
Somnolence	8	8	5	5	3	3
Speech disorder	1	1	1	1		
Syncope	12	12	3	3	9	9
Taste disorder	1	1	1	1		
Tension headache	1	1	1	1		
Transient ischaemic attack	1	1			1	1
Tremor	16	16	7	7	9	9
Unresponsive to stimuli	2	2	1	1	1	1
	496	496	315	315	181	181

System Organ Class

Product issues

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Liquid product physical issue	2	2	2	2
Product packaging quantity issue	3	3	3	3
Product quality issue	1	1	1	1
	6	6	6	6

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Psychiatric disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abnormal dreams	3	3	3	3		
Anxiety	11	11	7	7	4	4
Confusional state	4	4	1	1	3	3
Depressed mood	1	1	1	1		
Depression	1	1			1	1
Disorientation	4	4	3	3	1	1
Dissociation	1	1	1	1		
Hallucination, olfactory	1	1	1	1		
Insomnia	7	7	5	5	2	2
Mental status changes	1	1	1	1		
Nervousness	2	2			2	2
Nightmare	2	2	2	2		
Restlessness	3	3	1	1	2	2
Sleep disorder	3	3	3	3		
Somatic symptom disorder	1	1			1	1
	45	45	29	29	16	16

System Organ Class

Renal and urinary disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Haematuria	1	1	1	1
Hypertonic bladder	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Reproductive system and breast disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breast pain	1	1	1	1		
Dysmenorrhoea	1	1	1	1		
Menorrhagia	2	2	2	2		
Metrorrhagia	1	1	1	1		
Nipple pain	1	1	1	1		
Nipple swelling	1	1	1	1		
Scrotal erythema	1	1			1	1
Scrotal exfoliation	1	1			1	1
Scrotal pain	1	1			1	1
Scrotal swelling	1	1			1	1
	11	11	7	7	4	4

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Aphonia	2	2	1	1	1	1
Asthma	1	1			1	1
Catarrh	1	1	1	1		
Cough	15	15	10	10	5	5
Dry throat	2	2	2	2		
Dysphonia	3	3			3	3
Dyspnoea	34	34	16	16	18	18
Dyspnoea exertional	1	1	1	1		
Epistaxis	5	5	2	2	3	3
Increased upper airway secretion	1	1	1	1		
Nasal congestion	2	2	2	2		
Nasal discomfort	1	1	1	1		
Oropharyngeal pain	22	22	17	17	5	5
Painful respiration	2	2	1	1	1	1
Pharyngeal hypoaesthesia	2	2	2	2		
Pharyngeal paraesthesia	1	1			1	1
Pharyngeal swelling	2	2	1	1	1	1
Productive cough	1	1	1	1		
Pulmonary pain	2	2	1	1	1	1
Respiration abnormal	2	2	1	1	1	1
Rhinorrhoea	2	2	1	1	1	1
Sinus pain	1	1			1	1
Sneezing	1	1	1	1		
Throat irritation	5	5	2	2	3	3
Throat tightness	7	7	2	2	5	5
Tonsillar hypertrophy	1	1			1	1
Wheezing	10	10	8	8	2	2
	129	129	75	75	54	54

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Angioedema	3	3	2	2	1	1
Cold sweat	12	12	3	3	9	9
Dermatitis allergic	7	7	5	5	2	2
Erythema	26	26	21	21	5	5
Hyperhidrosis	17	17	13	13	4	4
Livedo reticularis	1	1	1	1		
Miliaria	2	2			2	2
Night sweats	2	2	2	2		
Pain of skin	3	3	1	1	2	2
Papule	1	1	1	1		
Petechiae	1	1	1	1		
Photosensitivity reaction	1	1			1	1
Piloerection	1	1			1	1
Pruritus	41	41	26	26	15	15
Rash	31	31	21	21	10	10
Rash erythematous	19	19	12	12	7	7
Rash macular	8	8	6	6	2	2
Rash maculo-papular	1	1			1	1
Rash papular	5	5	4	4	1	1
Rash pruritic	5	5	2	2	3	3
Skin mass	1	1	1	1		
Skin reaction	1	1	1	1		
Skin swelling	1	1	1	1		
Skin tightness	1	1			1	1
Skin warm	4	4	1	1	3	3
Urticaria	18	18	15	15	3	3
	213	213	140	140	73	73

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Social circumstances

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Impaired work ability	1	1	1	1
	1	1	1	1

System Organ Class

SOC Not Yet Coded

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
	1	1	1	1
	1	1	1	1

System Organ Class

Vascular disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Circulatory collapse	1	1			1	1
Flushing	18	18	12	12	6	6
Hot flush	11	11	6	6	5	5
Hypertension	10	10	5	5	5	5
Hypotension	5	5	2	2	3	3
Pallor	11	11	4	4	7	7
Peripheral circulatory failure	1	1			1	1
Peripheral coldness	5	5	2	2	3	3
	62	62	31	31	31	31

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

UNITED STATES

System Organ Class

Blood and lymphatic system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Lymphadenitis	2	2	2	2		
Lymphadenopathy	69	69	63	63	6	6
Lymph node pain	11	11	11	11		
Thrombotic thrombocytopenic purpura	1	1			1	1
	83	83	76	76	7	7

System Organ Class

Cardiac disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Arrhythmia	1	1	1	1		
Cardiac discomfort	1	1	1	1		
Cardiac disorder	2	2	2	2		
Cardiac flutter	1	1			1	1
Myocardial infarction	2	2	1	1	1	1
Palpitations	51	51	41	41	10	10
Pericarditis	1	1	1	1		
Supraventricular tachycardia	2	2			2	2
Tachycardia	52	52	42	42	10	10
Ventricular extrasystoles	5	5	3	3	2	2
Ventricular tachycardia	1	1	1	1		
	119	119	93	93	26	26

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Congenital, familial and genetic disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Congenital anomaly	1	1			1	1
Muscular dystrophy	1	1	1	1		
	2	2	1	1	1	1

System Organ Class

Ear and labyrinth disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Deafness	4	4	3	3	1	1
Deafness neurosensory	2	2			2	2
Deafness unilateral	1	1			1	1
Ear discomfort	6	6	5	5	1	1
Ear disorder	1	1	1	1		
Ear pain	14	14	13	13	1	1
Ear swelling	3	3	3	3		
Hyperacusis	1	1			1	1
Hypoacusis	3	3	3	3		
Motion sickness	1	1	1	1		
Paraesthesia ear	1	1	1	1		
Tinnitus	18	18	14	14	4	4
Vertigo	15	15	13	13	2	2
	70	70	57	57	13	13

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Eye disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abnormal sensation in eye	1	1	1	1		
Asthenopia	2	2	2	2		
Blepharospasm	1	1	1	1		
Blindness transient	1	1			1	1
Erythema of eyelid	1	1	1	1		
Eye discharge	2	2	2	2		
Eye disorder	4	4	4	4		
Eye haemorrhage	2	2			2	2
Eye inflammation	1	1	1	1		
Eye irritation	2	2	2	2		
Eyelids pruritus	2	2	2	2		
Eye pain	12	12	12	12		
Eye pruritus	7	7	6	6	1	1
Eye swelling	13	13	13	13		
Lacrimation increased	2	2	2	2		
Ocular discomfort	3	3	3	3		
Ocular hyperaemia	6	6	6	6		
Periorbital discomfort	1	1	1	1		
Periorbital oedema	1	1	1	1		
Periorbital swelling	7	7	5	5	2	2
Photophobia	6	6	6	6		
Swelling of eyelid	7	7	7	7		
Vision blurred	14	14	12	12	2	2
Visual impairment	8	8	7	7	1	1
	106	106	97	97	9	9

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abdominal discomfort	13	13	13	13		
Abdominal distension	3	3	3	3		
Abdominal pain	15	15	13	13	2	2
Abdominal pain lower	5	5	3	3	2	2
Abdominal pain upper	13	13	13	13		
Abdominal rigidity	1	1			1	1
Aptyalism	1	1	1	1		
Cheilitis	1	1	1	1		
Constipation	1	1	1	1		
Defaecation urgency	1	1	1	1		
Dental paraesthesia	2	2	2	2		
Diarrhoea	81	81	78	78	3	3
Diarrhoea haemorrhagic	1	1	1	1		
Dry mouth	18	18	17	17	1	1
Dyspepsia	5	5	5	5		
Dysphagia	9	9	7	7	2	2
Enlarged uvula	1	1			1	1
Flatulence	2	2	2	2		
Food poisoning	1	1	1	1		
Gastrointestinal disorder	6	6	6	6		
Gastrointestinal pain	1	1	1	1		
Gingival bleeding	2	2	2	2		
Gingival discolouration	1	1			1	1
Gingival discomfort	1	1			1	1
Gingival pain	2	2			2	2
Glossodynia	2	2	2	2		
Haematochezia	1	1			1	1
Hypoaesthesia oral	26	26	24	24	2	2
Infantile vomiting	1	1	1	1		
Lip blister	1	1	1	1		
Lip disorder	1	1	1	1		
Lip erythema	2	2	2	2		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Lip oedema	2	2	1	1	1	1
Lip pain	2	2	1	1	1	1
Lip pruritus	2	2	1	1	1	1
Lip swelling	16	16	10	10	6	6
Mouth swelling	5	5	3	3	2	2
Mouth ulceration	1	1	1	1		
Mucous stools	1	1	1	1		
Nausea	257	257	242	242	15	15
Oral discomfort	5	5	4	4	1	1
Oral disorder	2	2	2	2		
Oral mucosal blistering	1	1	1	1		
Oral mucosal eruption	3	3	3	3		
Oral mucosal erythema	1	1	1	1		
Oral pain	4	4	4	4		
Oral pruritus	3	3	3	3		
Palatal swelling	1	1			1	1
Pancreatitis	1	1			1	1
Paraesthesia oral	41	41	36	36	5	5
Retching	2	2	2	2		
Small intestinal obstruction	1	1			1	1
Stiff tongue	1	1	1	1		
Stomatitis	1	1	1	1		
Strawberry tongue	1	1	1	1		
Swollen tongue	18	18	11	11	7	7
Tongue coated	1	1	1	1		
Tongue discolouration	1	1	1	1		
Tongue discomfort	3	3	3	3		
Tongue disorder	3	3	3	3		
Tongue dry	1	1	1	1		
Tongue haematoma	1	1	1	1		
Tongue pruritus	2	2	1	1	1	1
Toothache	5	5	5	5		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Vomiting	76	76	73	73	3	3
Vomiting projectile	1	1	1	1		
	687	687	622	622	65	65

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Administration site pain	3	3	3	3		
Asthenia	77	77	73	73	4	4
Axillary pain	6	6	6	6		
Chest discomfort	43	43	34	34	9	9
Chest pain	31	31	26	26	5	5
Chills	348	348	336	336	12	12
Condition aggravated	24	24	20	20	4	4
Crying	1	1	1	1		
Death	1	1			1	1
Discomfort	11	11	11	11		
Disease recurrence	4	4	4	4		
Drug ineffective	116	116	38	38	78	78
Enanthema	1	1	1	1		
Energy increased	1	1	1	1		
Face oedema	2	2	1	1	1	1
Facial discomfort	2	2	2	2		
Facial pain	4	4	4	4		
Fatigue	391	391	385	385	6	6
Feeling abnormal	75	75	69	69	6	6
Feeling cold	18	18	16	16	2	2
Feeling hot	55	55	48	48	7	7
Feeling jittery	3	3	2	2	1	1
Feeling of body temperature change	4	4	4	4		
Gait disturbance	9	9	8	8	1	1
Glassy eyes	1	1	1	1		
Hangover	1	1	1	1		
Hunger	2	2	2	2		
Illness	28	28	27	27	1	1
Induration	2	2	2	2		
Inflammation	7	7	6	6	1	1
Influenza like illness	32	32	31	31	1	1
Injection site bruising	2	2	2	2		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Injection site coldness	1	1	1	1		
Injection site discomfort	2	2	2	2		
Injection site erythema	12	12	12	12		
Injection site extravasation	1	1	1	1		
Injection site haemorrhage	2	2	2	2		
Injection site hypersensitivity	1	1	1	1		
Injection site hypoaesthesia	4	4	4	4		
Injection site induration	2	2	2	2		
Injection site mass	2	2	2	2		
Injection site oedema	1	1	1	1		
Injection site pain	70	70	69	69	1	1
Injection site pruritus	4	4	4	4		
Injection site rash	4	4	4	4		
Injection site swelling	13	13	13	13		
Injection site urticaria	1	1	1	1		
Injection site warmth	4	4	4	4		
Localised oedema	1	1	1	1		
Local reaction	1	1	1	1		
Malaise	131	131	130	130	1	1
Mass	2	2	2	2		
No adverse event	1	1	1	1		
Nodule	1	1	1	1		
Oedema	1	1	1	1		
Oedema peripheral	1	1	1	1		
Pain	288	288	280	280	8	8
Peripheral swelling	36	36	33	33	3	3
Potentiating drug interaction	1	1	1	1		
Pyrexia	360	360	343	343	17	17
Secretion discharge	1	1	1	1		
Sensation of foreign body	6	6	4	4	2	2
Sluggishness	1	1	1	1		
Swelling	21	21	18	18	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Swelling face	28	28	25	25	3	3
Symptom recurrence	1	1	1	1		
Tenderness	9	9	9	9		
Therapeutic product ineffective	1	1	1	1		
Therapeutic response unexpected	1	1	1	1		
Thirst	2	2	2	2		
Vaccination site bruising	4	4	4	4		
Vaccination site coldness	1	1	1	1		
Vaccination site discomfort	8	8	8	8		
Vaccination site erythema	33	33	33	33		
Vaccination site haemorrhage	6	6	6	6		
Vaccination site hypoaesthesia	1	1	1	1		
Vaccination site induration	5	5	5	5		
Vaccination site joint discomfort	1	1	1	1		
Vaccination site macule	1	1	1	1		
Vaccination site mass	1	1	1	1		
Vaccination site movement impairment	7	7	7	7		
Vaccination site nodule	2	2	2	2		
Vaccination site pain	267	267	267	267		
Vaccination site paraesthesia	9	9	8	8	1	1
Vaccination site pruritus	12	12	12	12		
Vaccination site rash	8	8	8	8		
Vaccination site reaction	1	1	1	1		
Vaccination site swelling	27	27	27	27		
Vaccination site urticaria	4	4	4	4		
Vaccination site vesicles	2	2	2	2		
Vaccination site warmth	7	7	7	7		
Vessel puncture site haemorrhage	1	1	1	1		
Vessel puncture site injury	1	1	1	1		
	2,733	2,733	2554	2554	179	179

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Hepatobiliary disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Gal bladder disorder	1	1	1	1
Hepatic pain	1	1	1	1
	2	2	2	2

System Organ Class

Immune system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Allergy to vaccine	11	11	9	9	2	2
Anaphylactic reaction	24	24	3	3	21	21
Anaphylactic shock	2	2	1	1	1	1
Anaphylactoid reaction	2	2	1	1	1	1
Autoimmune disorder	2	2			2	2
Drug hypersensitivity	11	11	9	9	2	2
Food allergy	1	1	1	1		
Hypersensitivity	23	23	16	16	7	7
Immune system disorder	2	2			2	2
Immunodeficiency	1	1			1	1
Reaction to excipient	1	1	1	1		
Serum sickness	1	1			1	1
	81	81	41	41	40	40

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Infections and infestations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Appendicitis	2	2	1	1	1	1
Asymptomatic COVID-19	3	3			3	3
Bronchitis	1	1			1	1
Cellulitis	2	2	1	1	1	1
Conjunctivitis	1	1	1	1		
Coronavirus infection	1	1	1	1		
COVID-19	64	64	19	19	45	45
Ear infection	1	1	1	1		
Gastroenteritis viral	1	1			1	1
Herpes simplex	1	1	1	1		
Herpes virus infection	1	1	1	1		
Herpes zoster	7	7	7	7		
Hordeolum	3	3	3	3		
Infection	1	1	1	1		
Influenza	7	7	6	6	1	1
Laryngitis	1	1	1	1		
Mastitis	1	1			1	1
Meningitis	1	1			1	1
Nasopharyngitis	17	17	17	17		
Oral candidiasis	1	1	1	1		
Oral herpes	7	7	6	6	1	1
Oral viral infection	1	1	1	1		
Pertussis	1	1			1	1
Pharyngitis	1	1	1	1		
Pneumonia	1	1			1	1
Pustule	1	1	1	1		
Rash pustular	1	1	1	1		
Rhinitis	1	1	1	1		
Sinusitis	6	6	6	6		
Streptococcal infection	1	1			1	1
Suspected COVID-19	7	7	3	3	4	4
Tuberculosis	1	1	1	1		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Infections and infestations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Upper respiratory tract infection	1	1	1	1		
Urinary tract infection	2	2	2	2		
Vaginal infection	1	1	1	1		
Varicella	1	1	1	1		
Varicella zoster virus infection	1	1	1	1		
	152	152	89	89	63	63

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Accidental exposure to product	4	4	4	4		
Accidental overdose	16	16	15	15	1	1
Accidental underdose	6	6	6	6		
Circumstance or information capable of leading to medication error	32	32	31	31	1	1
Contusion	3	3	3	3		
Counterfeit product administered	1	1	1	1		
Exposure during pregnancy	3	3	3	3		
Exposure to SARS-CoV-2	11	11	11	11		
Exposure via breast milk	30	30	30	30		
Exposure via eye contact	1	1	1	1		
Exposure via skin contact	2	2	2	2		
Face injury	1	1			1	1
Fall	6	6	4	4	2	2
Foetal exposure timing unspecified	2	2	2	2		
Fracture	1	1			1	1
Inappropriate schedule of product administration	6	6	6	6		
Incorrect dose administered	5	5	5	5		
Incorrect route of product administration	24	24	23	23	1	1
Joint dislocation	1	1			1	1
Limb injury	2	2	2	2		
Maternal exposure during breast feeding	4	4	4	4		
Maternal exposure during pregnancy	19	19	19	19		
Maternal exposure timing unspecified	2	2	2	2		
Muscle strain	2	2	2	2		
Neck injury	1	1	1	1		
Nerve injury	1	1	1	1		
Occupational exposure to SARS-CoV-2	1	1	1	1		
Off label use	62	62	62	62		
Overdose	11	11	11	11		
Poor quality product administered	103	103	103	103		
Product administered at inappropriate site	11	11	11	11		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Injury, poisoning and procedural complications

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Product preparation error	19	19	18	18	1	1
Product preparation issue	12	12	11	11	1	1
Product prescribing error	2	2	2	2		
Product storage error	1	1	1	1		
Product use issue	62	62	62	62		
Thermal burns of eye	1	1	1	1		
Underdose	22	22	22	22		
Vaccination failure	1	1			1	1
Wrong technique in product usage process	34	34	34	34		
	528	528	517	517	11	11

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Blood glucose decreased	1	1	1	1		
Blood glucose increased	2	2	2	2		
Blood pressure abnormal	5	5	5	5		
Blood pressure decreased	5	5	4	4	1	1
Blood pressure diastolic increased	2	2	1	1	1	1
Blood pressure increased	37	37	28	28	9	9
Blood pressure systolic increased	1	1			1	1
Blood urine present	1	1	1	1		
Body temperature abnormal	2	2	2	2		
Body temperature decreased	2	2	2	2		
Body temperature increased	15	15	15	15		
Capillary nail refill test abnormal	1	1	1	1		
Coronavirus test positive	5	5	5	5		
Drug level increased	1	1			1	1
Ejection fraction abnormal	1	1	1	1		
Electrocardiogram QT prolonged	1	1			1	1
Epinephrine increased	1	1	1	1		
Fibrin D dimer increased	1	1	1	1		
Grip strength decreased	1	1	1	1		
Heart rate abnormal	4	4	4	4		
Heart rate decreased	5	5	3	3	2	2
Heart rate increased	89	89	77	77	12	12
Heart rate irregular	2	2	1	1	1	1
Influenza virus test positive	1	1	1	1		
Lipids increased	1	1	1	1		
Myocardial necrosis marker increased	1	1			1	1
Oxygen saturation decreased	1	1	1	1		
Platelet count decreased	1	1	1	1		
Pulse abnormal	3	3	3	3		
Respiratory rate decreased	1	1			1	1
Respiratory rate increased	4	4	3	3	1	1
SARS-CoV-2 ant body test positive	3	3	3	3		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Investigations

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
SARS-CoV-2 test false positive	1	1	1	1		
SARS-CoV-2 test negative	2	2	2	2		
SARS-CoV-2 test positive	81	81	50	50	31	31
Sinus rhythm	1	1	1	1		
Streptococcus test positive	1	1	1	1		
Weight decreased	3	3	3	3		
Weight increased	1	1	1	1		
	291	291	228	228	63	63

System Organ Class

Metabolism and nutrition disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Appetite disorder	1	1	1	1		
Decreased appetite	19	19	17	17	2	2
Dehydration	7	7	7	7		
Diabetes mellitus	1	1			1	1
Feeding disorder	1	1	1	1		
Hypoglycaemia	1	1	1	1		
	30	30	27	27	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Arthralgia	140	140	134	134	6	6
Arthritis	1	1	1	1		
Arthropathy	2	2	2	2		
Axillary mass	1	1	1	1		
Back disorder	1	1	1	1		
Back pain	39	39	36	36	3	3
Bone pain	8	8	8	8		
Bone swelling	2	2	2	2		
Facial asymmetry	1	1	1	1		
Joint instability	1	1			1	1
Joint range of motion decreased	8	8	8	8		
Joint stiffness	2	2	2	2		
Joint swelling	10	10	10	10		
Limb discomfort	23	23	22	22	1	1
Mobility decreased	8	8	8	8		
Muscle discomfort	1	1	1	1		
Muscle fatigue	2	2	2	2		
Muscle spasms	14	14	14	14		
Muscle tightness	7	7	7	7		
Muscle twitching	2	2	2	2		
Muscular weakness	14	14	12	12	2	2
Musculoskeletal chest pain	7	7	7	7		
Musculoskeletal discomfort	7	7	7	7		
Musculoskeletal disorder	1	1	1	1		
Musculoskeletal pain	4	4	3	3	1	1
Musculoskeletal stiffness	10	10	9	9	1	1
Myalgia	197	197	192	192	5	5
Neck pain	30	30	28	28	2	2
Pain in extremity	227	227	222	222	5	5
Pain in jaw	10	10	10	10		
Soft tissue swelling	1	1	1	1		
Spinal pain	3	3	3	3		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Tendonitis	1	1	1	1		
Tenosynovitis	1	1	1	1		
	786	786	759	759	27	27

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acoustic neuritis	1	1			1	1
Ageusia	23	23	22	22	1	1
Amnesia	1	1	1	1		
Anaesthesia	2	2	2	2		
Anosmia	26	26	23	23	3	3
Aphasia	2	2	2	2		
Ataxia	1	1			1	1
Balance disorder	8	8	6	6	2	2
Basal ganglia haemorrhage	1	1			1	1
Burning sensation	17	17	15	15	2	2
Cerebral disorder	1	1	1	1		
Cerebrovascular accident	3	3	1	1	2	2
Cognitive disorder	2	2	2	2		
Depressed level of consciousness	1	1	1	1		
Disturbance in attention	7	7	6	6	1	1
Dizziness	246	246	219	219	27	27
Dizziness postural	1	1	1	1		
Dysaesthesia	1	1	1	1		
Dysarthria	4	4	4	4		
Dysgeusia	30	30	30	30		
Dyskinesia	2	2	2	2		
Dyslexia	1	1	1	1		
Dysstasia	1	1			1	1
Facial paralysis	16	16	7	7	9	9
Fine motor skill dysfunction	1	1	1	1		
Freezing phenomenon	1	1	1	1		
Guillain-Barre syndrome	1	1	1	1		
Headache	520	520	502	502	18	18
Head discomfort	8	8	7	7	1	1
Hemiparesis	1	1			1	1
Hyperaesthesia	4	4	4	4		
Hypersomnia	4	4	4	4		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Hypertonia	1	1	1	1		
Hypoaesthesia	77	77	69	69	8	8
Hypogeusia	1	1	1	1		
Hypokinesia	1	1	1	1		
Hyposmia	1	1	1	1		
Infant irritability	1	1	1	1		
Irregular sleep wake rhythm disorder	1	1	1	1		
Lethargy	13	13	12	12	1	1
Loss of consciousness	9	9	1	1	8	8
Memory impairment	3	3	2	2	1	1
Mental impairment	5	5	3	3	2	2
Migraine	18	18	17	17	1	1
Movement disorder	3	3	3	3		
Neuralgia	2	2	2	2		
Neuropathy peripheral	1	1			1	1
Paraesthesia	96	96	86	86	10	10
Paraesthesia mucosal	1	1	1	1		
Parosmia	7	7	6	6	1	1
Peroneal nerve palsy	1	1	1	1		
Poor quality sleep	6	6	6	6		
Postictal state	1	1	1	1		
Presyncope	11	11	9	9	2	2
Reduced facial expression	1	1	1	1		
Sedation	1	1	1	1		
Seizure	3	3	1	1	2	2
Sensory disturbance	2	2	2	2		
Sensory loss	1	1	1	1		
Sinus headache	2	2	2	2		
Slow response to stimuli	1	1	1	1		
Somnolence	27	27	27	27		
Speech disorder	6	6	5	5	1	1
Syncope	13	13	2	2	11	11

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Nervous system disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Taste disorder	15	15	14	14	1	1
Transient ischaemic attack	1	1			1	1
Tremor	26	26	23	23	3	3
Tunnel vision	1	1			1	1
	1,298	1,298	1172	1172	126	126

System Organ Class

Product issues

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Needle issue	3	3	3	3
Product complaint	1	1	1	1
Product formulation issue	1	1	1	1
Product leakage	4	4	4	4
Product packaging quantity issue	4	4	4	4
Product temperature excursion issue	90	90	90	90
Syringe issue	1	1	1	1
	104	104	104	104

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Psychiatric disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abnormal dreams	2	2	2	2		
Agitation	4	4	4	4		
Anxiety	17	17	17	17		
Confusional state	5	5	4	4	1	1
Delirium	1	1			1	1
Depressed mood	2	2	2	2		
Disorientation	2	2	2	2		
Eating disorder	5	5	5	5		
Emotional disorder	2	2	2	2		
Fear	2	2	1	1	1	1
Hallucination	1	1			1	1
Initial insomnia	1	1	1	1		
Insomnia	18	18	18	18		
Irritability	2	2	2	2		
Laziness	1	1	1	1		
Middle insomnia	1	1	1	1		
Nervousness	13	13	12	12	1	1
Nightmare	1	1	1	1		
Panic attack	3	3	2	2	1	1
Panic reaction	1	1			1	1
Paranoia	1	1	1	1		
Post-traumatic stress disorder	1	1	1	1		
Restlessness	2	2	2	2		
Sleep disorder	8	8	6	6	2	2
Sleep disorder due to a general medical condition	1	1	1	1		
Staring	1	1			1	1
Stress	2	2	2	2		
Terminal insomnia	1	1	1	1		
Thinking abnormal	4	4	4	4		
	105	105	95	95	10	10

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Renal and urinary disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Chromaturia	1	1	1	1		
Dysuria	1	1	1	1		
Haematuria	1	1			1	1
Incontinence	1	1			1	1
Pollakiuria	1	1	1	1		
Renal pain	1	1	1	1		
Urinary incontinence	1	1	1	1		
	7	7	5	5	2	2

System Organ Class

Reproductive system and breast disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breast swelling	1	1	1	1		
Breast tenderness	1	1			1	1
Dysmenorrhoea	1	1	1	1		
Menstrual disorder	1	1	1	1		
Metrorrhagia	1	1	1	1		
Nipple pain	1	1	1	1		
Nipple swelling	2	2	2	2		
	8	8	7	7	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Aphonia	2	2	2	2		
Asthma	3	3	3	3		
Bronchospasm	1	1	1	1		
Choking	1	1	1	1		
Cough	84	84	74	74	10	10
Dry throat	8	8	6	6	2	2
Dysphonia	10	10	6	6	4	4
Dyspnoea	80	80	55	55	25	25
Dyspnoea exertional	3	3	3	3		
Epistaxis	3	3	3	3		
Hiccups	1	1	1	1		
Hyperventilation	4	4	2	2	2	2
Hypoxia	2	2			2	2
Increased upper airway secretion	1	1			1	1
Intranasal paraesthesia	1	1	1	1		
Laryngeal oedema	2	2	2	2		
Lower respiratory tract congestion	1	1	1	1		
Lung infiltration	1	1			1	1
Nasal congestion	48	48	46	46	2	2
Nasal discomfort	3	3	2	2	1	1
Nasal disorder	1	1	1	1		
Nasal dryness	1	1	1	1		
Nasal oedema	2	2	1	1	1	1
Obstructive airways disorder	1	1			1	1
Organising pneumonia	1	1	1	1		
Oropharyngeal discomfort	10	10	7	7	3	3
Oropharyngeal pain	72	72	69	69	3	3
Paranasal sinus discomfort	2	2	2	2		
Pharyngeal disorder	1	1	1	1		
Pharyngeal hypoaesthesia	3	3	3	3		
Pharyngeal mass	2	2	2	2		
Pharyngeal paraesthesia	8	8	8	8		

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Respiratory, thoracic and mediastinal disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Pharyngeal swelling	23	23	14	14	9	9
Pleuritic pain	1	1	1	1		
Productive cough	2	2	2	2		
Pulmonary congestion	1	1			1	1
Pulmonary embolism	1	1			1	1
Pulmonary oedema	1	1	1	1		
Respiratory distress	3	3			3	3
Respiratory tract congestion	3	3	3	3		
Rhinalgia	1	1	1	1		
Rhinorrhoea	28	28	28	28		
Sinus congestion	4	4	4	4		
Sinus disorder	2	2	2	2		
Sinus pain	2	2	2	2		
Sneezing	8	8	8	8		
Suffocation feeling	1	1	1	1		
Tachypnoea	1	1	1	1		
Throat clearing	1	1			1	1
Throat irritation	30	30	26	26	4	4
Throat tightness	31	31	18	18	13	13
Tonsillar hypertrophy	1	1	1	1		
Tracheomalacia	1	1			1	1
Upper-airway cough syndrome	5	5	5	5		
Upper respiratory tract congestion	5	5	5	5		
Wheezing	10	10	5	5	5	5
	529	529	433	433	96	96

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acne	1	1	1	1		
Angioedema	7	7	4	4	3	3
Blister	6	6	6	6		
Cold sweat	9	9	9	9		
Dermatitis allergic	1	1	1	1		
Drug eruption	1	1	1	1		
Dry skin	1	1	1	1		
Eczema	2	2	2	2		
Erythema	45	45	41	41	4	4
Hidradenitis	1	1	1	1		
Hyperhidrosis	48	48	44	44	4	4
Idiopathic urticaria	1	1	1	1		
Livedo reticularis	1	1			1	1
Mechanical urticaria	1	1	1	1		
Night sweats	9	9	7	7	2	2
Pain of skin	3	3	3	3		
Palmar erythema	1	1	1	1		
Papule	1	1	1	1		
Photosensitivity reaction	3	3	3	3		
Piloerection	2	2	2	2		
Pruritus	102	102	96	96	6	6
Pseudofolliculitis	1	1	1	1		
Psoriasis	1	1	1	1		
Rash	92	92	79	79	13	13
Rash erythematous	12	12	10	10	2	2
Rash macular	11	11	9	9	2	2
Rash maculo-papular	2	2	2	2		
Rash papular	2	2	2	2		
Rash pruritic	12	12	12	12		
Scab	1	1	1	1		
Skin burning sensation	2	2	2	2		
Skin discolouration	6	6	4	4	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Skin disorder	4	4	3	3	1	1
Skin irritation	1	1	1	1		
Skin reaction	1	1	1	1		
Skin tightness	2	2	2	2		
Urticaria	71	71	64	64	7	7
	467	467	420	420	47	47

System Organ Class

Social circumstances

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Impaired driving ability	1	1	1	1		
Impaired work ability	2	2	2	2		
Loss of personal independence in daily activities	9	9	8	8	1	1
	12	12	11	11	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Vascular disorders

Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Blood pressure fluctuation	1	1	1	1		
Bloody discharge	1	1	1	1		
Cyanosis	1	1	1	1		
Diastolic hypotension	1	1			1	1
Flushing	70	70	61	61	9	9
Haemorrhage	2	2	1	1	1	1
Hot flush	18	18	16	16	2	2
Hyperaemia	2	2	2	2		
Hypertension	22	22	15	15	7	7
Hypertensive crisis	1	1	1	1		
Hypertensive emergency	2	2			2	2
Hypotension	3	3	2	2	1	1
Pallor	5	5	5	5		
Peripheral coldness	14	14	13	13	1	1
Poor peripheral circulation	1	1	1	1		
Raynaud's phenomenon	1	1	1	1		
Shock symptom	1	1			1	1
Vasodilatation	1	1	1	1		
	147	147	122	122	25	25

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

UNITED STATES MINOR OUTLYING ISLANDS

System Organ Class

General disorders and administration site conditions			Spontaneous	
			Nonserious	
Preferred Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	I	C
Vaccination site pain	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

APPENDIX 2.6: Cumulative and Interval Summary Tabulation of Serious and Non-Serious Adverse Reactions From Post-Marketing Data Sources Organized per MedDRA System Organ Class by High Level Term

Cumulative Reporting Period: Through 31-DEC-2020

Interval Reporting Period: 01-DEC-2020 Through 31-DEC-2020

Total Number of Cases: 3,615 (Interval) / 3,615 (Cumulative)

Total Number of Adverse Events (PT): 11,824 (Interval) / 11,824 (Cumulative)

MedDRA Version: v.23.1J

System Organ Class

Blood and lymphatic system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Leukopenias NEC	1	1	1	1		
Lymphatic system disorders NEC	145	145	117	117	28	28
Thrombocytopenias	1	1			1	1
	147	147	118	118	29	29

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Cardiac disorders NEC	2	2	2	2		
Cardiac signs and symptoms NEC	72	72	55	55	17	17
Heart failures NEC	1	1			1	1
Ischaemic coronary artery disorders	4	4	1	1	3	3
Noninfectious pericarditis	2	2	2	2		
Rate and rhythm disorders NEC	83	83	60	60	23	23
Supraventricular arrhythmias	10	10	3	3	7	7
Ventricular arrhythmias and cardiac arrest	12	12	4	4	8	8
	186	186	127	127	59	59

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Congenital, familial and genetic disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Congenital disorders NEC	1	1			1	1
Non-site specific muscle disorders congenital	1	1	1	1		
	2	2	1	1	1	1

System Organ Class

Ear and labyrinth disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Ear disorders NEC	30	30	24	24	6	6
Hearing losses	11	11	6	6	5	5
Hyperacusia	2	2	1	1	1	1
Inner ear signs and symptoms	49	49	36	36	13	13
	92	92	67	67	25	25

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Eye disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Choroid and vitreous structural change, deposit and degeneration	1	1	1	1		
Conjunctival and corneal bleeding and vascular disorders	1	1			1	1
Eyelid movement disorders	1	1	1	1		
Lacrimation disorders	3	3	3	3		
Lid, lash and lacrimal infections, irritations and inflammations	11	11	10	10	1	1
Ocular bleeding and vascular disorders NEC	2	2			2	2
Ocular disorders NEC	57	57	51	51	6	6
Ocular infections, inflammations and associated manifestations	22	22	20	20	2	2
Ocular sensation disorders	17	17	12	12	5	5
Retinal structural change, deposit and degeneration	1	1			1	1
Visual disorders NEC	26	26	20	20	6	6
Visual impairment and blindness (excl colour blindness)	10	10	7	7	3	3
	152	152	125	125	27	27

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acute and chronic pancreatitis	1	1			1	1
Dental pain and sensation disorders	8	8	8	8		
Diarrhoea (excl infective)	136	136	112	112	24	24
Duodenal and small intestinal stenosis and obstruction	1	1			1	1
Dyspeptic signs and symptoms	5	5	5	5		
Faecal abnormalities NEC	4	4	4	4		
Flatulence, bloating and distension	7	7	6	6	1	1
Gastritis (excl infective)	2	2	2	2		
Gastrointestinal and abdominal pains (excl oral and throat)	65	65	52	52	13	13
Gastrointestinal atonic and hypomotility disorders NEC	1	1	1	1		
Gastrointestinal disorders NEC	7	7	7	7		
Gastrointestinal inflammatory disorders NEC	1	1	1	1		
Gastrointestinal signs and symptoms NEC	28	28	25	25	3	3
Gastrointestinal spastic and hypermotility disorders	6	6	3	3	3	3
Gingival disorders, signs and symptoms NEC	5	5	1	1	4	4
Gingival haemorrhages	2	2	2	2		
Intestinal haemorrhages	1	1			1	1
Nausea and vomiting symptoms	530	530	457	457	73	73
Non-site specific gastrointestinal haemorrhages	2	2			2	2
Oral dryness and saliva altered	35	35	29	29	6	6
Oral soft tissue disorders NEC	9	9	7	7	2	2
Oral soft tissue signs and symptoms	145	145	123	123	22	22
Oral soft tissue swelling and oedema	40	40	25	25	15	15
Stomatitis and ulceration	7	7	7	7		
Tongue disorders	4	4	4	4		
Tongue signs and symptoms	44	44	31	31	13	13
	1,096	1,096	912	912	184	184

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Administration site reactions NEC	5	5	5	5		
Adverse effect absent	1	1	1	1		
Asthenic conditions	869	869	769	769	100	100
Complications associated with device NEC	1	1	1	1		
Death and sudden death	5	5			5	5
Febrile disorders	503	503	434	434	69	69
Feelings and sensations NEC	679	679	602	602	77	77
Gait disturbances	12	12	10	10	2	2
General signs and symptoms NEC	244	244	207	207	37	37
Inflammations	7	7	6	6	1	1
Injection site reactions	142	142	140	140	2	2
Interactions	2	2	1	1	1	1
Mass conditions NEC	4	4	4	4		
Mucosal findings abnormal	2	2	1	1	1	1
Oedema NEC	5	5	4	4	1	1
Pain and discomfort NEC	495	495	436	436	59	59
Therapeutic and nontherapeutic responses	134	134	44	44	90	90
Vaccination site reactions	657	657	593	593	64	64
	3,767	3,767	3258	3258	509	509

System Organ Class

Hepatobiliary disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Gal bladder disorders NEC	1	1	1	1
Hepatobiliary signs and symptoms	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Immune system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Allergic conditions NEC	44	44	28	28	16	16
Allergies to foods, food additives, drugs and other chemicals	31	31	26	26	5	5
Anaphylactic and anaphylactoid responses	41	41	5	5	36	36
Autoimmune disorders NEC	2	2			2	2
Immune and associated conditions NEC	3	3	1	1	2	2
Immunodeficiency disorders NEC	1	1			1	1
	122	122	60	60	62	62

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Infections and infestations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abdominal and gastrointestinal infections	3	3	2	2	1	1
Bacterial infections NEC	6	6	2	2	4	4
Bordetella infections	1	1			1	1
Breast infections	1	1			1	1
Candida infections	1	1	1	1		
Central nervous system and spinal infections	1	1			1	1
Coronavirus infections	89	89	26	26	63	63
Ear infections	2	2	1	1	1	1
Eye and eyelid infections	5	5	5	5		
Female reproductive tract infections	1	1	1	1		
Herpes viral infections	23	23	19	19	4	4
Infections NEC	2	2	2	2		
Influenza viral infections	12	12	11	11	1	1
Lower respiratory tract and lung infections	5	5			5	5
Skin structures and soft tissue infections	3	3	3	3		
Streptococcal infections	1	1			1	1
Tuberculous infections	1	1	1	1		
Upper respiratory tract infections	35	35	33	33	2	2
Urinary tract infections	2	2	2	2		
Viral infections NEC	4	4	1	1	3	3
	198	198	110	110	88	88

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Accidental exposures to product	4	4	4	4		
Exposures associated with pregnancy, delivery and lactation	65	65	65	65		
Exposures to agents or circumstances NEC	11	11	11	11		
Fractures and dislocations NEC	2	2			2	2
Medication errors, product use errors and issues NEC	150	150	149	149	1	1
Muscle, tendon and ligament injuries	2	2	2	2		
Nerve injuries NEC	1	1	1	1		
Non-site specific injuries NEC	6	6	4	4	2	2
Non-site specific procedural complications	1	1			1	1
Occupational exposures	2	2	2	2		
Off label uses	77	77	77	77		
Overdoses NEC	15	15	15	15		
Pathways and sources of exposure	3	3	3	3		
Product administration errors and issues	224	224	220	220	4	4
Product confusion errors and issues	4	4	4	4		
Product preparation errors and issues	41	41	39	39	2	2
Product prescribing errors and issues	2	2	2	2		
Product storage errors and issues in the product use system	2	2	2	2		
Site specific injuries NEC	4	4	3	3	1	1
Skin injuries NEC	5	5	4	4	1	1
Stoma complications	3	3	2	2	1	1
Thermal burns	1	1	1	1		
Underdoses NEC	27	27	27	27		
Vaccination related complications	1	1			1	1
	653	653	637	637	16	16

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Adrenal medulla tests	1	1	1	1		
Bacteria identification and serology (excl mycobacteria)	1	1	1	1		
Blood gas and acid base analyses	5	5	1	1	4	4
Carbohydrate tolerance analyses (incl diabetes)	3	3	3	3		
Cardiac function diagnostic procedures	1	1	1	1		
Coagulation and bleeding analyses	1	1	1	1		
ECG investigations	1	1			1	1
Heart rate and pulse investigations	118	118	98	98	20	20
Investigations NEC	1	1			1	1
Lipoprotein and lipid tests NEC	1	1	1	1		
Physical examination procedures and organ system status	43	43	38	38	5	5
Platelet analyses	1	1	1	1		
Skeletal and cardiac muscle analyses	1	1			1	1
Therapeutic drug monitoring analyses	1	1			1	1
Urinalysis NEC	1	1	1	1		
Vascular tests NEC (incl blood pressure)	70	70	50	50	20	20
Virus identification and serology	101	101	67	67	34	34
	351	351	264	264	87	87

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Metabolism and nutrition disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Appetite disorders	32	32	23	23	9	9
Diabetes mellitus (incl subtypes)	2	2			2	2
Diabetic complications NEC	1	1			1	1
General nutritional disorders NEC	1	1	1	1		
Hyperglycaemic conditions NEC	2	2	1	1	1	1
Hypoglycaemic conditions NEC	3	3	2	2	1	1
Total fluid volume decreased	8	8	8	8		
Total fluid volume increased	2	2	2	2		
	51	51	37	37	14	14

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Arthropathies NEC	3	3	3	3		
Bone related signs and symptoms	27	27	26	26	1	1
Connective tissue disorders NEC	1	1			1	1
Joint related disorders NEC	1	1			1	1
Joint related signs and symptoms	231	231	201	201	30	30
Muscle pains	316	316	275	275	41	41
Muscle related signs and symptoms NEC	39	39	32	32	7	7
Muscle weakness conditions	24	24	20	20	4	4
Musculoskeletal and connective tissue conditions NEC	33	33	25	25	8	8
Musculoskeletal and connective tissue deformities of skull, face and buccal cavity	1	1	1	1		
Musculoskeletal and connective tissue pain and discomfort	509	509	456	456	53	53
Soft tissue disorders NEC	3	3	3	3		
Spondyloarthropathies	1	1			1	1
Tendon disorders	2	2	2	2		
	1,191	1,191	1044	1044	147	147

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acute polyneuropathies	2	2	1	1	1	1
Auditory nerve disorders	1	1			1	1
Central nervous system haemorrhages and cerebrovascular accidents	10	10	1	1	9	9
Coordination and balance disturbances	14	14	8	8	6	6
Cortical dysfunction NEC	3	3	3	3		
Disturbances in consciousness NEC	107	107	64	64	43	43
Disturbances in sleep phase rhythm	1	1	1	1		
Dyskinesias and movement disorders NEC	8	8	8	8		
Facial cranial nerve disorders	26	26	11	11	15	15
Generalised tonic-clonic seizures	2	2			2	2
Headaches NEC	757	757	664	664	93	93
Memory loss (excl dementia)	5	5	4	4	1	1
Mental impairment (excl dementia and memory loss)	18	18	14	14	4	4
Migraine headaches	27	27	24	24	3	3
Mononeuropathies	1	1	1	1		
Muscle tone abnormal	1	1	1	1		
Myelitis (incl infective)	1	1			1	1
Narcolepsy and hypersomnia	7	7	6	6	1	1
Nervous system disorders NEC	1	1	1	1		
Neurological signs and symptoms NEC	383	383	313	313	70	70
Neurologic visual problems NEC	1	1			1	1
Olfactory nerve disorders	39	39	35	35	4	4
Paraesthesias and dysaesthesias	272	272	236	236	36	36
Paralysis and paresis (excl cranial nerve)	5	5	1	1	4	4
Parkinson's disease and parkinsonism	2	2	2	2		
Peripheral neuropathies NEC	1	1			1	1
Seizures and seizure disorders NEC	8	8	1	1	7	7
Sensory abnormalities NEC	112	112	103	103	9	9
Sleep disturbances NEC	8	8	8	8		
Speech and language abnormalities	12	12	11	11	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Transient cerebrovascular events	2	2			2	2
Tremor (excl congenital)	44	44	31	31	13	13
	1,881	1,881	1553	1553	328	328

System Organ Class

Product issues

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Counterfeit, falsified and substandard products	2	2	2	2		
Device physical property and chemical issues	4	4	4	4		
Product distribution and storage issues	90	90	90	90		
Product packaging issues	18	18	18	18		
Product physical issues	14	14	14	14		
Product quality issues NEC	13	13	12	12	1	1
	141	141	140	140	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Psychiatric disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abnormal behaviour NEC	1	1			1	1
Anxiety symptoms	50	50	43	43	7	7
Behaviour and socialisation disturbances	1	1	1	1		
Confusion and disorientation	15	15	10	10	5	5
Deliria	1	1			1	1
Depressive disorders	1	1			1	1
Dissociative states	1	1	1	1		
Disturbances in initiating and maintaining sleep	30	30	28	28	2	2
Eating disorders NEC	5	5	5	5		
Emotional and mood disturbances NEC	4	4	4	4		
Fear symptoms and phobic disorders (incl social phobia)	2	2	1	1	1	1
Hallucinations (excl sleep-related)	2	2	1	1	1	1
Increased physical activity levels	6	6	4	4	2	2
Mental disorders NEC	1	1	1	1		
Mood alterations with depressive symptoms	3	3	3	3		
Mood disorders NEC	1	1	1	1		
Panic attacks and disorders	5	5	3	3	2	2
Parasomnias	8	8	8	8		
Sleep disorders NEC	13	13	11	11	2	2
Somatic symptom disorders	1	1			1	1
Stress disorders	1	1	1	1		
Thinking disturbances	4	4	4	4		
	156	156	130	130	26	26

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Renal and urinary disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Bladder and urethral symptoms	5	5	4	4	1	1
Myoneurogenic bladder disorders	1	1	1	1		
Urinary abnormalities	3	3	2	2	1	1
Urinary tract signs and symptoms NEC	1	1	1	1		
	10	10	8	8	2	2

System Organ Class

Reproductive system and breast disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breast signs and symptoms	8	8	7	7	1	1
Menstruation and uterine bleeding NEC	5	5	5	5		
Menstruation with increased bleeding	2	2	2	2		
Scrotal disorders NEC	4	4			4	4
	19	19	14	14	5	5

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Respiratory, thoracic and mediastinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breathing abnormalities	134	134	83	83	51	51
Bronchospasm and obstruction	26	26	17	17	9	9
Conditions associated with abnormal gas exchange	2	2			2	2
Coughing and associated symptoms	103	103	87	87	16	16
Laryngeal spasm, oedema and obstruction	3	3	3	3		
Lower respiratory tract signs and symptoms	5	5	4	4	1	1
Nasal congestion and inflammations	51	51	49	49	2	2
Nasal disorders NEC	13	13	9	9	4	4
Paranasal sinus disorders (excl infections and neoplasms)	6	6	6	6		
Parenchymal lung disorders NEC	2	2	1	1	1	1
Pharyngeal disorders (excl infections and neoplasms)	46	46	34	34	12	12
Pulmonary oedemas	2	2	1	1	1	1
Pulmonary thrombotic and embolic conditions	1	1			1	1
Respiratory signs and symptoms NEC	3	3	2	2	1	1
Respiratory tract disorders NEC	3	3	3	3		
Tracheal disorders (excl infections and neoplasms)	1	1			1	1
Upper respiratory tract signs and symptoms	274	274	223	223	51	51
	675	675	522	522	153	153

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acnes	1	1	1	1		
Angioedemas	11	11	6	6	5	5
Apocrine and eccrine gland disorders	102	102	81	81	21	21
Bullous conditions	6	6	6	6		
Dermal and epidermal conditions NEC	32	32	23	23	9	9
Dermatitis and eczema	15	15	13	13	2	2
Dermatitis ascribed to specific agent	1	1	1	1		
Erythemas	77	77	67	67	10	10
Photosensitivity and photodermatosis conditions	4	4	3	3	1	1
Pilar disorders NEC	4	4	3	3	1	1
Pruritus NEC	146	146	125	125	21	21
Psoriatic conditions	1	1	1	1		
Purpura and related conditions	1	1	1	1		
Rashes, eruptions and exanthems NEC	204	204	162	162	42	42
Skin and subcutaneous conditions NEC	1	1	1	1		
Skin vasomotor conditions	2	2	1	1	1	1
Urticarias	95	95	85	85	10	10
	703	703	580	580	123	123

System Organ Class

Social circumstances

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Disability issues	13	13	12	12	1	1
	13	13	12	12	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

SOC Not Yet Coded

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
	1	1	1	1
	1	1	1	1

System Organ Class

Surgical and medical procedures

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Immunisations	1	1	1	1
	1	1	1	1

System Organ Class

Vascular disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Accelerated and malignant hypertension	3	3	1	1	2	2
Blood pressure disorders NEC	1	1	1	1		
Circulatory collapse and shock	3	3			3	3
Haemorrhages NEC	3	3	2	2	1	1
Non-site specific vascular disorders NEC	3	3	3	3		
Peripheral vascular disorders NEC	121	121	97	97	24	24
Peripheral vasoconstriction, necrosis and vascular insufficiency	21	21	17	17	4	4
Site specific vascular disorders NEC	16	16	9	9	7	7
Vascular hypertensive disorders NEC	34	34	21	21	13	13
Vascular hypotensive disorders	9	9	4	4	5	5
	214	214	155	155	59	59

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

APPENDIX 2.6.1: Cumulative and Interval Summary Tabulation of Serious and Non-Serious Adverse Reactions From Post-Marketing Data Sources Organized per MedDRA System Organ Class by High Level Term per Country

Cumulative Reporting Period: Through 31-DEC-2020

Interval Reporting Period: 01-DEC-2020 Through 31-DEC-2020

Total Number of Cases: 3,615 (Interval) / 3,615 (Cumulative)

Total Number of Adverse Events (PT): 11,824 (Interval) / 11,824 (Cumulative)

MedDRA Version: v.23.1J

Country Where Event Occurred

AFGHANISTAN

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Feelings and sensations NEC	2	2	2	2
General signs and symptoms NEC	1	1	1	1
	3	3	3	3

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Muscle related signs and symptoms NEC	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Facial cranial nerve disorders	1	1			1	1
Paraesthesias and dysaesthesias	1	1	1	1		
	2	2	1	1	1	1

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Erythemas	1	1	1	1
Pruritus NEC	1	1	1	1
Rashes, eruptions and exanthems NEC	1	1	1	1
	3	3	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

BULGARIA

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Feelings and sensations NEC	1	1	1	1
	1	1	1	1

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Virus identification and serology	1	1	1	1
	1	1	1	1

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Musculoskeletal and connective tissue pain and discomfort	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Olfactory nerve disorders	1	1	1	1
Sensory abnormalities NEC	1	1	1	1
	2	2	2	2

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Apocrine and eccrine gland disorders	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

CANADA

System Organ Class

Blood and lymphatic system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Lymphatic system disorders NEC	1	1	1	1
	1	1	1	1

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Diarrhoea (excl infective)	2	2	2	2
Gastrointestinal signs and symptoms NEC	1	1	1	1
Nausea and vomiting symptoms	2	2	2	2
Oral soft tissue signs and symptoms	3	3	3	3
Tongue signs and symptoms	2	2	2	2
	10	10	10	10

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenic conditions	3	3	3	3
Febrile disorders	2	2	2	2
Feelings and sensations NEC	3	3	3	3
General signs and symptoms NEC	1	1	1	1
Pain and discomfort NEC	1	1	1	1
Therapeutic and nontherapeutic responses	1	1	1	1
Vaccination site reactions	1	1	1	1
	12	12	12	12

System Organ Class

Immune system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Allergic conditions NEC	1	1	1	1
Allergies to foods, food additives, drugs and other chemicals	1	1	1	1
	2	2	2	2

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Heart rate and pulse investigations	1	1	1	1
Virus identification and serology	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Metabolism and nutrition disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Appetite disorders	1	1	1	1
Total fluid volume increased	1	1	1	1
	2	2	2	2

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Muscle pains	1	1	1	1
Musculoskeletal and connective tissue pain and discomfort	1	1	1	1
	2	2	2	2

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Disturbances in consciousness NEC	2	2			2	2
Facial cranial nerve disorders	1	1			1	1
Headaches NEC	3	3	3	3		
Mental impairment (excl dementia and memory loss)	1	1	1	1		
Narcolepsy and hypersomnia	1	1	1	1		
Paraesthesias and dysaesthesias	1	1	1	1		
Sensory abnormalities NEC	1	1	1	1		
	10	10	7	7	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Respiratory, thoracic and mediastinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Upper respiratory tract signs and symptoms	1	1	1	1
	1	1	1	1

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Urticarias	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

CHILE

System Organ Class

Blood and lymphatic system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Lymphatic system disorders NEC	1	1	1	1
	1	1	1	1

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Nausea and vomiting symptoms	1	1	1	1
Oral dryness and saliva altered	1	1	1	1
	2	2	2	2

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenic conditions	2	2	2	2
Febrile disorders	1	1	1	1
General signs and symptoms NEC	1	1	1	1
Pain and discomfort NEC	1	1	1	1
Vaccination site reactions	1	1	1	1
	6	6	6	6

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Muscle pains	1	1	1	1
	1	1	1	1

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headaches NEC	1	1	1	1
Neurological signs and symptoms NEC	1	1	1	1
Paraesthesias and dysaesthesias	1	1	1	1
	3	3	3	3

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Dermatitis and eczema	4	4	4	4
	4	4	4	4

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

CROATIA

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenic conditions	2	2	2	2
Vaccination site reactions	2	2	2	2
	4	4	4	4

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product administration errors and issues	1	1	1	1
	1	1	1	1

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Physical examination procedures and organ system status	3	3	3	3
	3	3	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Musculoskeletal and connective tissue pain and discomfort	1	1	1	1
	1	1	1	1

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headaches NEC	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

CYPRUS

System Organ Class

General disorders and administration site conditions			Spontaneous	
			Serious	
High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	I	C
Death and sudden death	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

GERMANY

System Organ Class

Blood and lymphatic system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Leukopenias NEC	1	1	1	1
	1	1	1	1

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Cardiac signs and symptoms NEC	1	1	1	1		
Rate and rhythm disorders NEC	1	1			1	1
	2	2	1	1	1	1

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Nausea and vomiting symptoms	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Asthenic conditions	5	5	3	3	2	2
Febrile disorders	1	1	1	1		
Pain and discomfort NEC	1	1			1	1
Vaccination site reactions	5	5	5	5		
	12	12	9	9	3	3

System Organ Class

Immune system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Anaphylactic and anaphylactoid responses	1	1	1	1
	1	1	1	1

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Medication errors, product use errors and issues NEC	2	2	2	2		
Product administration errors and issues	9	9	8	8	1	1
Product storage errors and issues in the product use system	1	1	1	1		
	12	12	11	11	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Heart rate and pulse investigations	1	1	1	1
	1	1	1	1

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Muscle weakness conditions	1	1	1	1
Musculoskeletal and connective tissue pain and discomfort	2	2	2	2
	3	3	3	3

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Dyskinesias and movement disorders NEC	1	1	1	1		
Facial cranial nerve disorders	2	2			2	2
Headaches NEC	6	6	5	5	1	1
Neurological signs and symptoms NEC	2	2	2	2		
Paralysis and paresis (excl cranial nerve)	1	1	1	1		
Seizures and seizure disorders NEC	3	3			3	3
	15	15	9	9	6	6

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Product issues

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product quality issues NEC	1	1	1	1
	1	1	1	1

System Organ Class

Psychiatric disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Anxiety symptoms	1	1	1	1
	1	1	1	1

System Organ Class

Respiratory, thoracic and mediastinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breathing abnormalities	2	2	1	1	1	1
Coughing and associated symptoms	1	1			1	1
	3	3	1	1	2	2

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Apocrine and eccrine gland disorders	1	1	1	1
	1	1	1	1

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Vascular disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Peripheral vascular disorders NEC	1	1	1	1
Vascular hypertensive disorders NEC	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

GREECE

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Rate and rhythm disorders NEC	1	1	1	1
	1	1	1	1

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Gastrointestinal spastic and hypermotility disorders	2	2	2	2
	2	2	2	2

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Mucosal findings abnormal	1	1			1	1
Vaccination site reactions	1	1	1	1		
	2	2	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Immune system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Anaphylactic and anaphylactoid responses	1	1	1	1
	1	1	1	1

System Organ Class

Vascular disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Peripheral vascular disorders NEC	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

HUNGARY

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Oral dryness and saliva altered	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Feelings and sensations NEC	2	2	2	2
General signs and symptoms NEC	1	1	1	1
	3	3	3	3

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Vascular tests NEC (incl blood pressure)	1	1	1	1
	1	1	1	1

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Paraesthesias and dysaesthesias	1	1	1	1
Tremor (excl congenital)	1	1	1	1
	2	2	2	2

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Urticarias	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
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Country Where Event Occurred

INDIA

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Off label uses	1	1	1	1
Product administration errors and issues	1	1	1	1
	2	2	2	2

System Organ Class

Product issues

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Counterfeit, falsified and substandard products	1	1	1	1
	1	1	1	1

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* AE=Adverse Event
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Country Where Event Occurred

ISRAEL

System Organ Class

Blood and lymphatic system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Lymphatic system disorders NEC	1	1	1	1
	1	1	1	1

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Heart failures NEC	1	1			1	1
Noninfectious pericarditis	1	1	1	1		
Ventricular arrhythmias and cardiac arrest	1	1			1	1
	3	3	1	1	2	2

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Gastrointestinal and abdominal pains (excl oral and throat)	2	2	2	2
Nausea and vomiting symptoms	4	4	4	4
Oral soft tissue signs and symptoms	6	6	6	6
Tongue signs and symptoms	1	1	1	1
	13	13	13	13

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Asthenic conditions	15	15	15	15		
Death and sudden death	2	2			2	2
Febrile disorders	2	2	2	2		
Feelings and sensations NEC	8	8	7	7	1	1
General signs and symptoms NEC	1	1	1	1		
Injection site reactions	1	1	1	1		
Pain and discomfort NEC	2	2	2	2		
Therapeutic and nontherapeutic responses	1	1			1	1
Vaccination site reactions	19	19	19	19		
	51	51	47	47	4	4

System Organ Class

Infections and infestations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Coronavirus infections	1	1			1	1
Eye and eyelid infections	1	1	1	1		
Influenza viral infections	1	1	1	1		
	3	3	2	2	1	1

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Exposures associated with pregnancy, delivery and lactation	3	3	3	3		
Medication errors, product use errors and issues NEC	2	2	2	2		
Overdoses NEC	2	2	2	2		
Product administration errors and issues	25	25	24	24	1	1
Product preparation errors and issues	2	2	2	2		
Underdoses NEC	1	1	1	1		
	35	35	34	34	1	1

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Heart rate and pulse investigations	1	1	1	1
Vascular tests NEC (incl blood pressure)	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Bone related signs and symptoms	1	1	1	1		
Joint related signs and symptoms	1	1	1	1		
Muscle pains	2	2	2	2		
Musculoskeletal and connective tissue conditions NEC	1	1			1	1
Musculoskeletal and connective tissue pain and discomfort	4	4	4	4		
	9	9	8	8	1	1

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Coordination and balance disturbances	1	1	1	1		
Disturbances in consciousness NEC	2	2	1	1	1	1
Facial cranial nerve disorders	1	1			1	1
Headaches NEC	2	2	2	2		
Neurological signs and symptoms NEC	6	6	6	6		
Olfactory nerve disorders	1	1	1	1		
Paraesthesias and dysaesthesias	8	8	8	8		
Paralysis and paresis (excl cranial nerve)	1	1			1	1
Sensory abnormalities NEC	2	2	2	2		
Sleep disturbances NEC	1	1	1	1		
Tremor (excl congenital)	1	1	1	1		
	26	26	23	23	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Product issues

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Product packaging issues	11	11	11	11		
Product physical issues	8	8	8	8		
Product quality issues NEC	8	8	7	7	1	1
	27	27	26	26	1	1

System Organ Class

Psychiatric disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Disturbances in initiating and maintaining sleep	2	2	2	2
Sleep disorders NEC	1	1	1	1
	3	3	3	3

System Organ Class

Respiratory, thoracic and mediastinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Breathing abnormalities	2	2	2	2
Pharyngeal disorders (excl infections and neoplasms)	2	2	2	2
Upper respiratory tract signs and symptoms	2	2	2	2
	6	6	6	6

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Erythemas	1	1	1	1
Rashes, eruptions and exanthems NEC	2	2	2	2
Urticarias	1	1	1	1
	4	4	4	4

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* AE=Adverse Event
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Country Where Event Occurred

ITALY

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Gastrointestinal and abdominal pains (excl oral and throat)	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenic conditions	1	1	1	1
Febrile disorders	1	1	1	1
General signs and symptoms NEC	1	1	1	1
Injection site reactions	1	1	1	1
	4	4	4	4

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Medication errors, product use errors and issues NEC	2	2	2	2
Product confusion errors and issues	2	2	2	2
	4	4	4	4

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System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headaches NEC	1	1	1	1
	1	1	1	1

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

MALTA

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Cardiac signs and symptoms NEC	1	1	1	1
	1	1	1	1

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Heart rate and pulse investigations	1	1	1	1
Vascular tests NEC (incl blood pressure)	1	1	1	1
	2	2	2	2

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Disturbances in consciousness NEC	1	1	1	1
Neurological signs and symptoms NEC	1	1	1	1
	2	2	2	2

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Vascular disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Peripheral vascular disorders NEC	1	1	1	1
	1	1	1	1

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Country Where Event Occurred

MEXICO

System Organ Class

Eye disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Ocular disorders NEC	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenic conditions	1	1	1	1
Vaccination site reactions	1	1	1	1
	2	2	2	2

System Organ Class

Immune system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Allergic conditions NEC	1	1	1	1		
Anaphylactic and anaphylactoid responses	1	1			1	1
	2	2	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Muscle related signs and symptoms NEC	1	1			1	1
Musculoskeletal and connective tissue pain and discomfort	1	1	1	1		
	2	2	1	1	1	1

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acute polyneuropathies	1	1			1	1
Headaches NEC	1	1	1	1		
Myelitis (incl infective)	1	1			1	1
Paraesthesias and dysaesthesias	1	1			1	1
Paralysis and paresis (excl cranial nerve)	1	1			1	1
Seizures and seizure disorders NEC	1	1			1	1
	6	6	1	1	5	5

System Organ Class

Respiratory, thoracic and mediastinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breathing abnormalities	2	2	1	1	1	1
Laryngeal spasm, oedema and obstruction	1	1	1	1		
Nasal congestion and inflammations	1	1	1	1		
Upper respiratory tract signs and symptoms	2	2	2	2		
	6	6	5	5	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Angioedemas	1	1			1	1
Pruritus NEC	1	1	1	1		
Rashes, eruptions and exanthems NEC	1	1			1	1
	3	3	1	1	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

OMAN

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Diarrhoea (excl infective)	1	1	1	1
Gastritis (excl infective)	1	1	1	1
	2	2	2	2

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenic conditions	1	1	1	1
Febrile disorders	1	1	1	1
Pain and discomfort NEC	1	1	1	1
	3	3	3	3

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headaches NEC	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

POLAND

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Dental pain and sensation disorders	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenic conditions	1	1	1	1
Febrile disorders	1	1	1	1
Vaccination site reactions	1	1	1	1
	3	3	3	3

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product confusion errors and issues	1	1	1	1
	1	1	1	1

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Joint related signs and symptoms	1	1	1	1
Musculoskeletal and connective tissue pain and discomfort	1	1	1	1
	2	2	2	2

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headaches NEC	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

PORTUGAL

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Supraventricular arrhythmias	1	1	1	1
	1	1	1	1

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Oral soft tissue signs and symptoms	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenic conditions	1	1	1	1
	1	1	1	1

System Organ Class

Immune system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Allergic conditions NEC	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Exposures associated with pregnancy, delivery and lactation	1	1	1	1
	1	1	1	1

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headaches NEC	1	1	1	1
Neurological signs and symptoms NEC	1	1	1	1
	2	2	2	2

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Erythemas	1	1	1	1
Pruritus NEC	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
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Country Where Event Occurred

PUERTO RICO

System Organ Class

Blood and lymphatic system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Lymphatic system disorders NEC	2	2	2	2
	2	2	2	2

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Cardiac signs and symptoms NEC	1	1	1	1
Rate and rhythm disorders NEC	1	1	1	1
	2	2	2	2

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Diarrhoea (excl infective)	1	1	1	1
Gastrointestinal and abdominal pains (excl oral and throat)	1	1	1	1
Nausea and vomiting symptoms	3	3	3	3
	5	5	5	5

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Asthenic conditions	3	3	3	3
Febrile disorders	2	2	2	2
Gait disturbances	1	1	1	1
General signs and symptoms NEC	1	1	1	1
Pain and discomfort NEC	2	2	2	2
Vaccination site reactions	5	5	5	5
	14	14	14	14

System Organ Class

Metabolism and nutrition disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Appetite disorders	1	1	1	1
	1	1	1	1

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Joint related signs and symptoms	3	3	3	3
Musculoskeletal and connective tissue conditions NEC	1	1	1	1
Musculoskeletal and connective tissue pain and discomfort	5	5	5	5
	9	9	9	9

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headaches NEC	4	4	4	4
Paraesthesias and dysaesthesias	4	4	4	4
Sensory abnormalities NEC	2	2	2	2
Speech and language abnormalities	1	1	1	1
	11	11	11	11

System Organ Class

Respiratory, thoracic and mediastinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Upper respiratory tract signs and symptoms	1	1	1	1
	1	1	1	1

System Organ Class

Vascular disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Vascular hypertensive disorders NEC	1	1	1	1
	1	1	1	1

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Country Where Event Occurred

QATAR

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Nausea and vomiting symptoms	1	1	1	1
	1	1	1	1

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Muscle pains	1	1	1	1
	1	1	1	1

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Neurological signs and symptoms NEC	1	1	1	1
	1	1	1	1

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Erythemas	1	1	1	1
	1	1	1	1

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Country Where Event Occurred

ROMANIA

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Feelings and sensations NEC	1	1	1	1
General signs and symptoms NEC	1	1	1	1
Vaccination site reactions	2	2	2	2
	4	4	4	4

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Medication errors, product use errors and issues NEC	1	1	1	1
Product preparation errors and issues	5	5	5	5
	6	6	6	6

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Vascular tests NEC (incl blood pressure)	1	1	1	1
	1	1	1	1

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* AE=Adverse Event
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System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Muscle pains	1	1	1	1
Musculoskeletal and connective tissue pain and discomfort	6	6	6	6
	7	7	7	7

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Headaches NEC	1	1	1	1
	1	1	1	1

System Organ Class

Product issues

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product quality issues NEC	1	1	1	1
	1	1	1	1

System Organ Class

Psychiatric disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Panic attacks and disorders	1	1	1	1
	1	1	1	1

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System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Erythemas	1	1	1	1
Urticarias	1	1	1	1
	2	2	2	2

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* AE=Adverse Event
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Country Where Event Occurred

SLOVAKIA

System Organ Class

Surgical and medical procedures

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Immunisations	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

SLOVENIA

System Organ Class

Product issues

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Counterfeit, falsified and substandard products	1	1	1	1
	1	1	1	1

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Country Where Event Occurred

SPAIN

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Diarrhoea (excl infective)	1	1	1	1
Nausea and vomiting symptoms	1	1	1	1
	2	2	2	2

System Organ Class

Immune system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Anaphylactic and anaphylactoid responses	1	1	1	1
	1	1	1	1

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

SWEDEN

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Ventricular arrhythmias and cardiac arrest	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

SWITZERLAND

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Gastrointestinal and abdominal pains (excl oral and throat)	1	1	1	1
	1	1	1	1

System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Serious	
			I	C
Death and sudden death	1	1	1	1
General signs and symptoms NEC	1	1	1	1
	2	2	2	2

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Heart rate and pulse investigations	1	1	1	1
Vascular tests NEC (incl blood pressure)	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Psychiatric disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Increased physical activity levels	1	1	1	1
	1	1	1	1

System Organ Class

Renal and urinary disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Bladder and urethral symptoms	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

UNITED ARAB EMIRATES

System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Medication errors, product use errors and issues NEC	1	1	1	1
Off label uses	1	1	1	1
	2	2	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

UNITED KINGDOM

System Organ Class

Blood and lymphatic system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Lymphatic system disorders NEC	58	58	36	36	22	22
	58	58	36	36	22	22

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Cardiac signs and symptoms NEC	17	17	10	10	7	7
Ischaemic coronary artery disorders	2	2			2	2
Rate and rhythm disorders NEC	26	26	16	16	10	10
Supraventricular arrhythmias	7	7	2	2	5	5
Ventricular arrhythmias and cardiac arrest	4	4			4	4
	56	56	28	28	28	28

System Organ Class

Ear and labyrinth disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Ear disorders NEC	5	5	1	1	4	4
Hearing losses	1	1			1	1
Hyperacusia	1	1	1	1		
Inner ear signs and symptoms	15	15	8	8	7	7
	22	22	10	10	12	12

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Eye disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Choroid and vitreous structural change, deposit and degeneration	1	1	1	1		
Conjunctival and corneal bleeding and vascular disorders	1	1			1	1
Lacrimation disorders	1	1	1	1		
Lid, lash and lacrimal infections, irritations and inflammations	3	3	2	2	1	1
Ocular disorders NEC	13	13	9	9	4	4
Ocular infections, inflammations and associated manifestations	4	4	3	3	1	1
Ocular sensation disorders	8	8	3	3	5	5
Retinal structural change, deposit and degeneration	1	1			1	1
Visual disorders NEC	12	12	8	8	4	4
Visual impairment and blindness (excl colour blindness)	1	1			1	1
	45	45	27	27	18	18

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Diarrhoea (excl infective)	49	49	28	28	21	21
Faecal abnormalities NEC	3	3	3	3		
Flatulence, bloating and distension	2	2	1	1	1	1
Gastritis (excl infective)	1	1	1	1		
Gastrointestinal and abdominal pains (excl oral and throat)	25	25	17	17	8	8
Gastrointestinal inflammatory disorders NEC	1	1	1	1		
Gastrointestinal signs and symptoms NEC	5	5	4	4	1	1
Gastrointestinal spastic and hypermotility disorders	3	3	2	2	1	1
Gingival disorders, signs and symptoms NEC	1	1	1	1		
Intestinal haemorrhages	1	1			1	1
Nausea and vomiting symptoms	180	180	126	126	54	54
Non-site specific gastrointestinal haemorrhages	1	1			1	1
Oral dryness and saliva altered	14	14	10	10	4	4
Oral soft tissue disorders NEC	3	3	2	2	1	1
Oral soft tissue signs and symptoms	45	45	33	33	12	12
Oral soft tissue swelling and oedema	16	16	11	11	5	5
Stomatitis and ulceration	5	5	5	5		
Tongue signs and symptoms	11	11	6	6	5	5
	366	366	251	251	115	115

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Asthenic conditions	234	234	147	147	87	87
Complications associated with device NEC	1	1	1	1		
Febrile disorders	132	132	80	80	52	52
Feelings and sensations NEC	148	148	104	104	44	44
Gait disturbances	2	2	1	1	1	1
General signs and symptoms NEC	54	54	34	34	20	20
Injection site reactions	14	14	13	13	1	1
Interactions	1	1			1	1
Mass conditions NEC	1	1	1	1		
Pain and discomfort NEC	93	93	57	57	36	36
Therapeutic and nontherapeutic responses	14	14	3	3	11	11
Vaccination site reactions	211	211	148	148	63	63
	905	905	589	589	316	316

System Organ Class

Immune system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Allergic conditions NEC	17	17	9	9	8	8
Allergies to foods, food additives, drugs and other chemicals	6	6	5	5	1	1
Anaphylactic and anaphylactoid responses	9	9			9	9
Immune and associated conditions NEC	1	1	1	1		
	33	33	15	15	18	18

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* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Infections and infestations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abdominal and gastrointestinal infections	1	1	1	1		
Bacterial infections NEC	4	4	1	1	3	3
Coronavirus infections	13	13	3	3	10	10
Ear infections	1	1			1	1
Herpes viral infections	5	5	2	2	3	3
Infections NEC	1	1	1	1		
Influenza viral infections	4	4	4	4		
Lower respiratory tract and lung infections	3	3			3	3
Skin structures and soft tissue infections	1	1	1	1		
Upper respiratory tract infections	8	8	6	6	2	2
Viral infections NEC	2	2			2	2
	43	43	19	19	24	24

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Exposures associated with pregnancy, delivery and lactation	1	1	1	1		
Medication errors, product use errors and issues NEC	14	14	14	14		
Non-site specific procedural complications	1	1			1	1
Occupational exposures	1	1	1	1		
Off label uses	13	13	13	13		
Overdoses NEC	2	2	2	2		
Product administration errors and issues	16	16	16	16		
Product confusion errors and issues	1	1	1	1		
Product preparation errors and issues	3	3	3	3		
Skin injuries NEC	2	2	1	1	1	1
Stoma complications	3	3	2	2	1	1
Underdoses NEC	4	4	4	4		
	61	61	58	58	3	3

System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Blood gas and acid base analyses	4	4			4	4
Heart rate and pulse investigations	9	9	5	5	4	4
Investigations NEC	1	1			1	1
Physical examination procedures and organ system status	11	11	8	8	3	3
Vascular tests NEC (incl blood pressure)	14	14	8	8	6	6
Virus identification and serology	6	6	3	3	3	3
	45	45	24	24	21	21

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* AE=Adverse Event
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System Organ Class

Metabolism and nutrition disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Appetite disorders	10	10	3	3	7	7
Diabetes mellitus (incl subtypes)	1	1			1	1
Diabetic complications NEC	1	1			1	1
Hyperglycaemic conditions NEC	2	2	1	1	1	1
Hypoglycaemic conditions NEC	2	2	1	1	1	1
Total fluid volume decreased	1	1	1	1		
Total fluid volume increased	1	1	1	1		
	18	18	7	7	11	11

System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Bone related signs and symptoms	3	3	2	2	1	1
Connective tissue disorders NEC	1	1			1	1
Joint related signs and symptoms	66	66	42	42	24	24
Muscle pains	113	113	77	77	36	36
Muscle related signs and symptoms NEC	11	11	5	5	6	6
Muscle weakness conditions	9	9	7	7	2	2
Musculoskeletal and connective tissue conditions NEC	11	11	5	5	6	6
Musculoskeletal and connective tissue pain and discomfort	150	150	109	109	41	41
Soft tissue disorders NEC	1	1	1	1		
Spondyloarthropathies	1	1			1	1
	366	366	248	248	118	118

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* AE=Adverse Event
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System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Central nervous system haemorrhages and cerebrovascular accidents	6	6			6	6
Coordination and balance disturbances	3	3	1	1	2	2
Disturbances in consciousness NEC	37	37	17	17	20	20
Facial cranial nerve disorders	5	5	4	4	1	1
Generalised tonic-clonic seizures	2	2			2	2
Headaches NEC	212	212	138	138	74	74
Memory loss (excl dementia)	1	1	1	1		
Mental impairment (excl dementia and memory loss)	3	3	2	2	1	1
Migraine headaches	9	9	7	7	2	2
Narcolepsy and hypersomnia	2	2	1	1	1	1
Neurological signs and symptoms NEC	103	103	64	64	39	39
Olfactory nerve disorders	3	3	3	3		
Paraesthesias and dysaesthesias	57	57	43	43	14	14
Paralysis and paresis (excl cranial nerve)	1	1			1	1
Seizures and seizure disorders NEC	1	1			1	1
Sensory abnormalities NEC	32	32	25	25	7	7
Sleep disturbances NEC	1	1	1	1		
Speech and language abnormalities	1	1	1	1		
Transient cerebrovascular events	1	1			1	1
Tremor (excl congenital)	16	16	7	7	9	9
	496	496	315	315	181	181

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Product issues

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Product packaging issues	3	3	3	3
Product physical issues	2	2	2	2
Product quality issues NEC	1	1	1	1
	6	6	6	6

System Organ Class

Psychiatric disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Anxiety symptoms	13	13	7	7	6	6
Confusion and disorientation	8	8	4	4	4	4
Depressive disorders	1	1			1	1
Dissociative states	1	1	1	1		
Disturbances in initiating and maintaining sleep	7	7	5	5	2	2
Hallucinations (excl sleep-related)	1	1	1	1		
Increased physical activity levels	3	3	1	1	2	2
Mental disorders NEC	1	1	1	1		
Mood alterations with depressive symptoms	1	1	1	1		
Parasomnias	5	5	5	5		
Sleep disorders NEC	3	3	3	3		
Somatic symptom disorders	1	1			1	1
	45	45	29	29	16	16

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Renal and urinary disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Myoneurogenic bladder disorders	1	1	1	1
Urinary abnormalities	1	1	1	1
	2	2	2	2

System Organ Class

Reproductive system and breast disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breast signs and symptoms	3	3	3	3		
Menstruation and uterine bleeding NEC	2	2	2	2		
Menstruation with increased bleeding	2	2	2	2		
Scrotal disorders NEC	4	4			4	4
	11	11	7	7	4	4

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Respiratory, thoracic and mediastinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breathing abnormalities	37	37	18	18	19	19
Bronchospasm and obstruction	11	11	8	8	3	3
Coughing and associated symptoms	16	16	11	11	5	5
Lower respiratory tract signs and symptoms	2	2	1	1	1	1
Nasal congestion and inflammations	2	2	2	2		
Nasal disorders NEC	5	5	2	2	3	3
Pharyngeal disorders (excl infections and neoplasms)	6	6	3	3	3	3
Respiratory signs and symptoms NEC	2	2	1	1	1	1
Upper respiratory tract signs and symptoms	48	48	29	29	19	19
	129	129	75	75	54	54

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Angioedemas	3	3	2	2	1	1
Apocrine and eccrine gland disorders	33	33	18	18	15	15
Dermal and epidermal conditions NEC	11	11	5	5	6	6
Dermatitis and eczema	7	7	5	5	2	2
Erythemas	26	26	21	21	5	5
Photosensitivity and photodermatosis conditions	1	1			1	1
Pilar disorders NEC	1	1			1	1
Pruritus NEC	41	41	26	26	15	15
Purpura and related conditions	1	1	1	1		
Rashes, eruptions and exanthems NEC	69	69	45	45	24	24
Skin and subcutaneous conditions NEC	1	1	1	1		
Skin vasomotor conditions	1	1	1	1		
Urticarias	18	18	15	15	3	3
	213	213	140	140	73	73

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Social circumstances

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Disability issues	1	1	1	1
	1	1	1	1

System Organ Class

SOC Not Yet Coded

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
	1	1	1	1
	1	1	1	1

System Organ Class

Vascular disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Circulatory collapse and shock	2	2			2	2
Peripheral vascular disorders NEC	29	29	18	18	11	11
Peripheral vasoconstriction, necrosis and vascular insufficiency	5	5	2	2	3	3
Site specific vascular disorders NEC	11	11	4	4	7	7
Vascular hypertensive disorders NEC	10	10	5	5	5	5
Vascular hypotensive disorders	5	5	2	2	3	3
	62	62	31	31	31	31

* I=Interval, C=Cumulative
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Country Where Event Occurred

UNITED STATES

System Organ Class

Blood and lymphatic system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Lymphatic system disorders NEC	82	82	76	76	6	6
Thrombocytopenias	1	1			1	1
	83	83	76	76	7	7

System Organ Class

Cardiac disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Cardiac disorders NEC	2	2	2	2		
Cardiac signs and symptoms NEC	52	52	42	42	10	10
Ischaemic coronary artery disorders	2	2	1	1	1	1
Noninfectious pericarditis	1	1	1	1		
Rate and rhythm disorders NEC	54	54	43	43	11	11
Supraventricular arrhythmias	2	2			2	2
Ventricular arrhythmias and cardiac arrest	6	6	4	4	2	2
	119	119	93	93	26	26

System Organ Class

Congenital, familial and genetic disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Congenital disorders NEC	1	1			1	1
Non-site specific muscle disorders congenital	1	1	1	1		
	2	2	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Ear and labyrinth disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Ear disorders NEC	25	25	23	23	2	2
Hearing losses	10	10	6	6	4	4
Hyperacusia	1	1			1	1
Inner ear signs and symptoms	34	34	28	28	6	6
	70	70	57	57	13	13

System Organ Class

Eye disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Eyelid movement disorders	1	1	1	1		
Lacrimation disorders	2	2	2	2		
Lid, lash and lacrimal infections, irritations and inflammations	8	8	8	8		
Ocular bleeding and vascular disorders NEC	2	2			2	2
Ocular disorders NEC	43	43	41	41	2	2
Ocular infections, inflammations and associated manifestations	18	18	17	17	1	1
Ocular sensation disorders	9	9	9	9		
Visual disorders NEC	14	14	12	12	2	2
Visual impairment and blindness (excl colour blindness)	9	9	7	7	2	2
	106	106	97	97	9	9

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* AE=Adverse Event
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System Organ Class

Gastrointestinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acute and chronic pancreatitis	1	1			1	1
Dental pain and sensation disorders	7	7	7	7		
Diarrhoea (excl infective)	82	82	79	79	3	3
Duodenal and small intestinal stenosis and obstruction	1	1			1	1
Dyspeptic signs and symptoms	5	5	5	5		
Faecal abnormalities NEC	1	1	1	1		
Flatulence, bloating and distension	5	5	5	5		
Gastrointestinal and abdominal pains (excl oral and throat)	35	35	30	30	5	5
Gastrointestinal atonic and hypomotility disorders NEC	1	1	1	1		
Gastrointestinal disorders NEC	7	7	7	7		
Gastrointestinal signs and symptoms NEC	22	22	20	20	2	2
Gastrointestinal spastic and hypermotility disorders	1	1	1	1		
Gingival disorders, signs and symptoms NEC	4	4			4	4
Gingival haemorrhages	2	2	2	2		
Nausea and vomiting symptoms	337	337	319	319	18	18
Non-site specific gastrointestinal haemorrhages	1	1			1	1
Oral dryness and saliva altered	19	19	18	18	1	1
Oral soft tissue disorders NEC	6	6	5	5	1	1
Oral soft tissue signs and symptoms	90	90	80	80	10	10
Oral soft tissue swelling and oedema	24	24	14	14	10	10
Stomatitis and ulceration	2	2	2	2		
Tongue disorders	4	4	4	4		
Tongue signs and symptoms	30	30	22	22	8	8
	687	687	622	622	65	65

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System Organ Class

General disorders and administration site conditions

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Administration site reactions NEC	5	5	5	5		
Adverse effect absent	1	1	1	1		
Asthenic conditions	600	600	589	589	11	11
Death and sudden death	1	1			1	1
Febrile disorders	360	360	343	343	17	17
Feelings and sensations NEC	514	514	484	484	30	30
Gait disturbances	9	9	8	8	1	1
General signs and symptoms NEC	181	181	166	166	15	15
Inflammations	7	7	6	6	1	1
Injection site reactions	126	126	125	125	1	1
Interactions	1	1	1	1		
Mass conditions NEC	3	3	3	3		
Mucosal findings abnormal	1	1	1	1		
Oedema NEC	5	5	4	4	1	1
Pain and discomfort NEC	394	394	372	372	22	22
Therapeutic and nontherapeutic responses	118	118	40	40	78	78
Vaccination site reactions	407	407	406	406	1	1
	2,733	2,733	2554	2554	179	179

System Organ Class

Hepatobiliary disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Gal bladder disorders NEC	1	1	1	1
Hepatobiliary signs and symptoms	1	1	1	1
	2	2	2	2

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* AE=Adverse Event
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System Organ Class

Immune system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Allergic conditions NEC	24	24	16	16	8	8
Allergies to foods, food additives, drugs and other chemicals	24	24	20	20	4	4
Anaphylactic and anaphylactoid responses	28	28	5	5	23	23
Autoimmune disorders NEC	2	2			2	2
Immune and associated conditions NEC	2	2			2	2
Immunodeficiency disorders NEC	1	1			1	1
	81	81	41	41	40	40

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Infections and infestations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abdominal and gastrointestinal infections	2	2	1	1	1	1
Bacterial infections NEC	2	2	1	1	1	1
Bordetella infections	1	1			1	1
Breast infections	1	1			1	1
Candida infections	1	1	1	1		
Central nervous system and spinal infections	1	1			1	1
Coronavirus infections	75	75	23	23	52	52
Ear infections	1	1	1	1		
Eye and eyelid infections	4	4	4	4		
Female reproductive tract infections	1	1	1	1		
Herpes viral infections	18	18	17	17	1	1
Infections NEC	1	1	1	1		
Influenza viral infections	7	7	6	6	1	1
Lower respiratory tract and lung infections	2	2			2	2
Skin structures and soft tissue infections	2	2	2	2		
Streptococcal infections	1	1			1	1
Tuberculous infections	1	1	1	1		
Upper respiratory tract infections	27	27	27	27		
Urinary tract infections	2	2	2	2		
Viral infections NEC	2	2	1	1	1	1
	152	152	89	89	63	63

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Injury, poisoning and procedural complications

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Accidental exposures to product	4	4	4	4		
Exposures associated with pregnancy, delivery and lactation	60	60	60	60		
Exposures to agents or circumstances NEC	11	11	11	11		
Fractures and dislocations NEC	2	2			2	2
Medication errors, product use errors and issues NEC	128	128	127	127	1	1
Muscle, tendon and ligament injuries	2	2	2	2		
Nerve injuries NEC	1	1	1	1		
Non-site specific injuries NEC	6	6	4	4	2	2
Occupational exposures	1	1	1	1		
Off label uses	62	62	62	62		
Overdoses NEC	11	11	11	11		
Pathways and sources of exposure	3	3	3	3		
Product administration errors and issues	172	172	170	170	2	2
Product preparation errors and issues	31	31	29	29	2	2
Product prescribing errors and issues	2	2	2	2		
Product storage errors and issues in the product use system	1	1	1	1		
Site specific injuries NEC	4	4	3	3	1	1
Skin injuries NEC	3	3	3	3		
Thermal burns	1	1	1	1		
Underdoses NEC	22	22	22	22		
Vaccination related complications	1	1			1	1
	528	528	517	517	11	11

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* AE=Adverse Event
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System Organ Class

Investigations

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Adrenal medulla tests	1	1	1	1		
Bacteria identification and serology (excl mycobacteria)	1	1	1	1		
Blood gas and acid base analyses	1	1	1	1		
Carbohydrate tolerance analyses (incl diabetes)	3	3	3	3		
Cardiac function diagnostic procedures	1	1	1	1		
Coagulation and bleeding analyses	1	1	1	1		
ECG investigations	1	1			1	1
Heart rate and pulse investigations	104	104	89	89	15	15
Lipoprotein and lipid tests NEC	1	1	1	1		
Physical examination procedures and organ system status	29	29	27	27	2	2
Platelet analyses	1	1	1	1		
Skeletal and cardiac muscle analyses	1	1			1	1
Therapeutic drug monitoring analyses	1	1			1	1
Urinalysis NEC	1	1	1	1		
Vascular tests NEC (incl blood pressure)	51	51	39	39	12	12
Virus identification and serology	93	93	62	62	31	31
	291	291	228	228	63	63

System Organ Class

Metabolism and nutrition disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Appetite disorders	20	20	18	18	2	2
Diabetes mellitus (incl subtypes)	1	1			1	1
General nutritional disorders NEC	1	1	1	1		
Hypoglycaemic conditions NEC	1	1	1	1		
Total fluid volume decreased	7	7	7	7		
	30	30	27	27	3	3

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* AE=Adverse Event
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System Organ Class

Musculoskeletal and connective tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Arthropathies NEC	3	3	3	3		
Bone related signs and symptoms	23	23	23	23		
Joint related disorders NEC	1	1			1	1
Joint related signs and symptoms	160	160	154	154	6	6
Muscle pains	197	197	192	192	5	5
Muscle related signs and symptoms NEC	26	26	26	26		
Muscle weakness conditions	14	14	12	12	2	2
Musculoskeletal and connective tissue conditions NEC	20	20	19	19	1	1
Musculoskeletal and connective tissue deformities of skull, face and buccal cavity	1	1	1	1		
Musculoskeletal and connective tissue pain and discomfort	337	337	325	325	12	12
Soft tissue disorders NEC	2	2	2	2		
Tendon disorders	2	2	2	2		
	786	786	759	759	27	27

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acute polyneuropathies	1	1	1	1		
Auditory nerve disorders	1	1			1	1
Central nervous system haemorrhages and cerebrovascular accidents	4	4	1	1	3	3
Coordination and balance disturbances	10	10	6	6	4	4
Cortical dysfunction NEC	3	3	3	3		
Disturbances in consciousness NEC	65	65	45	45	20	20
Disturbances in sleep phase rhythm	1	1	1	1		
Dyskinesias and movement disorders NEC	7	7	7	7		
Facial cranial nerve disorders	16	16	7	7	9	9
Headaches NEC	522	522	504	504	18	18
Memory loss (excl dementia)	4	4	3	3	1	1
Mental impairment (excl dementia and memory loss)	14	14	11	11	3	3
Migraine headaches	18	18	17	17	1	1
Mononeuropathies	1	1	1	1		
Muscle tone abnormal	1	1	1	1		
Narcolepsy and hypersomnia	4	4	4	4		
Nervous system disorders NEC	1	1	1	1		
Neurological signs and symptoms NEC	268	268	238	238	30	30
Neurologic visual problems NEC	1	1			1	1
Olfactory nerve disorders	34	34	30	30	4	4
Paraesthesias and dysaesthesias	198	198	178	178	20	20
Paralysis and paresis (excl cranial nerve)	1	1			1	1
Parkinson's disease and parkinsonism	2	2	2	2		
Peripheral neuropathies NEC	1	1			1	1
Seizures and seizure disorders NEC	3	3	1	1	2	2
Sensory abnormalities NEC	74	74	72	72	2	2
Sleep disturbances NEC	6	6	6	6		
Speech and language abnormalities	10	10	9	9	1	1
Transient cerebrovascular events	1	1			1	1
Tremor (excl congenital)	26	26	23	23	3	3

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Nervous system disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
	1,298	1,298	1172	1172	126	126

System Organ Class

Product issues

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous	
			Nonserious	
			I	C
Device physical property and chemical issues	4	4	4	4
Product distribution and storage issues	90	90	90	90
Product packaging issues	4	4	4	4
Product physical issues	4	4	4	4
Product quality issues NEC	2	2	2	2
	104	104	104	104

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Psychiatric disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Abnormal behaviour NEC	1	1			1	1
Anxiety symptoms	36	36	35	35	1	1
Behaviour and socialisation disturbances	1	1	1	1		
Confusion and disorientation	7	7	6	6	1	1
Deliria	1	1			1	1
Disturbances in initiating and maintaining sleep	21	21	21	21		
Eating disorders NEC	5	5	5	5		
Emotional and mood disturbances NEC	4	4	4	4		
Fear symptoms and phobic disorders (incl social phobia)	2	2	1	1	1	1
Hallucinations (excl sleep-related)	1	1			1	1
Increased physical activity levels	2	2	2	2		
Mood alterations with depressive symptoms	2	2	2	2		
Mood disorders NEC	1	1	1	1		
Panic attacks and disorders	4	4	2	2	2	2
Parasomnias	3	3	3	3		
Sleep disorders NEC	9	9	7	7	2	2
Stress disorders	1	1	1	1		
Thinking disturbances	4	4	4	4		
	105	105	95	95	10	10

System Organ Class

Renal and urinary disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Bladder and urethral symptoms	4	4	3	3	1	1
Urinary abnormalities	2	2	1	1	1	1
Urinary tract signs and symptoms NEC	1	1	1	1		
	7	7	5	5	2	2

* I=Interval, C=Cumulative
* AE=Adverse Event
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System Organ Class

Reproductive system and breast disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breast signs and symptoms	5	5	4	4	1	1
Menstruation and uterine bleeding NEC	3	3	3	3		
	8	8	7	7	1	1

System Organ Class

Respiratory, thoracic and mediastinal disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Breathing abnormalities	91	91	61	61	30	30
Bronchospasm and obstruction	15	15	9	9	6	6
Conditions associated with abnormal gas exchange	2	2			2	2
Coughing and associated symptoms	86	86	76	76	10	10
Laryngeal spasm, oedema and obstruction	2	2	2	2		
Lower respiratory tract signs and symptoms	3	3	3	3		
Nasal congestion and inflammations	48	48	46	46	2	2
Nasal disorders NEC	8	8	7	7	1	1
Paranasal sinus disorders (excl infections and neoplasms)	6	6	6	6		
Parenchymal lung disorders NEC	2	2	1	1	1	1
Pharyngeal disorders (excl infections and neoplasms)	38	38	29	29	9	9
Pulmonary oedemas	2	2	1	1	1	1
Pulmonary thrombotic and embolic conditions	1	1			1	1
Respiratory signs and symptoms NEC	1	1	1	1		
Respiratory tract disorders NEC	3	3	3	3		
Tracheal disorders (excl infections and neoplasms)	1	1			1	1
Upper respiratory tract signs and symptoms	220	220	188	188	32	32
	529	529	433	433	96	96

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Skin and subcutaneous tissue disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Acnes	1	1	1	1		
Angioedemas	7	7	4	4	3	3
Apocrine and eccrine gland disorders	67	67	61	61	6	6
Bullous conditions	6	6	6	6		
Dermal and epidermal conditions NEC	21	21	18	18	3	3
Dermatitis and eczema	4	4	4	4		
Dermatitis ascribed to specific agent	1	1	1	1		
Erythemas	46	46	42	42	4	4
Photosensitivity and photodermatosis conditions	3	3	3	3		
Pilar disorders NEC	3	3	3	3		
Pruritus NEC	102	102	96	96	6	6
Psoriatic conditions	1	1	1	1		
Rashes, eruptions and exanthems NEC	131	131	114	114	17	17
Skin vasomotor conditions	1	1			1	1
Urticarias	73	73	66	66	7	7
	467	467	420	420	47	47

System Organ Class

Social circumstances

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Disability issues	12	12	11	11	1	1
	12	12	11	11	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

System Organ Class

Vascular disorders

High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	Spontaneous			
			Nonserious		Serious	
			I	C	I	C
Accelerated and malignant hypertension	3	3	1	1	2	2
Blood pressure disorders NEC	1	1	1	1		
Circulatory collapse and shock	1	1			1	1
Haemorrhages NEC	3	3	2	2	1	1
Non-site specific vascular disorders NEC	3	3	3	3		
Peripheral vascular disorders NEC	89	89	78	78	11	11
Peripheral vasoconstriction, necrosis and vascular insufficiency	16	16	15	15	1	1
Site specific vascular disorders NEC	5	5	5	5		
Vascular hypertensive disorders NEC	22	22	15	15	7	7
Vascular hypotensive disorders	4	4	2	2	2	2
	147	147	122	122	25	25

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Country Where Event Occurred

UNITED STATES MINOR OUTLYING ISLANDS

System Organ Class

General disorders and administration site conditions			Spontaneous	
			Nonserious	
High Level Term	*Interval Total # Spontaneous AE*	*Cumulative Total # Spontaneous AE*	I	C
Vaccination site reactions	1	1	1	1
	1	1	1	1

* I=Interval, C=Cumulative
* AE=Adverse Event
* Multiple adverse events coding to the same Preferred Term may have been reported in some cases. Counts are provided for the number of unique Preferred Terms reported.

Appendix 3 (Referred in Section 8.2 Overview of Signals: New, Ongoing or Closed)

Tabular summary of safety signals that were new, ongoing or closed during the reporting interval

Product name: PF-07302048 (BNT162b2)

Reporting interval: 01-Dec-2020 to 31-Dec-2020

Signal Term	Date Detected	Status (ongoing, or closed)	Date Closed (for closed signals)	Source or trigger of signal	Reason for evaluation and summary of key data	Method of signal evaluation	Action(s) taken or planned
Hypersensitivity (not Anaphylaxis)	19 Dec 2020	Ongoing	NA	EMA request to include as an adverse reaction in EU SmPC at time of conditional approval	EMA request to include as an adverse reaction in EU SmPC at time of conditional approval	Review of unblinded clinical study data; review of post-authorization data	Added as an adverse reaction to Section 4.8 of the EU SmPC per EMA request; under evaluation for potential inclusion in EUA PI and CDS
Insomnia	19 Dec 2020	Ongoing	NA	EMA request to include as an adverse reaction in EU SmPC at time of conditional approval	EMA request to include as an adverse reaction in EU SmPC at time of conditional approval	Review of unblinded clinical study data; review of post-authorization data	Added as an adverse reaction to Section 4.8 of the EU SmPC per EMA request; under evaluation for potential inclusion in EUA PI and CDS
Injection site pruritus	19 Dec 2020	Ongoing	NA	EMA request to include as an adverse reaction in EU SmPC at time of conditional approval	EMA request to include as an adverse reaction in EU SmPC at time of conditional approval	Review of unblinded clinical study data; review of post-authorization data	Added as an adverse reaction to Section 4.8 of the EU SmPC per EMA request; under evaluation for potential inclusion in EUA PI and CDS

Signal Term	Date Detected	Status (ongoing, or closed)	Date Closed (for closed signals)	Source or trigger of signal	Reason for evaluation and summary of key data	Method of signal evaluation	Action(s) taken or planned
Pain in extremity	19 Dec 2020	Ongoing	NA	EMA request to include as an adverse reaction in EU SmPC at time of conditional approval	EMA request to include as an adverse reaction in EU SmPC at time of conditional approval	Review of unblinded clinical study data; review of post-authorization data	Added as an adverse reaction to Section 4.8 of the EU SmPC per EMA request; under evaluation for potential inclusion in EUA PI and CDS
Anaphylaxis	08 Dec 2020	Closed	30 Dec 2020	EMA request to include as an Important identified risk in EU-RMP and as an adverse reaction in EU SPC at time of conditional approval; FDA request to include it as an Important Identified Risk in the US PVP	EMA request to include as an Important identified risk in EU-RMP and as an adverse reaction in EU SPC at time of conditional approval; FDA request to include it as an Important Identified Risk in the US PVP	Review of unblinded clinical study data; review of post-authorization data	Anaphylaxis was included in the EU-RMP as an Important Identified Risk and was included as an adverse reaction in Section 4.8 of the EU SmPC. The IB, US PVP and EUA PI are being similarly updated
Malaise	04 Dec 2020	Closed	07 Dec 2020	Unblinded clinical study data review	In review of unblinded clinical study data (data lock date 14 Nov 2020), malaise occurred at an increased frequency in vaccine group compared to placebo group following vaccination	Review of unblinded clinical study data	Malaise was included as an adverse reaction in the EUA PI and in Section 4.8 of the EU SmPC

Signal Term	Date Detected	Status (ongoing, or closed)	Date Closed (for closed signals)	Source or trigger of signal	Reason for evaluation and summary of key data	Method of signal evaluation	Action(s) taken or planned
Facial paralysis	03 Dec 2020 opened as safety topic. 19 Dec 2020 reopened	Ongoing	NA	Initially opened and closed following review of unblinded clinical study data (C4591001) (DLP 14 Nov 2020) Re-opened due to EMA request to include as adverse reaction in EU SmPC at time of conditional approval	Initially opened and closed following review of unblinded clinical study data (C4591001) (DLP 14 Nov 2020) Re-opened due to EMA request to include as adverse reaction in EU SmPC at time of conditional approval	Review of unblinded clinical study data; review of post-authorization data	Added as an adverse reaction to Section 4.8 of the EU SmPC per EMA request; under evaluation for potential inclusion in EUA PI and CDS
Injection site redness	16 Nov 2020	Closed	07 Dec 2020	Unblinded clinical study data review	In review of unblinded clinical study data (data lock date 14 Nov 2020), injection site redness occurred at an increased frequency in vaccine group compared to placebo group following vaccination	Review of unblinded clinical study data	Injection site redness was included as an adverse reaction in the EUA PI and in Section 4.8 of the EU SmPC
Vomiting	16 Nov 2020	Closed	07 Dec 2020	Unblinded clinical study data review	In review of unblinded clinical study data (data lock date 14 Nov 2020), vomiting was not found to occur at an increased frequency in vaccine group compared to placebo group following vaccination	Review of unblinded clinical study data	No Risk. No action taken. There is no evidence to conclude this is an adverse reaction for the vaccine

Signal Term	Date Detected	Status (ongoing, or closed)	Date Closed (for closed signals)	Source or trigger of signal	Reason for evaluation and summary of key data	Method of signal evaluation	Action(s) taken or planned
Nausea	16 Nov 2020	Closed	07 Dec 2020	Unblinded clinical study data review	In review of unblinded clinical study data (data lock date 14 Nov 2020), nausea occurred at an increased frequency in vaccine group compared to placebo group following vaccination	Review of unblinded clinical study data	Nausea was included as an adverse reaction in the EUA PI and in Section 4.8 of the EU SmPC
Injection Site Swelling	16 Nov 2020	Closed	07 Dec 2020	Unblinded clinical study data review	In review of unblinded clinical study data (data lock date 14 Nov 2020), injection site swelling occurred at an increased frequency in vaccine group compared to placebo group following vaccination	Review of unblinded clinical study data	Injection site swelling was included as an adverse reaction in the EUA PI and in Section 4.8 of the EU SmPC
Diarrhoea	16 Nov 2020	Closed	07 Dec 2020	Unblinded clinical study data review	In review of unblinded clinical study data (data lock date 14 Nov 2020), diarrhoea was not found to occur at an increased frequency in vaccine group compared to placebo group following vaccination	Review of unblinded clinical study data	No Risk. No action taken. There is no evidence to conclude this is an adverse reaction for the vaccine

Appendix 3.1 (Referred in Section 8.2 Overview of Signals: New, Ongoing or Closed)

Signals Evaluation

Table below presents the evaluations of signals for PF-07302048 (BNT162b2) during the current reporting period.

Table 1. Evaluation of Signals During the Reporting Interval

Signal	Evaluation
Signals Determined to Not be Risks	
Diarrhoea	Diarrhoea was a pre-specified systemic reactogenicity event for Study C4591001. At the time of unblinded clinical data review (data lock 14 Nov 2020), the frequency of reports of diarrhea were low and comparable in both study groups (vaccine recipients and placebo recipients). Hence, diarrhea was not concluded to be an adverse reaction caused by the vaccine.
Vomiting	Vomiting was a pre-specified systemic reactogenicity event for Study C4591001. At the time of unblinded clinical data review (data lock 14 Nov 2020), the frequency of reports of vomiting were low and comparable in both study groups (vaccine recipients and placebo recipients). Hence, vomiting was not concluded to be an adverse reaction caused by the vaccine.
Signal Determined to be Important Risks	
Anaphylaxis	The MAH did not identify Anaphylaxis as a safety risk based on the unblinded clinical data review and assessment included in the initial regulatory submission documents (data lock 14 Nov 2020) because there were no reported cases of anaphylaxis to vaccination. However, when post-authorization vaccination began, reports of anaphylaxis were reported. Following review and assessments of spontaneous reports using the Brighton Collaboration categorization methodology, the MAH considered anaphylaxis an important identified risk as of 30 December 2020. Anaphylaxis is included as a risk in the EU SmPC and is being added to the EUA PI. Anaphylaxis is included in the EU RMP and is being added to the US PVP as an important identified risk
Signals Determined to be Risks (Not Categorized as Important) or Ongoing	
Facial paralysis	The MAH did not identify Facial paralysis as a safety risk based on the unblinded clinical data review and assessment included in the initial regulatory submission documents (data lock 14 Nov 2020). However, the EMA requested the inclusion of Acute peripheral facial paralysis in section 4.8 of the EU SmPC based on 4 cases of facial paralysis in the vaccine group and none in the placebo group. With the accumulation of post-authorization data, including reports of facial paralysis and facial paresis, the MAH has reopened the topic for evaluation. An update will be provided in the next monthly safety report.
Hypersensitivity (not Anaphylaxis)	The MAH did not identify Hypersensitivity as a safety risk based on the unblinded clinical data review and assessment included in the initial regulatory submission documents (data lock 14 Nov 2020). However, the EMA requested the inclusion of Hypersensitivity in section 4.8 of the EU SmPC. With the MAH determination to add anaphylaxis as an identified risk to the US PVP and EUA PI, the topic of less severe hypersensitivity reactions is being evaluated for possible inclusion in the adverse reaction section of the EUA PI to

	better characterize reactions reported in the post-authorization use of the vaccine. An update will be provided in the next monthly safety report.
Insomnia	The MAH did not identify Insomnia as a safety risk based on the unblinded clinical data review and assessment included in the initial regulatory submission documents (data lock 14 Nov 2020). However, the EMA requested the inclusion of Insomnia in section 4.8 of the EU SmPC based on the clinical study data. The MAH is evaluating this topic and will provide an update in the next monthly safety report
Injection site pruritus	The MAH did not identify Injection site pruritus as a safety risk based on the unblinded clinical data review and assessment included in the initial regulatory submission documents (data lock 14 Nov 2020). However, the EMA requested the inclusion of Injection site pruritus in section 4.8 of the EU SmPC based on the clinical study data. The MAH is evaluating this topic and will provide an update in the next monthly safety report
Injection site redness	Injection site redness was a pre-specified local reactogenicity event for Study C4591001. At the time of unblinded clinical data review (data lock 14 Nov 2020), the frequency of reports of injection site redness were higher in the BNT group compared to the placebo group and based on biologic plausibility, injection site redness was added as a reaction (not important) to the EUA PI and EU SmPC at the time of initial regulatory submission.
Injection site swelling	Injection site swelling was a pre-specified local reactogenicity event for Study C4591001. At the time of unblinded clinical data review (data lock 14 Nov 2020), the frequency of reports of injection site swelling were higher in the BNT group compared to the placebo group and based on biologic plausibility, injection site swelling was added as a reaction (not important) to the EUA PI and EU SmPC at the time of initial regulatory submission.
Malaise	At the time of Study C4591001 unblinded clinical data review (data lock 14 Nov 2020), the frequency of reports of Malaise were higher in the BNT group compared to the placebo group and based on biologic plausibility, Malaise was added as a reaction (not important) to the EUA PI and EU SmPC at the time of initial regulatory submission.
Nausea	At the time of Study C4591001 unblinded clinical data review (data lock 14 Nov 2020), the frequency of reports of Nausea were higher in the BNT group compared to the placebo group and based on biologic plausibility, Nausea was included as a reaction (not important) to the EUA PI and EU SmPC at the time of initial regulatory submission.
Pain in extremity	The MAH did not identify Pain in extremity as a safety risk based on the unblinded clinical data review and assessment included in the initial regulatory submission documents (data lock 14 Nov 2020). However, the EMA requested the inclusion of Pain in extremity in section 4.8 of the EU SmPC based on the clinical study data. The MAH is evaluating this topic and will provide an update in the next monthly safety report.

APPENDIX 4. CUMULATIVE APPROVAL/AUTHORISATION STATUS

Product Detail Set Name	Marketing Authorization Holder	Country	Approval Date	Authorization Type
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer/BioNTech	United Kingdom	01-Dec-20	Temporary authorization under regulation 174
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Bahrain	03-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Israel	06-Dec-20	Special import approval Clause 29
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Canada	09-Dec-20	Interim Order
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Qatar	10-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Saudi Arabia	10-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Mexico	11-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	United States	11-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Kuwait	13-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Oman	13-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Lebanon	14-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Singapore	14-Dec-20	Pandemic Special Access Route
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Costa Rica	15-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Ecuador	15-Dec-20	Importation Authorization
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	United Arab Emirates	15-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Chile	16-Dec-20	Special import for emergency use article 99

Product Detail Set Name	Marketing Authorization Holder	Country	Approval Date	Authorization Type
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Panama	16-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Jordan	17-Dec-20	EUA
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Serbia	17-Dec-20	Import License
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Switzerland	19-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Austria	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Belgium	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Bulgaria	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Croatia	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Cyprus	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Czech Republic	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Denmark	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Estonia	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Finland	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	France	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Germany	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Greece	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Hungary	21-Dec-20	Conditional marketing authorization approval

Product Detail Set Name	Marketing Authorization Holder	Country	Approval Date	Authorization Type
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Iceland	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Ireland	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Italy	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Latvia	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Liechtenstein	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Lithuania	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Luxembourg	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Malta	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Netherlands	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Norway	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Poland	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Portugal	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Romania	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Slovakia	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Slovenia	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Spain	21-Dec-20	Conditional marketing authorization approval
Pfizer-BioNTech COVID-19 mRNA vaccine	BioNTech	Sweden	21-Dec-20	Conditional marketing authorization approval

Product Detail Set Name	Marketing Authorization Holder	Country	Approval Date	Authorization Type
Pfizer-BioNTech COVID-19 mRNA vaccine	Pfizer	Argentina	22-Dec-20	Conditional marketing authorization approval

EUA= Emergency Use Authorization

APPENDIX 5. LIST OF ADVERSE EVENTS OF SPECIAL INTEREST

1p36 deletion syndrome;2-Hydroxyglutaric aciduria;5'nucleotidase increased;Acoustic neuritis;Acquired C1 inhibitor deficiency;Acquired epidermolysis bullosa;Acquired epileptic aphasia;Acute cutaneous lupus erythematosus;Acute disseminated encephalomyelitis;Acute encephalitis with refractory, repetitive partial seizures;Acute febrile neutrophilic dermatosis;Acute flaccid myelitis;Acute haemorrhagic leukoencephalitis;Acute haemorrhagic oedema of infancy;Acute kidney injury;Acute macular outer retinopathy;Acute motor axonal neuropathy;Acute motor-sensory axonal neuropathy;Acute myocardial infarction;Acute respiratory distress syndrome;Acute respiratory failure;Addison's disease;Administration site thrombosis;Administration site vasculitis;Adrenal thrombosis;Adverse event following immunisation;Ageusia;Agranulocytosis;Air embolism;Alanine aminotransferase abnormal;Alanine aminotransferase increased;Alcoholic seizure;Allergic bronchopulmonary mycosis;Allergic oedema;Alloimmune hepatitis;Alopecia areata;Alpers disease;Alveolar proteinosis;Ammonia abnormal;Ammonia increased;Amniotic cavity infection;Amygdalohippocampectomy;Amyloid arthropathy;Amyloidosis;Amyloidosis senile;Anaphylactic reaction;Anaphylactic shock;Anaphylactic transfusion reaction;Anaphylactoid reaction;Anaphylactoid shock;Anaphylactoid syndrome of pregnancy;Angioedema;Angiopathic neuropathy;Ankylosing spondylitis;Anosmia;Antiacetylcholine receptor antibody positive;Anti-actin antibody positive;Anti-aquaporin-4 antibody positive;Anti-basal ganglia antibody positive;Anti-cyclic citrullinated peptide antibody positive;Anti-epithelial antibody positive;Anti-erythrocyte antibody positive;Anti-exosome complex antibody positive;Anti-GAD antibody negative;Anti-GAD antibody positive;Anti-ganglioside antibody positive;Antigliadin antibody positive;Anti-glomerular basement membrane antibody positive;Anti-glomerular basement membrane disease;Anti-glycyl-tRNA synthetase antibody positive;Anti-HLA antibody test positive;Anti-IA2 antibody positive;Anti-insulin antibody increased;Anti-insulin antibody positive;Anti-insulin receptor antibody increased;Anti-insulin receptor antibody positive;Anti-interferon antibody negative;Anti-interferon antibody positive;Anti-islet cell antibody positive;Antimitochondrial antibody positive;Anti-muscle specific kinase antibody positive;Anti-myelin-associated glycoprotein antibodies positive;Anti-myelin-associated glycoprotein associated polyneuropathy;Antimyocardial antibody positive;Anti-neuronal antibody positive;Antineutrophil cytoplasmic antibody increased;Antineutrophil cytoplasmic antibody positive;Anti-neutrophil cytoplasmic antibody positive vasculitis;Anti-NMDA antibody positive;Antinuclear antibody increased;Antinuclear antibody positive;Antiphospholipid antibodies positive;Antiphospholipid syndrome;Anti-platelet antibody positive;Anti-prothrombin antibody positive;Antiribosomal P antibody positive;Anti-RNA polymerase III antibody positive;Anti-saccharomyces cerevisiae antibody test positive;Anti-sperm antibody positive;Anti-SRP antibody positive;Antisynthetase syndrome;Anti-thyroid antibody positive;Anti-transglutaminase antibody increased;Anti-VGCC antibody positive;Anti-VGKC antibody positive;Anti-vimentin antibody positive;Antiviral prophylaxis;Antiviral treatment;Anti-zinc transporter 8 antibody positive;Aortic embolus;Aortic thrombosis;Aortitis;Aplasia pure red cell;Aplastic anaemia;Application site thrombosis;Application site vasculitis;Arrhythmia;Arterial bypass occlusion;Arterial bypass thrombosis;Arterial thrombosis;Arteriovenous fistula thrombosis;Arteriovenous graft site stenosis;Arteriovenous graft thrombosis;Arteritis;Arteritis

coronary;Arthralgia;Arthritis;Arthritis enteropathic;Ascites;Aseptic cavernous sinus thrombosis;Aspartate aminotransferase abnormal;Aspartate aminotransferase increased;Aspartate-glutamate-transporter deficiency;AST to platelet ratio index increased;AST/ALT ratio abnormal;Asthma;Asymptomatic COVID-19;Ataxia;Atheroembolism;Atonic seizures;Atrial thrombosis;Atrophic thyroiditis;Atypical benign partial epilepsy;Atypical pneumonia;Aura;Autoantibody positive;Autoimmune anaemia;Autoimmune aplastic anaemia;Autoimmune arthritis;Autoimmune blistering disease;Autoimmune cholangitis;Autoimmune colitis;Autoimmune demyelinating disease;Autoimmune dermatitis;Autoimmune disorder;Autoimmune encephalopathy;Autoimmune endocrine disorder;Autoimmune enteropathy;Autoimmune eye disorder;Autoimmune haemolytic anaemia;Autoimmune heparin-induced thrombocytopenia;Autoimmune hepatitis;Autoimmune hyperlipidaemia;Autoimmune hypothyroidism;Autoimmune inner ear disease;Autoimmune lung disease;Autoimmune lymphoproliferative syndrome;Autoimmune myocarditis;Autoimmune myositis;Autoimmune nephritis;Autoimmune neuropathy;Autoimmune neutropenia;Autoimmune pancreatitis;Autoimmune pancytopenia;Autoimmune pericarditis;Autoimmune retinopathy;Autoimmune thyroid disorder;Autoimmune thyroiditis;Autoimmune uveitis;Autoinflammation with infantile enterocolitis;Autoinflammatory disease;Automatism epileptic;Autonomic nervous system imbalance;Autonomic seizure;Axial spondyloarthritis;Axillary vein thrombosis;Axonal and demyelinating polyneuropathy;Axonal neuropathy;Bacterascites;Baltic myoclonic epilepsy;Band sensation;Basedow's disease;Basilar artery thrombosis;Basophilopenia;B-cell aplasia;Behcet's syndrome;Benign ethnic neutropenia;Benign familial neonatal convulsions;Benign familial pemphigus;Benign rolandic epilepsy;Beta-2 glycoprotein antibody positive;Bickerstaff's encephalitis;Bile output abnormal;Bile output decreased;Biliary ascites;Bilirubin conjugated abnormal;Bilirubin conjugated increased;Bilirubin urine present;Biopsy liver abnormal;Biotinidase deficiency;Birdshot chorioretinopathy;Blood alkaline phosphatase abnormal;Blood alkaline phosphatase increased;Blood bilirubin abnormal;Blood bilirubin increased;Blood bilirubin unconjugated increased;Blood cholinesterase abnormal;Blood cholinesterase decreased;Blood pressure decreased;Blood pressure diastolic decreased;Blood pressure systolic decreased;Blue toe syndrome;Brachiocephalic vein thrombosis;Brain stem embolism;Brain stem thrombosis;Bromosulphthalein test abnormal;Bronchial oedema;Bronchitis;Bronchitis mycoplasmal;Bronchitis viral;Bronchopulmonary aspergillosis allergic;Bronchospasm;Budd-Chiari syndrome;Bulbar palsy;Butterfly rash;C1q nephropathy;Caesarean section;Calcium embolism;Capillaritis;Caplan's syndrome;Cardiac amyloidosis;Cardiac arrest;Cardiac failure;Cardiac failure acute;Cardiac sarcoidosis;Cardiac ventricular thrombosis;Cardiogenic shock;Cardiolipin antibody positive;Cardiopulmonary failure;Cardio-respiratory arrest;Cardio-respiratory distress;Cardiovascular insufficiency;Carotid arterial embolus;Carotid artery thrombosis;Cataplexy;Catheter site thrombosis;Catheter site vasculitis;Cavernous sinus thrombosis;CDKL5 deficiency disorder;CEC syndrome;Cement embolism;Central nervous system lupus;Central nervous system vasculitis;Cerebellar artery thrombosis;Cerebellar embolism;Cerebral amyloid angiopathy;Cerebral arteritis;Cerebral artery embolism;Cerebral artery thrombosis;Cerebral gas embolism;Cerebral microembolism;Cerebral septic infarct;Cerebral thrombosis;Cerebral venous sinus thrombosis;Cerebral venous thrombosis;Cerebrospinal thrombotic

tamponade;Cerebrovascular accident;Change in seizure presentation;Chest discomfort;Child-Pugh-Turcotte score abnormal;Child-Pugh-Turcotte score increased;Chillblains;Choking;Choking sensation;Cholangitis sclerosing;Chronic autoimmune glomerulonephritis;Chronic cutaneous lupus erythematosus;Chronic fatigue syndrome;Chronic gastritis;Chronic inflammatory demyelinating polyradiculoneuropathy;Chronic lymphocytic inflammation with pontine perivascular enhancement responsive to steroids;Chronic recurrent multifocal osteomyelitis;Chronic respiratory failure;Chronic spontaneous urticaria;Circulatory collapse;Circumoral oedema;Circumoral swelling;Clinically isolated syndrome;Clonic convulsion;Coeliac disease;Cogan's syndrome;Cold agglutinins positive;Cold type haemolytic anaemia;Colitis;Colitis erosive;Colitis herpes;Colitis microscopic;Colitis ulcerative;Collagen disorder;Collagen-vascular disease;Complement factor abnormal;Complement factor C1 decreased;Complement factor C2 decreased;Complement factor C3 decreased;Complement factor C4 decreased;Complement factor decreased;Computerised tomogram liver abnormal;Concentric sclerosis;Congenital anomaly;Congenital bilateral perisylvian syndrome;Congenital herpes simplex infection;Congenital myasthenic syndrome;Congenital varicella infection;Congestive hepatopathy;Convulsion in childhood;Convulsions local;Convulsive threshold lowered;Coombs positive haemolytic anaemia;Coronary artery disease;Coronary artery embolism;Coronary artery thrombosis;Coronary bypass thrombosis;Coronavirus infection;Coronavirus test;Coronavirus test negative;Coronavirus test positive;Corpus callosotomy;Cough;Cough variant asthma;COVID-19;COVID-19 immunisation;COVID-19 pneumonia;COVID-19 prophylaxis;COVID-19 treatment;Cranial nerve disorder;Cranial nerve palsies multiple;Cranial nerve paralysis;CREST syndrome;Crohn's disease;Cryofibrinogenaemia;Cryoglobulinaemia;CSF oligoclonal band present;CSWS syndrome;Cutaneous amyloidosis;Cutaneous lupus erythematosus;Cutaneous sarcoidosis;Cutaneous vasculitis;Cyanosis;Cyclic neutropenia;Cystitis interstitial;Cytokine release syndrome;Cytokine storm;De novo purine synthesis inhibitors associated acute inflammatory syndrome;Death neonatal;Deep vein thrombosis;Deep vein thrombosis postoperative;Deficiency of bile secretion;Deja vu;Demyelinating polyneuropathy;Demyelination;Dermatitis;Dermatitis bullous;Dermatitis herpetiformis;Dermatomyositis;Device embolisation;Device related thrombosis;Diabetes mellitus;Diabetic ketoacidosis;Diabetic mastopathy;Dialysis amyloidosis;Dialysis membrane reaction;Diastolic hypotension;Diffuse vasculitis;Digital pitting scar;Disseminated intravascular coagulation;Disseminated intravascular coagulation in newborn;Disseminated neonatal herpes simplex;Disseminated varicella;Disseminated varicella zoster vaccine virus infection;Disseminated varicella zoster virus infection;DNA antibody positive;Double cortex syndrome;Double stranded DNA antibody positive;Dreamy state;Dressler's syndrome;Drop attacks;Drug withdrawal convulsions;Dyspnoea;Early infantile epileptic encephalopathy with burst-suppression;Eclampsia;Eczema herpeticum;Embolia cutis medicamentosa;Embolic cerebellar infarction;Embolic cerebral infarction;Embolic pneumonia;Embolic stroke;Embolism;Embolism arterial;Embolism venous;Encephalitis;Encephalitis allergic;Encephalitis autoimmune;Encephalitis brain stem;Encephalitis haemorrhagic;Encephalitis periaxialis diffusa;Encephalitis post immunisation;Encephalomyelitis;Encephalopathy;Endocrine disorder;Endocrine ophthalmopathy;Endotracheal intubation;Enteritis;Enteritis leukopenic;Enterobacter pneumonia;Enterocolitis;Enteropathic spondylitis;Eosinopenia;Eosinophilic

fasciitis;Eosinophilic granulomatosis with polyangiitis;Eosinophilic oesophagitis;Epidermolysis;Epilepsy;Epilepsy surgery;Epilepsy with myoclonic-atonic seizures;Epileptic aura;Epileptic psychosis;Erythema;Erythema induratum;Erythema multiforme;Erythema nodosum;Evans syndrome;Exanthema subitum;Expanded disability status scale score decreased;Expanded disability status scale score increased;Exposure to communicable disease;Exposure to SARS-CoV-2;Eye oedema;Eye pruritus;Eye swelling;Eyelid oedema;Face oedema;Facial paralysis;Facial paresis;Faciobrachial dystonic seizure;Fat embolism;Febrile convulsion;Febrile infection-related epilepsy syndrome;Febrile neutropenia;Felty's syndrome;Femoral artery embolism;Fibrillary glomerulonephritis;Fibromyalgia;Flushing;Foaming at mouth;Focal cortical resection;Focal dyscognitive seizures;Foetal distress syndrome;Foetal placental thrombosis;Foetor hepaticus;Foreign body embolism;Frontal lobe epilepsy;Fulminant type 1 diabetes mellitus;Galactose elimination capacity test abnormal;Galactose elimination capacity test decreased;Gamma-glutamyltransferase abnormal;Gamma-glutamyltransferase increased;Gastritis herpes;Gastrointestinal amyloidosis;Gelastic seizure;Generalised onset non-motor seizure;Generalised tonic-clonic seizure;Genital herpes;Genital herpes simplex;Genital herpes zoster;Giant cell arteritis;Glomerulonephritis;Glomerulonephritis membranoproliferative;Glomerulonephritis membranous;Glomerulonephritis rapidly progressive;Glossopharyngeal nerve paralysis;Glucose transporter type 1 deficiency syndrome;Glutamate dehydrogenase increased;Glycocholic acid increased;GM2 gangliosidosis;Goodpasture's syndrome;Graft thrombosis;Granulocytopenia;Granulocytopenia neonatal;Granulomatosis with polyangiitis;Granulomatous dermatitis;Grey matter heterotopia;Guanase increased;Guillain-Barre syndrome;Haemolytic anaemia;Haemophagocytic lymphohistiocytosis;Haemorrhage;Haemorrhagic ascites;Haemorrhagic disorder;Haemorrhagic pneumonia;Haemorrhagic varicella syndrome;Haemorrhagic vasculitis;Hantavirus pulmonary infection;Hashimoto's encephalopathy;Hashitoxicosis;Hemimegalencephaly;Henoch-Schonlein purpura;Henoch-Schonlein purpura nephritis;Hepaplastin abnormal;Hepaplastin decreased;Heparin-induced thrombocytopenia;Hepatic amyloidosis;Hepatic artery embolism;Hepatic artery flow decreased;Hepatic artery thrombosis;Hepatic enzyme abnormal;Hepatic enzyme decreased;Hepatic enzyme increased;Hepatic fibrosis marker abnormal;Hepatic fibrosis marker increased;Hepatic function abnormal;Hepatic hydrothorax;Hepatic hypertrophy;Hepatic hypoperfusion;Hepatic lymphocytic infiltration;Hepatic mass;Hepatic pain;Hepatic sequestration;Hepatic vascular resistance increased;Hepatic vascular thrombosis;Hepatic vein embolism;Hepatic vein thrombosis;Hepatic venous pressure gradient abnormal;Hepatic venous pressure gradient increased;Hepatitis;Hepatobiliary scan abnormal;Hepatomegaly;Hepatosplenomegaly;Hereditary angioedema with C1 esterase inhibitor deficiency;Herpes dermatitis;Herpes gestationis;Herpes oesophagitis;Herpes ophthalmic;Herpes pharyngitis;Herpes sepsis;Herpes simplex;Herpes simplex cervicitis;Herpes simplex colitis;Herpes simplex encephalitis;Herpes simplex gastritis;Herpes simplex hepatitis;Herpes simplex meningitis;Herpes simplex meningoencephalitis;Herpes simplex meningomyelitis;Herpes simplex necrotising retinopathy;Herpes simplex oesophagitis;Herpes simplex otitis externa;Herpes simplex pharyngitis;Herpes simplex pneumonia;Herpes simplex reactivation;Herpes simplex sepsis;Herpes simplex viraemia;Herpes simplex virus conjunctivitis neonatal;Herpes simplex visceral;Herpes virus

infection;Herpes zoster;Herpes zoster cutaneous disseminated;Herpes zoster infection neurological;Herpes zoster meningitis;Herpes zoster meningoencephalitis;Herpes zoster meningomyelitis;Herpes zoster meningoradiculitis;Herpes zoster necrotising retinopathy;Herpes zoster oticus;Herpes zoster pharyngitis;Herpes zoster reactivation;Herpetic radiculopathy;Histone antibody positive;Hoigne's syndrome;Human herpesvirus 6 encephalitis;Human herpesvirus 6 infection;Human herpesvirus 6 infection reactivation;Human herpesvirus 7 infection;Human herpesvirus 8 infection;Hyperammonaemia;Hyperbilirubinaemia;Hypercholia;Hypergammaglobulinaemia benign monoclonal;Hyperglycaemic seizure;Hypersensitivity;Hypersensitivity vasculitis;Hyperthyroidism;Hypertransaminasaemia;Hyperventilation;Hypoalbuminaemia;Hypocalcaemic seizure;Hypogammaglobulinaemia;Hypoglossal nerve paralysis;Hypoglossal nerve paresis;Hypoglycaemic seizure;Hyponatraemic seizure;Hypotension;Hypotensive crisis;Hypothenar hammer syndrome;Hypothyroidism;Hypoxia;Idiopathic CD4 lymphocytopenia;Idiopathic generalised epilepsy;Idiopathic interstitial pneumonia;Idiopathic neutropenia;Idiopathic pulmonary fibrosis;IgA nephropathy;IgM nephropathy;IIIrd nerve paralysis;IIIrd nerve paresis;Iliac artery embolism;Immune thrombocytopenia;Immune-mediated adverse reaction;Immune-mediated cholangitis;Immune-mediated cholestasis;Immune-mediated cytopenia;Immune-mediated encephalitis;Immune-mediated encephalopathy;Immune-mediated endocrinopathy;Immune-mediated enterocolitis;Immune-mediated gastritis;Immune-mediated hepatic disorder;Immune-mediated hepatitis;Immune-mediated hyperthyroidism;Immune-mediated hypothyroidism;Immune-mediated myocarditis;Immune-mediated myositis;Immune-mediated nephritis;Immune-mediated neuropathy;Immune-mediated pancreatitis;Immune-mediated pneumonitis;Immune-mediated renal disorder;Immune-mediated thyroiditis;Immune-mediated uveitis;Immunoglobulin G4 related disease;Immunoglobulins abnormal;Implant site thrombosis;Inclusion body myositis;Infantile genetic agranulocytosis;Infantile spasms;Infected vasculitis;Infective thrombosis;Inflammation;Inflammatory bowel disease;Infusion site thrombosis;Infusion site vasculitis;Injection site thrombosis;Injection site urticaria;Injection site vasculitis;Instillation site thrombosis;Insulin autoimmune syndrome;Interstitial granulomatous dermatitis;Interstitial lung disease;Intracardiac mass;Intracardiac thrombus;Intracranial pressure increased;Intrapericardial thrombosis;Intrinsic factor antibody abnormal;Intrinsic factor antibody positive;IPEX syndrome;Irregular breathing;IRVAN syndrome;IVth nerve paralysis;IVth nerve paresis;JC polyomavirus test positive;JC virus CSF test positive;Jeavons syndrome;Jugular vein embolism;Jugular vein thrombosis;Juvenile idiopathic arthritis;Juvenile myoclonic epilepsy;Juvenile polymyositis;Juvenile psoriatic arthritis;Juvenile spondyloarthritis;Kaposi sarcoma inflammatory cytokine syndrome;Kawasaki's disease;Kayser-Fleischer ring;Keratoderma blenorrhagica;Ketosis-prone diabetes mellitus;Kounis syndrome;Lafora's myoclonic epilepsy;Lambl's excrescences;Laryngeal dyspnoea;Laryngeal oedema;Laryngeal rheumatoid arthritis;Laryngospasm;Laryngotracheal oedema;Latent autoimmune diabetes in adults;LE cells present;Lemierre syndrome;Lennox-Gastaut syndrome;Leucine aminopeptidase increased;Leukoencephalomyelitis;Leukoencephalopathy;Leukopenia;Leukopenia neonatal;Lewis-Sumner syndrome;Lhermitte's sign;Lichen planopilaris;Lichen planus;Lichen sclerosus;Limbic encephalitis;Linear IgA disease;Lip oedema;Lip swelling;Liver function test abnormal;Liver function test decreased;Liver function test increased;Liver induration;Liver injury;Liver iron concentration abnormal;Liver iron concentration

increased;Liver opacity;Liver palpable;Liver sarcoidosis;Liver scan abnormal;Liver tenderness;Low birth weight baby;Lower respiratory tract herpes infection;Lower respiratory tract infection;Lower respiratory tract infection viral;Lung abscess;Lupoid hepatic cirrhosis;Lupus cystitis;Lupus encephalitis;Lupus endocarditis;Lupus enteritis;Lupus hepatitis;Lupus myocarditis;Lupus myositis;Lupus nephritis;Lupus pancreatitis;Lupus pleurisy;Lupus pneumonitis;Lupus vasculitis;Lupus-like syndrome;Lymphocytic hypophysitis;Lymphocytopenia neonatal;Lymphopenia;MAGIC syndrome;Magnetic resonance imaging liver abnormal;Magnetic resonance proton density fat fraction measurement;Mahler sign;Manufacturing laboratory analytical testing issue;Manufacturing materials issue;Manufacturing production issue;Marburg's variant multiple sclerosis;Marchiafava-Bignami disease;Marine Lenhart syndrome;Mastocytic enterocolitis;Maternal exposure during pregnancy;Medical device site thrombosis;Medical device site vasculitis;MELAS syndrome;Meningitis;Meningitis aseptic;Meningitis herpes;Meningoencephalitis herpes simplex neonatal;Meningoencephalitis herpetic;Meningomyelitis herpes;MERS-CoV test;MERS-CoV test negative;MERS-CoV test positive;Mesangioproliferative glomerulonephritis;Mesenteric artery embolism;Mesenteric artery thrombosis;Mesenteric vein thrombosis;Metapneumovirus infection;Metastatic cutaneous Crohn's disease;Metastatic pulmonary embolism;Microangiopathy;Microembolism;Microscopic polyangiitis;Middle East respiratory syndrome;Migraine-triggered seizure;Miliary pneumonia;Miller Fisher syndrome;Mitochondrial aspartate aminotransferase increased;Mixed connective tissue disease;Model for end stage liver disease score abnormal;Model for end stage liver disease score increased;Molar ratio of total branched-chain amino acid to tyrosine;Molybdenum cofactor deficiency;Monocytopenia;Mononeuritis;Mononeuropathy multiplex;Morphoea;Morvan syndrome;Mouth swelling;Moyamoya disease;Multifocal motor neuropathy;Multiple organ dysfunction syndrome;Multiple sclerosis;Multiple sclerosis relapse;Multiple sclerosis relapse prophylaxis;Multiple subpial transection;Multisystem inflammatory syndrome in children;Muscular sarcoidosis;Myasthenia gravis;Myasthenia gravis crisis;Myasthenia gravis neonatal;Myasthenic syndrome;Myelitis;Myelitis transverse;Myocardial infarction;Myocarditis;Myocarditis post infection;Myoclonic epilepsy;Myoclonic epilepsy and ragged-red fibres;Myokymia;Myositis;Narcolepsy;Nasal herpes;Nasal obstruction;Necrotising herpetic retinopathy;Neonatal Crohn's disease;Neonatal epileptic seizure;Neonatal lupus erythematosus;Neonatal mucocutaneous herpes simplex;Neonatal pneumonia;Neonatal seizure;Nephritis;Nephrogenic systemic fibrosis;Neuralgic amyotrophy;Neuritis;Neuritis cranial;Neuromyelitis optica pseudo relapse;Neuromyelitis optica spectrum disorder;Neuromyotonia;Neuronal neuropathy;Neuropathy peripheral;Neuropathy, ataxia, retinitis pigmentosa syndrome;Neuropsychiatric lupus;Neurosarcoidosis;Neutropenia;Neutropenia neonatal;Neutropenic colitis;Neutropenic infection;Neutropenic sepsis;Nodular rash;Nodular vasculitis;Noninfectious myelitis;Noninfective encephalitis;Noninfective encephalomyelitis;Noninfective oophoritis;Obstetrical pulmonary embolism;Occupational exposure to communicable disease;Occupational exposure to SARS-CoV-2;Ocular hyperaemia;Ocular myasthenia;Ocular pemphigoid;Ocular sarcoidosis;Ocular vasculitis;Oculofacial paralysis;Oedema;Oedema blister;Oedema due to hepatic disease;Oedema mouth;Oesophageal achalasia;Ophthalmic artery thrombosis;Ophthalmic herpes simplex;Ophthalmic herpes zoster;Ophthalmic vein thrombosis;Optic neuritis;Optic

neuropathy;Optic perineuritis;Oral herpes;Oral lichen planus;Oropharyngeal oedema;Oropharyngeal spasm;Oropharyngeal swelling;Osmotic demyelination syndrome;Ovarian vein thrombosis;Overlap syndrome;Paediatric autoimmune neuropsychiatric disorders associated with streptococcal infection;Paget-Schroetter syndrome;Palindromic rheumatism;Palisaded neutrophilic granulomatous dermatitis;Palmoplantar keratoderma;Palpable purpura;Pancreatitis;Panencephalitis;Papillophlebitis;Paracancerous pneumonia;Paradoxical embolism;Parainfluenzae viral laryngotracheobronchitis;Paraneoplastic dermatomyositis;Paraneoplastic pemphigus;Paraneoplastic thrombosis;Paresis cranial nerve;Parietal cell antibody positive;Paroxysmal nocturnal haemoglobinuria;Partial seizures;Partial seizures with secondary generalisation;Patient isolation;Pelvic venous thrombosis;Pemphigoid;Pemphigus;Penile vein thrombosis;Pericarditis;Pericarditis lupus;Perihepatic discomfort;Periorbital oedema;Periorbital swelling;Peripheral artery thrombosis;Peripheral embolism;Peripheral ischaemia;Peripheral vein thrombus extension;Periportal oedema;Peritoneal fluid protein abnormal;Peritoneal fluid protein decreased;Peritoneal fluid protein increased;Peritonitis lupus;Pernicious anaemia;Petit mal epilepsy;Pharyngeal oedema;Pharyngeal swelling;Pityriasis lichenoides et varioliformis acuta;Placenta praevia;Pleuroparenchymal fibroelastosis;Pneumobilia;Pneumonia;Pneumonia adenoviral;Pneumonia cytomegaloviral;Pneumonia herpes viral;Pneumonia influenzal;Pneumonia measles;Pneumonia mycoplasmal;Pneumonia necrotising;Pneumonia parainfluenzae viral;Pneumonia respiratory syncytial viral;Pneumonia viral;POEMS syndrome;Polyarteritis nodosa;Polyarthritis;Polychondritis;Polyglandular autoimmune syndrome type I;Polyglandular autoimmune syndrome type II;Polyglandular autoimmune syndrome type III;Polyglandular disorder;Polymicrogyria;Polymyalgia rheumatica;Polymyositis;Polyneuropathy;Polyneuropathy idiopathic progressive;Portal pyaemia;Portal vein embolism;Portal vein flow decreased;Portal vein pressure increased;Portal vein thrombosis;Portosplenomesenteric venous thrombosis;Post procedural hypotension;Post procedural pneumonia;Post procedural pulmonary embolism;Post stroke epilepsy;Post stroke seizure;Post thrombotic retinopathy;Post thrombotic syndrome;Post viral fatigue syndrome;Postictal headache;Postictal paralysis;Postictal psychosis;Postictal state;Postoperative respiratory distress;Postoperative respiratory failure;Postoperative thrombosis;Postpartum thrombosis;Postpartum venous thrombosis;Postpericardiotomy syndrome;Post-traumatic epilepsy;Postural orthostatic tachycardia syndrome;Precerebral artery thrombosis;Pre-eclampsia;Preictal state;Premature labour;Premature menopause;Primary amyloidosis;Primary biliary cholangitis;Primary progressive multiple sclerosis;Procedural shock;Proctitis herpes;Proctitis ulcerative;Product availability issue;Product distribution issue;Product supply issue;Progressive facial hemiatrophy;Progressive multifocal leukoencephalopathy;Progressive multiple sclerosis;Progressive relapsing multiple sclerosis;Prosthetic cardiac valve thrombosis;Pruritus;Pruritus allergic;Pseudovasculitis;Psoriasis;Psoriatic arthropathy;Pulmonary amyloidosis;Pulmonary artery thrombosis;Pulmonary embolism;Pulmonary fibrosis;Pulmonary haemorrhage;Pulmonary microemboli;Pulmonary oil microembolism;Pulmonary renal syndrome;Pulmonary sarcoidosis;Pulmonary sepsis;Pulmonary thrombosis;Pulmonary tumour thrombotic microangiopathy;Pulmonary vasculitis;Pulmonary veno-occlusive disease;Pulmonary venous thrombosis;Pyoderma gangrenosum;Pyostomatitis vegetans;Pyrexia;Quarantine;Radiation leukopenia;Radiculitis

brachial;Radiologically isolated syndrome;Rash;Rash erythematous;Rash pruritic;Rasmussen encephalitis;Raynaud's phenomenon;Reactive capillary endothelial proliferation;Relapsing multiple sclerosis;Relapsing-remitting multiple sclerosis;Renal amyloidosis;Renal arteritis;Renal artery thrombosis;Renal embolism;Renal failure;Renal vascular thrombosis;Renal vasculitis;Renal vein embolism;Renal vein thrombosis;Respiratory arrest;Respiratory disorder;Respiratory distress;Respiratory failure;Respiratory paralysis;Respiratory syncytial virus bronchiolitis;Respiratory syncytial virus bronchitis;Retinal artery embolism;Retinal artery occlusion;Retinal artery thrombosis;Retinal vascular thrombosis;Retinal vasculitis;Retinal vein occlusion;Retinal vein thrombosis;Retinol binding protein decreased;Retinopathy;Retrograde portal vein flow;Retroperitoneal fibrosis;Reversible airways obstruction;Reynold's syndrome;Rheumatic brain disease;Rheumatic disorder;Rheumatoid arthritis;Rheumatoid factor increased;Rheumatoid factor positive;Rheumatoid factor quantitative increased;Rheumatoid lung;Rheumatoid neutrophilic dermatosis;Rheumatoid nodule;Rheumatoid nodule removal;Rheumatoid scleritis;Rheumatoid vasculitis;Saccadic eye movement;SAPHO syndrome;Sarcoidosis;SARS-CoV-1 test;SARS-CoV-1 test negative;SARS-CoV-1 test positive;SARS-CoV-2 antibody test;SARS-CoV-2 antibody test negative;SARS-CoV-2 antibody test positive;SARS-CoV-2 carrier;SARS-CoV-2 sepsis;SARS-CoV-2 test;SARS-CoV-2 test false negative;SARS-CoV-2 test false positive;SARS-CoV-2 test negative;SARS-CoV-2 test positive;SARS-CoV-2 viraemia;Satoyoshi syndrome;Schizencephaly;Scleritis;Sclerodactylia;Scleroderma;Scleroderma associated digital ulcer;Scleroderma renal crisis;Scleroderma-like reaction;Secondary amyloidosis;Secondary cerebellar degeneration;Secondary progressive multiple sclerosis;Segmented hyalinising vasculitis;Seizure;Seizure anoxic;Seizure cluster;Seizure like phenomena;Seizure prophylaxis;Sensation of foreign body;Septic embolus;Septic pulmonary embolism;Severe acute respiratory syndrome;Severe myoclonic epilepsy of infancy;Shock;Shock symptom;Shrinking lung syndrome;Shunt thrombosis;Silent thyroiditis;Simple partial seizures;Sjogren's syndrome;Skin swelling;SLE arthritis;Smooth muscle antibody positive;Sneezing;Spinal artery embolism;Spinal artery thrombosis;Splenic artery thrombosis;Splenic embolism;Splenic thrombosis;Splenic vein thrombosis;Spondylitis;Spondyloarthropathy;Spontaneous heparin-induced thrombocytopenia syndrome;Status epilepticus;Stevens-Johnson syndrome;Stiff leg syndrome;Stiff person syndrome;Stillbirth;Still's disease;Stoma site thrombosis;Stoma site vasculitis;Stress cardiomyopathy;Stridor;Subacute cutaneous lupus erythematosus;Subacute endocarditis;Subacute inflammatory demyelinating polyneuropathy;Subclavian artery embolism;Subclavian artery thrombosis;Subclavian vein thrombosis;Sudden unexplained death in epilepsy;Superior sagittal sinus thrombosis;Susac's syndrome;Suspected COVID-19;Swelling;Swelling face;Swelling of eyelid;Swollen tongue;Sympathetic ophthalmia;Systemic lupus erythematosus;Systemic lupus erythematosus disease activity index abnormal;Systemic lupus erythematosus disease activity index decreased;Systemic lupus erythematosus disease activity index increased;Systemic lupus erythematosus rash;Systemic scleroderma;Systemic sclerosis pulmonary;Tachycardia;Tachypnoea;Takayasu's arteritis;Temporal lobe epilepsy;Terminal ileitis;Testicular autoimmunity;Throat tightness;Thromboangiitis obliterans;Thrombocytopenia;Thrombocytopenic purpura;Thrombophlebitis;Thrombophlebitis migrans;Thrombophlebitis

neonatal;Thrombophlebitis septic;Thrombophlebitis superficial;Thromboplastin antibody positive;Thrombosis;Thrombosis corpora cavernosa;Thrombosis in device;Thrombosis mesenteric vessel;Thrombotic cerebral infarction;Thrombotic microangiopathy;Thrombotic stroke;Thrombotic thrombocytopenic purpura;Thyroid disorder;Thyroid stimulating immunoglobulin increased;Thyroiditis;Tongue amyloidosis;Tongue biting;Tongue oedema;Tonic clonic movements;Tonic convulsion;Tonic posturing;Topectomy;Total bile acids increased;Toxic epidermal necrolysis;Toxic leukoencephalopathy;Toxic oil syndrome;Tracheal obstruction;Tracheal oedema;Tracheobronchitis;Tracheobronchitis mycoplasmal;Tracheobronchitis viral;Transaminases abnormal;Transaminases increased;Transfusion-related alloimmune neutropenia;Transient epileptic amnesia;Transverse sinus thrombosis;Trigeminal nerve paresis;Trigeminal neuralgia;Trigeminal palsy;Truncus coeliacus thrombosis;Tuberous sclerosis complex;Tubulointerstitial nephritis and uveitis syndrome;Tumefactive multiple sclerosis;Tumour embolism;Tumour thrombosis;Type 1 diabetes mellitus;Type I hypersensitivity;Type III immune complex mediated reaction;Uhthoff's phenomenon;Ulcerative keratitis;Ultrasound liver abnormal;Umbilical cord thrombosis;Uncinate fits;Undifferentiated connective tissue disease;Upper airway obstruction;Urine bilirubin increased;Urobilinogen urine decreased;Urobilinogen urine increased;Urticaria;Urticaria papular;Urticarial vasculitis;Uterine rupture;Uveitis;Vaccination site thrombosis;Vaccination site vasculitis;Vagus nerve paralysis;Varicella;Varicella keratitis;Varicella post vaccine;Varicella zoster gastritis;Varicella zoster oesophagitis;Varicella zoster pneumonia;Varicella zoster sepsis;Varicella zoster virus infection;Vasa praevia;Vascular graft thrombosis;Vascular pseudoaneurysm thrombosis;Vascular purpura;Vascular stent thrombosis;Vasculitic rash;Vasculitic ulcer;Vasculitis;Vasculitis gastrointestinal;Vasculitis necrotising;Vena cava embolism;Vena cava thrombosis;Venous intravasation;Venous recanalisation;Venous thrombosis;Venous thrombosis in pregnancy;Venous thrombosis limb;Venous thrombosis neonatal;Vertebral artery thrombosis;Vessel puncture site thrombosis;Visceral venous thrombosis;VIth nerve paralysis;VIth nerve paresis;Vitiligo;Vocal cord paralysis;Vocal cord paresis;Vogt-Koyanagi-Harada disease;Warm type haemolytic anaemia;Wheezing;White nipple sign;XIth nerve paralysis;X-ray hepatobiliary abnormal;Young's syndrome;Zika virus associated Guillain Barre syndrome.

APPENDIX 5.1 OBSERVED VERSUS EXPECTED ANALYSIS FOR ADVERSE EVENTS OF SPECIAL INTEREST

For this report, MAH has conducted ad hoc, unadjusted observed to expected ratio (O/E) analyses for AESI that were reported more than once and were not already an identified risk: facial paralysis (n=23), seizure (including epilepsy) (n=9), stroke (n=5), Guillain Barre Syndrome (n=2), pericarditis (n=2), and death (n=5). Of note, these reported cases were pulled from the safety database via the respective MedDRA search criteria and have not necessarily undergone adjudication (e.g. assessment per Brighton Collaboration criteria for level of diagnostic certainty), which is considered appropriate in a setting where the goal of the O/E analysis is signal detection.[1]

Given that anaphylaxis is an identified risk, the goal of an observed to expected comparison would not be signal identification but risk estimation. Therefore, spontaneous reports of anaphylaxis are currently undergoing adjudication and O/E analysis for risk estimation will be included in the next summary monthly safety report.

For preliminary signal evaluation, expected case counts were derived from estimated background incidence rates and post-vaccination follow up exposure time (EnCEPP, 2020).[2] For each AESI, two different background rates were used to reflect the plausible range based on available data and different case definitions.

Person-years (PY) of exposure to Pfizer-BioNTech COVID 19 Vaccine through 31 December 2020 were determined from publicly available information reported on vaccine administration in countries where Pfizer-BioNTech vaccine is authorized (Austria, Bulgaria, Canada, Chile, Costa Rica, Croatia, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kuwait, Latvia, Lithuania, Luxembourg, Mexico, Northern Ireland, Oman, Poland, Portugal, Romania, Scotland, United States, Wales).[3] This estimate does not reflect exposure in persons vaccinated in countries that did not publicly report. Additionally, the estimate assumes that only the Pfizer-BioNTech vaccine was being administered between authorization and 31 December 2020.

For each event, expected counts were determined assuming 3 risk periods of variable duration reflecting different assumptions regarding the anticipated interval between the vaccination and the potential event: 3, 7, and 21 days resulting in 39359, 75037, and 103164 PY of observation, respectively. Of note, all reported cases for a given event were included in the O/E calculation for all intervals included all events reported, regardless of proximity of event to date of vaccination.

The tables below summarize, for each event, 6 ratios of observed to expected cases determined reflecting the two background rates and 3 risk windows.

For facial paralysis (Bell's palsy) the O/E ratio ranged from 0.26 (95% CI: 0.17, 0.39) to 2.54 (95% CI: 1.61, 3.81).

Observed to expected (O/E) ratio of spontaneously reported facial paralysis events (23 observed cases) through 31 December 2020

Background rate (Source)	Risk Period		
	3 Days (39359 PY)	7 Days (75037 PY)	21 Days (103164 PY)
0.85/1000PY[1]			
Expected cases	33.4	63.6	87.5
O/E	0.69	0.36	0.26
(95% CI)	(0.44, 1.03)	(0.23, 0.54)	(0.17, 0.39)
0.23/1000PY[2]			
Expected N	9.1	17.3	23.7
O/E	2.54	1.33	0.97
(95% CI)	(1.61, 3.81)	(0.85, 2.00)	(0.61, 1.45)

[1] Source: Pfizer internal data AT20105_PANTHER_11062020.xlsx
[2] Source: https://www.medscape.com/answers/1146903-20219/what-is-the-incidence-of-bell-palsy-idiopathic-facial-paralysis-ifp-in-the-us (Accessed: 1/5/2021)

For seizure (including epilepsy) the O/E ratio ranged from 0.01 (95% CI: <0.01 – 0.02) to 0.18 (95% CI: 0.08, 0.35).

Observed to expected ratio of spontaneously reported seizure events (including epilepsy) (9 observed cases) through 31 December 2020

Background rate	Risk Period		
	3 Days (39359 PY)	7 Days (75037 PY)	21 Days (103164 PY)
9.4/1000PY[1]			
Expected N	370.7	706.7	971.5
O/E	0.02	0.01	0.01
(95% CI)	0.01, 0.05	0.01, 0.02	<0.01, 0.02
1.3/1000PY[2]			
Expected N	49.5	94.4	129.8
O/E	0.18	0.10	0.07
(95% CI)	0.08, 0.35	0.04, 0.18	0.03, 0.13

[1] Source: Pfizer internal data AT20105_PANTHER_11062020.xlsx
[2] Source: Pfizer internal data PFI_SE_PNG

For stroke, the O/E ratio ranged from
0.01 (95% CI: <0.01, 0.01) to 0.06 (95% CI: 0.02, 0.13).

Observed to expected ratio of spontaneously reported stroke events (5 observed cases) through 31 December 2020

Background rate	Risk Period		
	3 Days (39359 PY)	7 Days (75037 PY)	21 Days (103164 PY)
9.1/1000PY[1]			
Expected N	359.9	686.1	943.2
O/E	0.01	0.01	0.01
(95% CI)	0.01, 0.03	<0.01, 0.02	<0.01, 0.01
2.2/1000PY[2]			
Expected N	87.5	166.9	229.4
O/E	0.06	0.03	0.02
(95% CI)	0.02, 0.13	0.01, 0.07	0.01, 0.05

[1] Source: Pfizer internal data AT20105_PANTHER_11062020.xlsx
[2] Source: Pfizer internal data PFI_SE_PNG

For Guillain Barre, the O/E ratio ranged from
0.02 (95% CI: <0.01, 0.08) to 0.37 (95% CI: 0.04, 1.32).

Observed to expected ratio of spontaneously reported Guillain Barre Syndrome events (2 observed cases) through 31 December 2020

Background rate	Risk Period		
	3 Days (39359 PY)	7 Days (75037 PY)	21 Days (103164 PY)
0.85/1000PY[1]			
Expected N	33.5	63.8	87.7
O/E	0.06	0.03	0.02
(95% CI)	0.01, 0.22	<0.01, 0.11	<0.01, 0.08
0.14/1000PY[2]			
Expected N	5.5	10.4	14.3
O/E	0.37	0.19	0.14
(95% CI)	0.04, 1.32	0.02, 0.69	0.02, 0.50

[1] Source: Pfizer internal data AT20105_PANTHER_11062020.xlsx
[2] Source: Pfizer internal data PFI_SE_PNG

For pericarditis, the O/E ratio ranged from
0.05 (95% CI: 0.01, 0.19) to 0.28 (95% CI: 0.03, 1.02).

Observed to expected ratio of spontaneously reported pericarditis events (2 observed cases) through 31 December 2020

Background rate	Risk Period		
	3 Days (39359 PY)	7 Days (75037 PY)	21 Days (103164 PY)
0.37/1000PY[1]			
Expected N	14.6	27.9	38.4
O/E	0.14	0.07	0.05
(95% CI)	0.02, 0.49	0.01, 0.26	0.01, 0.19
0.18/1000PY[2]			
Expected N	7.1	13.5	18.6
O/E	0.28	0.15	0.11
(95% CI)	0.03, 1.02	0.02, 0.54	0.01, 0.39

[1] Source: Pfizer Internal Data AT20105_Pericarditis_and_Mortality
[2] Source: Elfstrom P, Hamsten A et al. "Cardiomypathy, pericarditis and myocarditis in a population-based cohort of inpatients with coeliac disease", J Intern Med 2007; 262:545-554.

For Death, the O/E ratio ranged from
<0.01 (95% CI: <0.01, 0.01) to 0.01(95% CI: <0.01, 0.03).

Observed to expected ratio of spontaneously reported death events (5 observed cases) through 31 December 2020

Background rate	Risk Period		
	3 Days (39359 PY)	7 Days (75037 PY)	21 Days (103164 PY)
12.4/1000PY[1]			
Expected N	486.4	927.4	1275.0
O/E	0.01	0.01	<0.01
(95% CI)	<0.01, 0.02	<0.01, 0.01	<0.01, 0.01
11.2/1000PY[2]			
Expected N	439.3	837.4	1151.3
O/E	0.01	0.01	<0.01
(95% CI)	<0.01, 0.02	<0.01, 0.01	<0.01, 0.01

[1] Source: Pfizer Internal Data AT20105_Pericarditis_and_Mortality
[2] Source: https://wonder.cdc.gov/controller/datarequest/D76; jsessionid= 990A43FE58ACC3B42DE6AD4B0E97 (death rate among those aged 20+): Accessed (1/5/2021)

O/E for all events other than facial palsy are below 1, indicating a lower number of observed events than expected. In some cases this ratio is much less than 1, which may due to several factors including differences in characteristics between persons being vaccinated and those in the background rate populations, e.g., age distributions and comorbidities, underreporting of events via the passive surveillance system, etc. For facial palsy the lower level of the 95% CI is higher than 1 in the analyses using the background rate reported in the literature and a 3-day risk window, suggesting a higher than expected count. Importantly, the 23 observed cases in the numerator of the ratio have not been confirmed via clinical review and are assumed to have started within 3 days of vaccination.

Of note since the data lock point for this study, two cases of facial palsy have been invalidated, which would imply a lower O/E. These will be removed from any future analyses. Facial paralysis is currently a safety signal undergoing evaluation.

Several limitations of the observed to expected comparison must be noted. With respect to observed cases, case ascertainment through the spontaneous reports likely reflect an underreporting due to incomplete reporting or a lag in reporting. Additionally, spontaneous surveillance systems are prone to reporting bias whereby events that have been previously identified as potentially related to vaccine, e.g., facial paralysis, are more likely to be reported and potentially reported despite not meeting the clinical definition. Conversely, events that have not been previously associated with a vaccine are likely to be underreported.

With respect to the expected case counts, estimates concerning both exposure to vaccine and the background rate have limitations. Our exposure estimate assumes that the number of reported administrations is complete and accurate when in fact not all countries administering vaccine have reported counts of vaccine administration to the data source. Thus the exposure is underestimated.

The expected count also assumes that the expected incidence rate in the vaccinated population is the same as that in the population used to calculate the background rate. However, the background rates used in this analysis are derived from one large US electronic health records database, one large US insurance claims database, or literature review. It is possible that the delivery of health care, population demographics, and underlying health status of the US populations included in the background rate estimates differ from those expected in the persons administered the vaccine. However to date, the majority of exposure derives from the US. Further, sensitivity analysis were conducted to demonstrate the range of event rates depending on the case definitions among population for background rate calculation.

A final limitation concerns the time at risk for a given event during which an excess of risk occurs in the case of causal association. Three periods (3 days, 7 days, and 21 days) were selected to provide a range of evaluation (i.e. sensitivity analyses) for the number of expected cases, however, observed cases were included regardless of proximity to vaccination which may lead to overestimate if the observed cases occurred outside of the risk period.

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[1] Mahaux O. Bauchau V, Van Holle L. Pharmacoepidemiological considerations in observed-to-expected analyses for vaccines. Pharmacoepidemiol Drug Saf 2016; 25(2):215–22.

[2] The European Network of Centres for Pharmacoepidemiology and Pharmacovigilance (ENCePP). Guide on Methodological Standards in Pharmacoepidemiology (Revision 8). EMA/95098/2010.

[3] https://ourworldindata.org/covid-vaccinations#daily-vaccination-rates (accessed 02 January 2021).

APPENDIX 6. LITERATURE REVIEW IN THE REPORTING PERIOD (METHODOLOGY)

A web-based literature review service is used to review medical literature from clinical and non-clinical literature sources for significant safety information relevant to authorized Pfizer medicinal product.

The following bibliographic databases are searched in this order:

1. MEDLINE®

2. Embase

Each search uses controlled vocabulary terms that are unique to each database. For each database, the search focuses on the following:

- AEs, effects and outcomes
- Generic name of the drug
- Prenatal and perinatal exposure and exposure through breast milk
- Drug interactions
- Clinical studies
- Epidemiology and meta-analyses
- Poisoning and toxicity
- Drug resistance and drug tolerance
- Toxicity tests

Searches are limited by date and by literature type. Reviews, editorials, and news reports (i.e., works consisting of an announcement or statement of recent or current events of new data and matters of interest in the field of medicine or science) are excluded because they are not peer-reviewed.