DRUG SAFETY INFORMATION No.73

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Health Products Regulation Group
Health Sciences Authority
11 Biopolis Way #11-03 Helios
Singapore 138667
Website: www.hsa.gov.sg
Fax: 6478 9069

Dear Healthcare Professional

MONITORING THE SAFETY PROFILE OF COVID-19 VACCINES

The Health Sciences Authority (HSA) would like to highlight to healthcare professionals the requirements on the safety monitoring of the COVID-19 vaccines and the importance of healthcare professionals' contribution to adverse event (AE) reporting to ensure continued safety of the vaccines.

Background

2 On 14 December 2020, HSA granted authorisation of the Pfizer-BioNTech COVID-19 Vaccine via the Pandemic Special Access Route (PSAR) for active immunisation to prevent COVID-19 disease in Singapore.[1] More COVID-19 vaccines are expected to be authorised in the coming months for use in the local population. To facilitate early access to COVID-19 vaccines, the safety follow-up period of these vaccines at the point of HSA's authorisation are generally shorter compared to other standard vaccines approved. Hence, there is a need to closely monitor the ongoing safety of these vaccines to ensure that their benefits continue to outweigh their risks.

Vaccine Adverse Event (AE) Monitoring and Reporting to HSA

3 Based on the trials of COVID-19 vaccines to date, the most common AEs observed were those expected with all vaccinations: injection site reactions, fatigue, headache, muscle pain, chills, joint pain, fever, diarrhoea, and vomiting. As with any medicine/vaccine, there may be unexpected or rare serious AEs (SAEs) that may be associated with the use of the COVID-19 vaccines, especially when they are used on a large scale and for different groups of patients. For example, rare cases of anaphylactic reactions have been reported overseas with COVID-19 vaccines during their roll-out in other countries. Healthcare professionals are advised to remind vaccine recipients to monitor and inform them of any AEs experienced that may be associated with the vaccine, and to check with the recipients for any AEs when they return for their second vaccine dose.

a) Anaphylaxis and Allergic Reactions

4 Anaphylaxis after vaccination is a known AE and occurs very rarely at about one per 100,000 doses in general. Given the reports of anaphylactic reactions to COVID-19 vaccines in the US and UK, HSA recommends that persons who receive any COVID-19 vaccines including the Pfizer-BioNTech COVID-19 vaccine be observed for at least 30 minutes post-vaccination. Vaccine recipients have to be informed to continue to monitor for signs and symptoms of anaphylaxis (see Annex A Table 1) for 24 hours and to call 995 or go to the nearest A&E department should they experience these symptoms.

[1]https://www.hsa.gov.sg/announcements/dear-healthcare-professional-letter/interim-authorisation-of-pfizer-biontech-covid-19-vaccine-(bnt162b2)-for-active-immunisation-to-prevent-covid-19-disease-in-singapore

b) Timelines and Channels of Reporting AEs to HSA

5 Healthcare professionals are required to report all suspected SAEs (see Annex A Table 2 for definition of SAEs) associated with COVID-19 vaccines to HSA:

- all fatal and life-threatening events should be reported **within 24 hours** (Note: Fatal events are reportable as Coroner's cases under the Coroners Act).
- all other SAEs and Adverse Events of Special Interest (AESIs) (see Annex B) are to be reported as soon as possible and within 48 hours

6 The following channels may be used for the submission of AE reports:

- reporting through the Adverse Drug Reactions/Drug Allergy module of the Critical Medical Information Store (CMIS) available in the Electronic Medical Records (EMR) of public health institutions
- online reporting at https://www.hsa.gov.sg/adverse-events

7 Healthcare professionals should provide as much information as possible, including information on the administration of concomitant vaccines, presence of co-morbidities and outcome of the patient to enable proper causality assessment at HSA's end. Please also include the ***brand name*** and ***batch number*** of the vaccine to facilitate investigations on quality-related issues where needed.

8 Healthcare professionals are encouraged to report SAEs even if they are unsure about whether the vaccine has caused them. HSA will follow up on these reports to assess the causality. The information provided will allow a more accurate computation of the frequency of AEs in Singapore and potentially in subgroups of individuals.

Notification of Particulars of Vaccine Recipients to National Immunisation Registry (NIR)

9 To enhance HSA's safety monitoring, the population exposure to COVID-19 vaccines will need to be determined. Healthcare professionals are required to notify the NIR of all persons who have been vaccinated with the COVID-19 vaccines through the respective IT systems. The submission should be done as soon as possible, **within 48 hours**. Importantly, please provide the ***brand name*** and ***batch number*** of the vaccine when notifying the NIR.

10 HSA will continue to communicate any relevant updates and findings on the safety profile of COVID-19 vaccines to healthcare professionals. COVID-19 vaccine information and safety updates (e.g. list of AESIs) will be updated on https://www.hsa.gov.sg/covid-19-information-and-advisories. Should you require further clarifications, please contact the Vigilance and Compliance Branch at Tel: 6866-1111 or Email: hsa_productsafety@hsa.gov.sg.

Yours faithfully

MS JALENE POH
DIRECTOR
VIGILANCE AND COMPLIANCE BRANCH
HEALTH PRODUCTS REGULATION GROUP
HEALTH SCIENCES AUTHORITY

cc Director of Medical Services, Ministry of Health

Table 1 Signs and symptoms of anaphylaxis

Signs and symptoms of anaphylaxis include:

- Respiratory: Throat tightness, stridor, shortness of breath, wheezing, cough
- Gastrointestinal: Nausea, vomiting, diarrhoea, abdominal pain
- Cardiovascular: Dizziness, fainting, tachycardia, hypotension
- Skin/mucosa: Generalised hives, itching, swelling of face, throat, lips, eyes

Table 2 Definition of serious adverse events (SAEs)

SAEs are defined as:

- Death;
- A life-threatening AE;
- Inpatient hospitalisation or prolongation of existing hospitalisation;
- 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 jeopardise the individual and may require medical or surgical intervention to prevent one of the outcomes listed above.

ANNEX B

Adverse Events of Special Interest (AESIs)

An adverse event of special interest (AESI) is one of scientific and medical concern specific to a vaccine product or vaccination programme, for which ongoing monitoring and rapid communication to HSA is warranted. Such an event might require further investigation in order to characterise and understand it. Whilst there are no signals of safety concerns based on the available data, the following is the list of serious adverse events of interest (AESIs) that have been associated historically with the use of vaccines:

- Anaphylaxis
- Bell's palsy
- Convulsion
- Demyelinating disorders such as acute disseminated encephalomyelitis (ADEM) and myelitis
- Encephalitis
- Guillain-Barré syndrome
- Thrombocytopenia
- Vasculitis
- Vaccination failure

This list may be updated as more information is obtained about the safety profile of COVID-19 vaccines from HSA's surveillance activities and as part of safety follow-up in clinical trials. Healthcare professionals may refer to the HSA website for updates on the latest list of AESIs.