## CIRCULAR H71/2021

## TO: DDG: CHIEF OF OPERATIONS / CHIEF DIRECTORS / DIRECTORS / HEADS OF INSTITUTIONS

HEAD OF HEALTH: CITY OF CAPE TOWN
For Attention - ALL MEDICAL, PARAMEDICAL, PHARMACEUTICAL AND NURSING PERSONNEL

## GUIDANCE ON THE MANAGEMENT OF VACCINE-INDUCED IMMUNE THROMBOTIC THROMBOCYTOPENIA (VITT)

The NOTICE: GUIDANCE ON THE MANAGEMENT OF VACCINE-INDUCED IMMUNE THROMBOTIC THROMBOCYTOPENIA (VITT) Reference: 2021/05/12/EDP/01, dated 13 May 2021, from National Department of Health, refers and is attached.

There have been reports of vaccine-induced immune thrombotic thrombocytopenia (VITT) associated with COVID-19 vaccines produced by both AstraZeneca/Oxford University (ChAdOxl CoV-19) and Johnson \& Johnson (Ad26.COV2.S). This serious adverse event is very rare (reported in less than 1 in 100,000 vaccinated people), but guidance for management of VITT has been recommended by the COVID-19 Guidelines Committee and National Essential Medicines List COVID-19 Therapeutics Subcommittee - see attached Appendix I.

The recommended medicines for the management of VITT, fondaparinux and/or directacting oral anticoagulants (rivaroxaban), can be procured through a buy-out process for use by (or in consultation with) appropriate specialists at Tertiary and Quaternary hospital level facilities. A limited supply of direct-acting oral anticoagulants (rivaroxaban), on consignment from a tertiary hospital, will be available at rural regional hospitals for emergency use and in consultation with an appropriate specialist / haematologist.

## Please see Appendix I:

MANAGEMENT OF VACCINE-INDUCED IMMUNE THROMBOTIC THROMBOCYTOPENIA

Contact details of tertiary hospitals:

## Tygerberg Hospital:

| Department | Contact person | Contact number |
| :--- | :--- | ---: |
| Pharmacy working hours | Ms llana Adams | 0219384619 |
| Pharmacy after hours | Pharmacist on call - contact via switchboard | 0219384911 |
| Haematology | Consultant on call - contact via switchboard | 0219384911 |

Groote Schuur Hospital:

| Department | Contact person | Contact number |
| :--- | :--- | ---: |
| Pharmacy working hours | Pharmacy Bulk Store | 0214043223 |
| Pharmacy after hours | Pharmacist on call - contact via switchboard | 0214049111 |
| Haematology | Consultant on call - contact via switchboard | 0214049111 |

In rural areas, emergency stock of rivaroxaban oral tablets 15 mg (42) will be available on consignment from tertiary hospitals, at:

Worcester hospital, Paarl hospital and George hospital
Expiry dates of rivaroxaban tablets should be monitored and stock managed appropriately.

This circular has been developed in consultation with the Provincial Pharmacy and Therapeutics Committee (PPTC), PPTC ExCo, Rural Distric $\dagger$ Managers: Pharmaceutical Services, Pharmacologists and Responsible Pharmacists at Groote Schuur and Tygerberg Hospitals; as well as Responsible Pharmacists at the Rural Regional Hospitals.

Healthcare professionals and managers are requested to distribute and communicate this information in consultation with the Pharmaceutical and Therapeutics Committees.

Your co-operation in this regard is appreciated.


CHIEF DIRECTOR: EMERGENCY AND CLINICAL SERVICES SUPPORT
DATE: 31 May 2021
health
Department:
Health
REPUBLIC OF SOUTH AFRICA
Private Bag X828, PRETORIA, 0001, Civitas Building, Pretoria

## notice: guidance on the management of vaccine-induced immune thrombotic THROMBOCYTOPENIA (VITT)

There have been reports of vaccine-induced immune thrombotic thrombocytopenia (VITT) associated with COVID-19 vaccines produced by both AstraZeneca/Oxford University (ChAdOx1 CoV-19) and Johnson \& Johnson (Ad26.COV2.S). This serious adverse event is very rare (reported in less than 1 in 100,000 vaccinated people), but guidance for management of VITT has been recommended by the COVID-19 Guidelines Committee and National Essential Medicines List COVID-19 Therapeutics Subcommittee - see attached Appendix I.

The recommended medicines for the management of VITT, fondaparinux and/or direct-acting oral anticoagulants ${ }^{1}$, can be procured by Provinces, through a buy-out process for use by specialists (or in consultation with specialists) at Tertiary and Quaternary hospital level facilities.

Provinces and Healthcare Facilities are requested to distribute and communicate this information in consultation with the Pharmaceutical and Therapeutics Committees.

Kindly share with healthcare professionals, as required.

Comments may be submitted via e-mail:
Essential Drugs Programme
E-mail: SAEDP@health.gov.za

Kind regards
3x fomaosisem

MS K JAMALOODIEN DIRECTOR: AFFORDABLE MEDICINES
DATE: 13 MAY 2021


DRLBAMFORD
ACTING CHIEF DIRECTOR: CHILD, YOUTH AND SCHOOL HEALTH
DATE: 13 MAY 2021

[^0]APPENDIXI

## MANAGEMENT OF VACCINE-INDUCED IMMUNE THROMBOTIC THROMBOCYTOPENIA

The COVID-19 guidelines committee notes the reports of vaccine-induced immune thrombotic thrombocytopenia (VITT) that have followed administration of COVID-19 vaccines produced by both AstraZeneca/Oxford University (ChAdOx1 CoV-19) and Johnson \& Johnson (Ad26.COV2.S). Current evidence suggests that this side-effect, while severe, is extremely rare (reported in less than 1 in 100,000 vaccinated people). It appears that the condition may be mediated by platelet factor 4 antibodies, suggesting a similar pathogenesis to a closely-related syndrome, heparin-induced thrombocytopenia (HIT). Apart from this link to HIT, there does not appear to be a connection between the development of VITT and any other previous history of venous or arterial thrombophilia.

The diagnosis of VITT should be considered in the following scenario:

- Recent COVID-19 vaccination with either the Johnson \& Johnson or AstraZeneca vaccines. This is typically within 3-30 days, although as other cases are identified, this range may change.
AND
- Platelet count $<150 \times 10^{9} / \mathrm{L}$, or a decrease of $\geq 50 \%$,


## AND/OR

- Acute thrombosis - either venous or arterial. As seen in HIT, the venous thromboses may occur in unusual locations, such as the cerebral venous sinuses, the splanchnic veins, or the adrenal veins.

It is essential to manage the patient in consultation with an expert as intravenous immunoglobulin (IVIG) or corticosteroids may be required, and there is a need to balance bleeding and thrombotic risks.

Evidence for the management of this condition is uncertain and is largely extrapolated from the management of HIT. We suggest that patients diagnosed with VITT are managed with either²:

- Direct-acting oral anticoagulant (i.e. rivaroxaban, apixaban, or dabigatran) - e.g. Rivaroxaban, oral, 15 mg 12 hourly for 3 weeks; - Followed by 20 mg daily

OR

- Fondaparinux, subcutaneous daily
- <50 kg: 5 mg once per day
- $50-100 \mathrm{~kg}: 7.5 \mathrm{mg}$ once per day
- $>100 \mathrm{~kg}$ : 10 mg once per day


## Note:

" Avoid platelet transfusions.
" Using heparin or warfarin (in the acute phase) to anticoagulate patients with VITT is not recommended.
We acknowledge that fondaparinux and the direct-acting oral anticoagulants are expensive and not included on the national essential medicines list. However, given the life-threatening nature of VITT, and the challenge of vaccine hesitancy, it is recommended that small volumes of one or more of these agents be accessed at tertiary or quaternary facilities through buy-out processes. It is anticipated that fewer than 500 courses of these drugs will be required to treat VITT nationally during the entire vaccine roll-out.
(The guidance in this circular will be included in the next update of the National Department of Health/ National Institute of Communicable Diseases Guidelines for the Clinical Management of Suspected or Confirmed COVID-19 Disease available from: https://www.knowledgehub.org.za/e-library or https://www.nicd.ac.za/diseases-a-z-index/covid-19/covid-19-quidelines/clinical-management-of-suspected-or-confirmed-covid-19-disease/


[^0]:    ${ }^{1}$ Jacobson et al., Recommendations for the diagnosis and management of vaccine-induced immune thrombotic thrombocytopenia S Afr Med J.
    Published online 20 April 2021. https://doi.org/10.7196/SAMJ.2021.v111i7.15772

