

June 2024

HPU Memorandum: Monkeypox (Mpox) Management

Purpose:

The purpose of this document is to provide the latest updates on the management of the mpox virus. The document provides a brief overview of potential therapeutic options that may emerge in the near future. This information builds upon the recent mpox outbreak in South Africa.

Preventive care:

The main mode of mpox prevention is vaccination. Mass vaccination against mpox is not currently recommended but specific high-risk groups are encouraged to receive the vaccine as they face a notably higher risk of contracting mpox compared to the general population. These groups comprise of healthcare workers, sex workers and MSM (Men Who Have Sex with Men).

Dr. Joe Phaahla, South Africa's Minister of Health, recently announced that mpox vaccine shipments are anticipated to arrive in the coming weeks. These vaccines will be stored at provincial health department depots and will be readily accessible at healthcare clinics. Mpox vaccines are not currently available for private purchase in South Africa. The country is sourcing these vaccines from Gavi (the Vaccine Alliance) and Western European nations with surplus supplies.

Mpox shares genetic similarities with the smallpox virus. Individuals, typically over the age of 40 years old, who have previously received the smallpox vaccine (currently no local access) exhibit partial protection against mpox. The smallpox vaccine demonstrates approximately 85% effectiveness against the mpox virus, either preventing the disease or reducing its severity if acquired. Despite their genetic similarity, these remain distinct viruses. Having previously received the smallpox vaccine should not prevent administration of the mpox vaccine for eligible individuals, if recommended by the treating healthcare provider.

Other non-pharmacological preventative measures include effective tracing, isolation and quarantine (varying from 3-17 days) procedures. As well as good personal hygiene (e.g., frequent handwashing), regularly cleaning and disinfecting surrounding surfaces/objects, thoroughly cooking all animal meat, practicing safe sex, and using face masks and Personal Protective Equipment (PPE) when in contact with infected people or animals.

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Mpox treatment:

The approach to treating mpox infection is similar to that of other viral infections. For most cases, specific therapeutic interventions are unnecessary, as the virus is primarily self-limiting. Treatment focuses on providing supportive care and symptomatic relief.

It is important to note that supportive care is not limited to out-of-hospital settings and in severe cases hospitalisation may be necessary. Various scenarios, such as excessive nausea, vomiting or dysphagia, may warrant referral to a hospital facility to manage symptoms and complications such as dehydration. Additionally, patients with severe disease or complications may require hospitalization for pain management and observation.

Therapeutic intervention, such as antivirals, may be necessary for severe cases of mpox infection. Patients at risk of developing severe mpox disease include children under 8 years of age, individuals with a history of atopic dermatitis, those with exfoliative skin conditions, pregnant or breastfeeding mothers, and immunocompromised individuals (though this list is not exhaustive).

At present, there is no locally approved antiviral drug specifically indicated for the mpox infection. The use of existing antiviral medications in this context would be considered off-label; however, it may be considered appropriate on a case-by-case basis.

The World Health Organisation (WHO) recommends the use of an antiviral called tecovirimat (also known as TPOXX) for treating severe cases. This drug can be used in patients living with HIV with a CD4 count below 350. In South Africa, the Department of Health (DoH) have acquired tecovirimat through the Section 21 SAHPRA approval process on compassionate use for those who experience severe health complications due to the disease. This drug is not currently available for private purchase in South Africa.

Mpox, being genetically similar to the smallpox virus, allows for the consideration of certain antiviral drugs initially developed for smallpox treatment. In the United States, several antiviral drugs are available for various orthopoxvirus infections, each with distinct FDA-approved indications. Among these, tecovirimat and brincidofovir have received more recent (2022) licensing for mpox treatment. However, data on their efficacy in human cases of mpox is limited, primarily drawn from observations in animal studies. In the U.S., unregistered products can be accessed through an expanded access protocol during an orthopoxvirus outbreak (1) (2) (3) (4) (5).

| Agent | Original FDA approval | FDA indication for mpox | Local approval |
|---|--|--------------------------------|------------------------------|
| Tecovirimat | Smallpox | Yes (since 2022) | No Subject to Section 21 |
| Cidofovir | Cytomegalovirus (CMV) – associated with HIV/AIDS | No - expanded access protocol | No Subject to Section 21. |
| Brincidofovir | Smallpox | Yes (2022) | No |
| Vaccinia Immune Globulin Intravenous (VIGIV) | Vaccinia infections | No - expanded access protocol | No |

The off-label use of topical anti-viral therapy (e.g., trifluorodine and vidarabine) may also be beneficial for infections spreading to atypical sites, such as the mouth, eyes, or genitals (2).

Local prevalence:

According to the DoH, as at 21st June 2024, South Africa has reported 13 laboratory-confirmed cases of mpox, resulting in 2 fatalities. These cases are distributed across three provinces: Gauteng (5), KwaZulu-Natal (7), and Western Cape (1). Affected patients were mainly men aged 30 to 39 years, and none had a recent travel history to countries experiencing an outbreak. Their illnesses were severe, necessitating hospitalization. South Africa now joins the list of countries facing a mpox outbreak.

Medscheme member impact:

Data extracted from 1 January 2024 to 20 June 2024 indicates a total of 7 mpox-related hospital admissions across Medscheme Client Schemes with none for SAMWUMED. During this period, 20 unique beneficiaries across Medscheme Client Schemes claimed for other services such as pathology, consultations, consumables, or medicines with none for SAMWUMED. To note that this data is based on submission for services against the mpox ICD10 code (i.e., B04).

Provisional data on the geographical location of these members indicates that among the 20 unique members, the highest numbers of infection were observed in the Eastern Cape and Gauteng, followed by the Western Cape as per the table below. This data is insufficient to comment on any notable trends related to geographical location.

| Province | Unique beneficiary claims |
|----------------------|---------------------------|
| <i>EASTERN CAPE</i> | 6 |
| <i>GAUTENG</i> | 6 |
| <i>KWAZULU-NATAL</i> | 1 |
| <i>NORTHWEST</i> | 3 |
| <i>WESTERN CAPE</i> | 4 |
| Total | 20 |

Claims impact on medicine:

According to the claims data, only one antiviral drug has been claimed under the mpox ICD-10 code. This is a combination antiretroviral agent called Acriptega®. Acriptega® consists of lamivudine, tenofovir disoproxil and dolutegravir and is indicated for the treatment of HIV-1 (human immunodeficiency virus-1) infection. This drug was only claimed by one member monthly since January 2024 whom resides in KwaZulu-Natal and who are on another medical scheme. There have been no claims for the internationally available antivirals mentioned above.

Conclusion:

Medscheme will continue to monitor the published literature, SAHPRA registration updates (vaccines and antivirals) and DoH alerts regarding availability of a mpox vaccines and treatments, as well as the process to acquire these for the benefit of our client schemes and members.

The DoH urges anyone with suspected mpox symptoms or who had physical contact with known cases to present themselves at a healthcare facility

References

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3. CDC (Centers for Disease Control and Prevention): About Monkeypox. . Accessed on 14 June 2024.
4. NICD (National Institute for Communicable Diseases): Monkeypox FAQ. Updated 15 June 2024
5. European Centre for Disease Prevention and Control, Accessed 13 June 2024.
6. Bhekisisa, center for health journalism; <https://bhekisisa.org/health-news-south-africa/2024-06-14-mpox-jabs-and-treatment-could-arrive-in-days/>

DISCLAIMER

This document is intended to provide Medscheme's funding decision for the above-mentioned product. Medscheme funding decisions are developed using formal health technology assessment on the basis of research that takes into consideration relevant legislation, evidence-based medicine principles and affordability All communicated reimbursement decisions are subject to individual scheme rules and benefit design.

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