



ACADEMIA ESPAÑOLA  
DE DERMATOLOGÍA  
Y VENEREOLOGÍA

# ACTAS Dermo-Sifiliográficas

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## LETTER TO THE EDITOR

### [Translated article]

### Anti-*Vaccinia* Immunoglobulin and Post-exposure Prophylaxis with *Vaccinia*-based Vaccine for Management of the Monkeypox Outbreak

### Inmunoglobulina anti-*Vaccinia* y profilaxis postexposición mediante vacuna basada en *Vaccinia* para el control del brote de viruela símica (*Monkeypox*)

To the Editor,

Some time ago, we published a brief review of treatments available or in development that could be of use in the control of the then incipient outbreak of monkeypox.<sup>1</sup> In that review, we highlighted the role of tecovirimat as the only antiviral drug approved by the European Medicines Agency (EMA) for the virus, given its good safety profile and proven efficacy in reducing mortality in animal models.<sup>2</sup>

In response to that publication, Dr Sookaromdee and Dr Wiwanitkit published a letter entitled *Treatments for Monkeypox*,<sup>3</sup> in which they shared their opinion on the use of tecovirimat and mentioned intravenous immunoglobulin as another potentially effective treatment for monkeypox, now declared a *Public Health Emergency of International Concern* by the World Health Organization (WHO).<sup>4</sup>

One of the affirmations by Dr Sookaromdee and Dr Wiwanitkit is that, although tecovirimat has demonstrated efficacy, it is not a widely used drug in countries in which the *Monkeypox virus* has traditionally been considered endemic.<sup>3</sup> A possible reason for the limited use of tecovirimat in those countries is that their healthcare resources and structure are not comparable to those in European countries.<sup>5</sup> In addition, we should add that approval by the EMA<sup>2</sup> is not applicable in Africa, and to date, it is the only health agency to have approved the drug for the indication of monkeypox.



The second aspect that we wanted to comment on is the possibility of using intravenously-administered anti-*Vaccinia* immunoglobulin, proposed by Sookaromdee and Wiwanitkit.<sup>3</sup> This immunoglobulin is indicated only for the treatment of certain complications such as *eczema vaccinatum*, progressive *Vaccinia*, and severe generalized *Vaccinia* caused by administration of the vaccine derived from the *Vaccinia virus*.<sup>6</sup> The regimen administered is 6000 U/kg as soon as possible after onset of the first symptoms of the disease, with possible dose repetitions according to the severity of the condition and response to the initial dose (doses can be increased to 9000 U/kg if the patient has not responded to the first dose).<sup>7</sup> Although there are factors to support its use against monkeypox, such as the similarity of *Orthopoxvirus* genomes,<sup>8</sup> to date, there have been no human trials on its use in this indication.

Finally, it is necessary to highlight the use of the *Vaccinia*-based vaccine as post-exposure prophylaxis. The WHO currently recommends administration of a second- or third-generation vaccine for case contacts in the first 4 days after exposure.<sup>9</sup> It is estimated that the vaccine could provide cross-immunity against the *Monkeypox virus* with an efficacy of approximately 80%–85%,<sup>10</sup> given the aforementioned genomic similarity among *Orthopoxvirus*.<sup>8</sup>

### Funding

None declared.

### Conflict of interests

None declared.

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DOI of original article:  
<https://doi.org/10.1016/j.ad.2022.08.017>

<https://doi.org/10.1016/j.ad.2022.08.026>

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