This is the only study to compare $ETCO_2$ with D-dimer; D-dimer is the gold standard to rule out PE at present (Fig 2).

Both parameters look at similar tests but from different perspectives. D-dimer measures the clot lysis (fibrinolysis) and $ETCO_2$ looks at the physiological consequences of the clot, ie dead space ventilation caused by the clot in the pulmonary circulation.

We will probably require a larger sample size for more definitive conclusions, but this is a promising step in the right direction. ■

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## The potential threat of Nipah virus

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Editor – I read with interest the review article by Dr Alam that discusses the potential future threat from Nipah virus (NiV).[1] Since first being isolated in 1999 in Malaysia, it has caused further outbreaks of encephalitis in south and east Asia, most recently in India in 2021, thus posing an ongoing threat.[1] The review also importantly discusses the fact that human-to-human transmission of NiV has been observed and that it may have pandemic potential. The fact that NiV is in the World Health Organization (WHO) Research and Development (R&D) Blueprint list of epidemic threats requiring urgent R&D action highlights the global concern regarding NiV.[2] Despite the high mortality from NiV infection ranging from 40% to 91%, Dr Alam also emphasises that there are no licensed treatments, with care being only supportive.[1]

Lessons must be learnt from our experiences with the COVID-19 pandemic as well as the ongoing multi-country monkeypox outbreak.[3] Greater efforts must be made to optimise our preparedness for future potential threats (such as NiV) and take advantage of any opportunities that may facilitate this preparedness; for example, regarding antiviral therapy for NiV infection, a study was conducted in which African green monkeys were challenged with a lethal dose of NiV (Bangladesh genotype): all animals who received remdesivir survived whereas all the control animals died.[4] Remdesivir has been used widely during the COVID-19 pandemic and continues to feature in current national COVID-19 treatment guidelines.[5] We should, therefore, utilise our vast experience with the use of this antiviral to study its potential role in the treatment of human NiV infection. In macaques, remdesivir penetrates poorly into the central nervous system (CNS) with a brain:plasma ratio of $<0.05$.[6] However, its CNS penetration in humans is largely unknown but is of interest not only because NiV frequently causes an encephalitis but also in view of the fact that there have been numerous reports of COVID-19-associated encephalitis.[7] Many patients with COVID-19-associated neurological disease receive remdesivir that potentially provides an opportunity to study its blood brain barrier penetration and/or characterise the effects of remdesivir on brain tissue through post-mortem studies, indirectly providing valuable information regarding its possible utility in the treatment of CNS disease caused by NiV.[8,9] ■

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