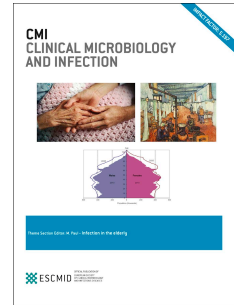


Journal Pre-proof

Re: 'ESCMID COVID-19 living guidelines: drug treatment and clinical management'
by Bartoletti et al

Nicolas Dauby, M.D., Ph.D



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Re: 'ESCMID COVID-19 Living guidelines: drug treatment and clinical management' by Bartoletti et al

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To the Editor,

In their living guidelines for treatment of COVID-19 hospitalized patients, Bartoletti and colleagues make a conditional recommendation to use Remdesivir (RDV) in patients not on mechanical ventilation or ECMO[1]. The benefit of RDV was only shown in the ACTT-1 placebo-controlled randomized clinical trial that shown a faster time to recovery. However, the uptake of corticosteroids, which have been shown to significantly decrease mortality and reduce the need of MV in COVID-19 patients, in the ACCTT-1 trial was low. It is not known whether RDV has any benefit in a population with high corticosteroids uptake. Because of the lack of a meaningful effect on mortality or disease progression, WHO guidelines recommend against the use of RDV[2].

Importantly, Bartoletti et al do not mention the severe cardiac side effects associated with RDV use that are now increasingly reported in international pharmacovigilance databases, including cardiac arrest, bradycardia, and hypotension[3,4]. Multiple case reports of bradycardia and other electrocardiogram changes have been reported in the literature following RDV administration[5,6]. Mechanisms of RDV-induced cardiotoxicity are not elucidated but might include alterations in the adenosine metabolism[5] and in vitro data suggest a significant impact of RDV on cell viability of human pluripotent stem cell cardiomyocytes[3]. The recommendation to use RDV in hospitalized COVID-19 patients should be performed after careful assessment of the benefit-risk balance which has clearly changed since the initial publication of the ACTT-1 trial.

Conflict of interest : none to declare

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