

Expert Opinion on COVID-19 Vaccination and the Use of Cladribine Tablets

Short title: COVID-19 Vaccination and Cladribine Tablets

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Background: Gaps in current evidence and guidance leave clinicians with unanswered questions on the use of cladribine tablets for the treatment of multiple sclerosis (MS) in the era of the COVID-19 pandemic, in particular relating to COVID-19 vaccination.

Objective: We describe a consensus-based program led by international MS experts with the aim of supplementing current guidelines and treatment labels by providing timely recommendations relating to COVID-19 vaccination and the use of cladribine tablets in clinical practice.

Methods: A steering committee (SC) of 10 international MS experts identified seven clinical questions to answer concerning the use of cladribine tablets and COVID-19 vaccination, which addressed issues relating to patient selection, timing and efficacy, and safety. Clinical recommendations to address each question were drafted using available evidence combined with expert opinion from the SC. An extended faculty of 28 MS experts, representing 19 countries, in addition to the SC members, voted on the recommendations. Consensus on recommendations was achieved when $\geq 75\%$ of respondents expressed an agreement score of 7–9, on a 9-point scale.

Results: Consensus was achieved on all 13 recommendations. Clinical recommendations are provided on whether all patients with MS receiving cladribine tablets should be vaccinated against COVID-19, and whether they should be prioritized; the timing of vaccination around dosing of cladribine tablets (i.e., before and after a treatment course); and the safety of COVID-19 vaccination for these patients.

Conclusions: There was overwhelming consensus that the risks of COVID-19 outweigh the risks of vaccination in people with MS who are being treated with cladribine tablets, and that all people with MS being treated with cladribine tablets should be vaccinated against COVID-19 as soon as possible, unless they have a contraindication. The consensus provides

timely guidance on patient selection, timing, efficacy, and safety of COVID-19 vaccination in patients receiving cladribine tablets, which is relevant to decision-making in everyday clinical practice.