Canadian Rheumatology Association Position Statement on COVID-19 Vaccination

Version 6.0 March 25, 2022

Highlights of Changes:

Updated to include:

- addition of 2 newly approved vaccines by Health Canada;
- preference of mRNA vaccines for immunosuppressed adults not yet vaccinated;
- recommendations to vaccinate children between 5 and 11 years old;
- preference of the Pfizer vaccine for 12-18 year olds;
- preliminary data on withholding DMARDs around vaccination;
- decrease in age recommendation for those on certain immunosuppressive medications who should receive a third dose in the primary series;
- recommendations on booster doses for all adults;
- vaccination in patients with Multisystem Inflammatory Syndrome in Children/Adults;
- consideration of treatment of COVID-19 in newly symptomatic immunosuppressed patients and vaccination following treatment.

There are currently six COVID-19 vaccines approved by Health Canada: two mRNA vaccines (Pfizer-BioNTech and Moderna); two viral vector vaccines (AstraZeneca [Oxford; Serum Institute of India] and Johnson & Johnson); one protein-based vaccine (Novavax); and one plant-based virus-like vaccine (Medicago). The goal of the Health Canada vaccination campaign is to have the majority of Canadians vaccinated.

The Canadian Rheumatology Association (CRA) provides the following updated recommendations regarding the COVID-19 vaccine for patients with rheumatic diseases:

1. Patients not yet vaccinated should be encouraged to receive any of the Health Canada approved vaccines as soon as possible. However, it is preferred that immunosuppressed patients receive either of the mRNA vaccines. Patients should be counseled about vaccine benefits and safety, and also for potentially lower vaccine response in those who are immunosuppressed. Even after vaccination, patients, particularly those who are immunosuppressed, will need to continue to follow all current public health guidelines to protect themselves against COVID-19.

2. Children between 5 and 11 years old are eligible to receive the Pfizer vaccine (10 microgram dose). Health Canada has approved both mRNA vaccines (adult dosing) for individuals between 12 and 18 years of age however, the Pfizer vaccine is currently the one recommended in this age group given the higher risk of myocarditis with the Moderna vaccine. Studies are still ongoing in children under 5.

3. Preliminary data suggests that withholding DMARDs, such as methotrexate and mycophenolate

mofetil, during the COVID-19 vaccination schedule improves vaccine response. Physicians need to weigh the benefits of this with the risk for potential disease flare and such decisions should be individualized.

4. Decreased immune response to two doses of mRNA COVID-19 vaccines has been consistently observed in patients treated with anti-CD20 agents (e.g., rituximab), mycophenolic acid and/or glucocorticoids (moderate/high doses). A third dose of an mRNA vaccine, at least four weeks after the second dose, can improve this response and should be received in all patients (≥ 5 years old) on these medications. A third dose should also be considered in patients on other immunosuppressive treatments particularly in patients on abatacept, JAK inhibitors, and antimetabolites (e.g., methotrexate) where decreased immune response was seen in some studies. Although studies suggest no significant impact on the immune response to the vaccine in patients treated with anti-TNFs for rheumatic diseases, studies in inflammatory bowel disease indicate a reduced response. A third dose in patients with rheumatic disease on anti-TNFs can be considered, particularly if on higher doses or when combined with other DMARDs.

5. The primary COVID-19 vaccine series is usually 2 doses; however, as indicated above, it is 3 doses for those on certain immunosuppressive medications. In addition to the primary series, it is recommended that in all those 18 years and older, that they also receive an additional *booster* dose at least 3 - 6 months after their last COVID-19 vaccine. Only mRNA vaccines are offered for this purpose. In 18 - 29-year-olds, the Pfizer vaccine is recommended for this purpose given the higher risk of myocarditis in this age group with the Moderna vaccine.

6. Individuals who have had Multisystem Inflammatory Syndrome in Children (MIS-C) or adults (MIS-A) from SARS-CoV-2 infection, who have not yet been fully vaccinated, can receive the COVID-19 vaccine, but this should be evaluated on a case-by-case basis. There is currently insufficient data on the best timing for the administration of the COVID-19 vaccine in these patients. Vaccination can be considered after clinical recovery, including return to normal cardiac function, or ≥ 90 days of disease onset, whichever is longer. There is also insufficient data on the best timing for the administration of the COVID-19 vaccine following intravenous immunoglobulin. This product may decrease the effectiveness of the vaccine but vaccination is still recommended.

7. Serological testing for vaccine response is not recommended at this time given uncertainties in the interpretation of lab testing.

8. Any public health recommendations should take into consideration immunocompromised individuals in the population who may not be adequately immunized despite vaccination.

9. Given that immunosuppressed individuals may have a reduced response to COVID-19 vaccination, immunosuppressed adults with rheumatic diseases with a high risk for poor outcomes related to COVID-19 could be considered for treatment of newly symptomatic disease with an anti-SARS-CoV-2 monoclonal antibody or nirmatrelvir/ritonavir as per provincial and institutional guidelines. Immunosuppressed individuals between 12-17 years old weighing ≥ 40 kg with multiple comorbidities could be considered for treatment with the anti-SARS-CoV-2 monoclonal antibody sotrovimab only.

10. There is currently insufficient data on the best timing for the administration of the COVID-19 vaccine following monoclonal antibody or convalescent plasma for the treatment or prevention of COVID-19. These products may decrease the effectiveness of the vaccine if given close together. Refer to provincial guidelines.

The CRA recognizes that there may be provincial variability regarding vaccine availability and vaccine recommendations.

Rheumatology patients should not be disadvantaged in receiving the COVID-19 vaccine because of diagnosis, treatment, where they live or because of an access issue due to a disability. The CRA shares the same goal as NACI and Health Canada in wanting to achieve equitable access to the COVID-19 vaccine and therefore highlights the importance of this issue.

For pregnant and breastfeeding women, please see SOGC recommendations below.

This statement will be updated as more information becomes available.

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