

Table 3: Guidance Related to the Use and Timing of Vaccination and Immunomodulatory Therapies in Relation to COVID-19 Vaccination in RMD Patients*

Medication	Timing Considerations for Immunomodulatory Therapy and Vaccination*	Level of Task Force Consensus
Hydroxychloroquine; apremilast; IVIG; glucocorticoids, prednisone-equivalent dose <20mg/day	No modifications to either immunomodulatory therapy or vaccination timing	Strong-Moderate
Sulfasalazine; Leflunomide; Azathioprine; Cyclophosphamide (oral); TNFi; IL-6R; IL-1; IL-17; IL-12/23; IL-23; Belimumab; Glucocorticoids, prednisone-equivalent dose ≥ 20mg/day†	No modifications to either immunomodulatory therapy or vaccination timing	Moderate
Mycophenolate; oral calcineurin inhibitors	Assuming that disease is stable, hold for 1 week following each vaccination	Moderate
Methotrexate	Hold MTX for 1 week after each of the 2mRNA vaccine doses, for those with well-controlled disease; no modifications to vaccination timing	Moderate
Methotrexate	Hold MTX for 2 weeks after single-dose COVID vaccination, for those with well-controlled disease	Moderate
JAKi	Hold JAKi for 1 week after each vaccine dose; no modification to vaccination timing	Moderate
Abatacept SQ	Hold SQ abatacept both one week prior to and one week after the <u>first</u> COVID-19 vaccine dose (only); no interruption around the second vaccine dose	Moderate
Abatacept IV	Time vaccine administration so that the first vaccination will occur four weeks after abatacept infusion (i.e., the entire dosing interval), and postpone the subsequent abatacept infusion by one week (i.e., a 5-week gap in total); no medication adjustment for the second vaccine dose	Moderate
Cyclophosphamide IV	Time CYC administration so that it will occur approximately 1 week after each vaccine dose, when feasible	Moderate
Rituximab	Assuming that patient's COVID-19 risk is low or is able to be mitigated by preventive health measures (e.g., self-isolation), schedule vaccination so that the vaccine series is initiated approximately 4 weeks prior to next scheduled rituximab cycle; after vaccination, delay RTX 2-4 weeks after final vaccine dose, if disease activity allows	Moderate
Acetaminophen, NSAIDs	Assuming that disease is stable, hold for 24 hours prior to vaccination (no restrictions on use post vaccination to treat symptoms)	Moderate
Supplemental Dosing (i.e., booster dose)		
All immunomodulatory or immunosuppressive therapies‡	Except for glucocorticoids and anti-cytokine therapies (see footnote), hold all immunomodulatory or immunosuppressive medications for 1-2 weeks after booster vaccination, assuming disease activity allows.	Moderate
Rituximab§	Patients on rituximab or other anti-CD20 medications should discuss the optimal timing with their rheumatology provider before proceeding with booster vaccination.	Strong

RMD = rheumatic and musculoskeletal disease; IVIG = intravenous immunoglobulin; TNFi = tumor necrosis factor inhibitor; IL = interleukin; JAKi = janus kinase inhibitor; CYC = cyclophosphamide; RTX = rituximab; IV = intravenous; SQ = subcutaneous; NSAID = non-steroidal anti-inflammatory drugs

*Guidance to 'hold' a therapy was made based on the assumption that the patient had well enough controlled disease to allow for a temporary interruption; if not, decision-making should be determined on a case-by-case basis, considering the circumstances involved