

UPDATE to [2017 ACR-AAHKS Perioperative Management Guideline*](#)

Summary of Scope / PICO Questions

June 2021

PICO 1

In patients with RA, AS, PsA, JIA, severe or not severe SLE undergoing THA or TKA and who are receiving one or more of the candidate drugs, what is the effect of stopping the drug prior to surgery versus continuing?

PICO 2

In patients with RA, AS, PsA, JIA, severe or not severe SLE undergoing THA or TKA who are receiving one or more of the candidate drugs in whom one has decided to stop the drug, what is the effect of stopping the drug early prior to surgery versus stopping late?

PICO 3

In patients with RA, AS, PsA, JIA, severe or not severe SLE undergoing THA or TKA who are receiving one or more of the candidate drugs in whom one has decided to stop the drug, what is the effect of restarting the drug early after surgery versus restarting late?

PICO 4

In patients with RA, AS, PsA, JIA, severe or not severe SLE undergoing THA or TKA who are receiving chronic glucocorticoids, what is the effect of administering supra-physiologic doses of glucocorticoids perioperatively (stress-dose corticosteroids) vs. continuing the usual glucocorticoid dose?

QUESTION 5: Indirect evidence of drug-related adverse effects from non-surgical studies

What is the risk for serious adverse events, infections, or hospitalizations, associated with use of each of the candidate drugs outside of the surgical setting, limiting the search to systematic literature reviews and meta-analyses for RA, SpA, and JIA, and including observational studies in SLE, as indicated?

QUESTION 6: Baseline risk of adverse events in patients with inflammatory arthritis undergoing THA or TKA who were not receiving the drugs of interest

What is the background risk for adverse events associated with THA or TKA in patients with RA, SpA, JIA, or SLE independent of the use of anti-rheumatic medications of interest?

Medications included in this Guideline Update

Table 2 from the 2017 Guideline*

with drug list updated for consideration in the 2021 update work

DMARDs: CONTINUE these medications through surgery	Dosing Interval	Continue/Withhold
Methotrexate	Weekly	Continue
Sulfasalazine	Once or twice daily	Continue
Hydroxychloroquine	Once or twice daily	Continue
Leflunomide (Arava)	Daily	Continue
Doxycycline	Daily	Continue
Apremilast (Otezla) [#]	Twice daily	To be decided 2021
BIOLOGICS: STOP these medications prior to surgery and schedule surgery at the end of the dosing cycle. RESUME medications at minimum 14 days after surgery in the absence wound healing problems, surgical site infection or systemic infection.	Dosing Interval	Schedule Surgery (relative to last biologic agent dose administered) during
Adalimumab (Humira)	Weekly or every 2 weeks	Week 2 or 3
Etanercept (Enbrel)	Weekly or twice weekly	Week 2
Golimumab (Simponi)	Every 4 weeks (SQ) or every 8 weeks (IV)	Week 5 Week 9
Infliximab (Remicade)	Every 4, 6, or 8 weeks	Week 5, 7, or 9
Abatacept (Orencia)	Monthly (IV) or weekly (SQ)	Week 5 Week 2
Certolizumab (Cimzia)	Every 2 or 4 weeks	Week 3 or 5
Rituximab (Rituxan)	2 doses 2 weeks apart every 4-6 months	Month 7
Tocilizumab (Actemra)	Every week (SQ) or every 4 weeks (IV)	Week 2 Week 5
Anakinra (Kineret)	Daily	Day 2
IL-17-Secukinumab (Cosentyx)	Every 4 weeks	Week 5
Ustekinumab (Stelara)	Every 12 weeks	Week 13
Belimumab (Benlysta)	Every 4 weeks	Week 5
Ixekizumab (Taltz) [#]	Every 4 weeks	To be decided 2021
IL-23 Guselkumab (Tremfya) [#]	Every 8 weeks	To be decided 2021

<i>JAK inhibitors</i>		
Tofacitinib (Xeljanz): STOP this medication 7 days prior to surgery.	Daily or twice daily	7 days after last dose
Baricitinib (Olumiant) [#]	Daily	To be decided 2021
Upadacitinib (Rinvoq) [#]	Daily	To be decided 2021
SLE-SPECIFIC MEDICATIONS: CONTINUE these medications in the perioperative period	Dosing Interval	Continue/Withhold
Mycophenolate mofetil	Twice daily	Continue
Azathioprine	Daily or twice daily	Continue
Cyclosporine	Twice daily	Continue
Tacrolimus	Twice daily (IV and PO)	Continue
NON-SEVERE SLE: DISCONTINUE these medications 1 week prior to surgery	Dosing Interval	Continue/Withhold
Mycophenolate mofetil	Twice daily	Withhold
Azathioprine	Daily or twice daily	Withhold
Cyclosporine	Twice daily	Withhold
Tacrolimus	Twice daily (IV and PO)	Withhold
<i>Standard doses and dosing intervals obtained from prescribing information provided online by pharmaceutical companies.</i>		
* 2017 American College of Rheumatology/American Association of Hip and Knee Surgeons Guideline for the Perioperative Management of Antirheumatic Medication in Patients with Rheumatic Diseases Undergoing Elective Total Hip or Total Knee Arthroplasty		
[#] Drug added for 2021 update work		