#### SUPPLEMENTARY APPENDIX 3: Population, Intervention, Comparator, Outcome (PICO) Questions

#### 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?