

### **III. Supplement**

1. PICO
2. Developers
3. Patient preferences
4. Review and approval
5. Conflict of interests
6. Searching terms and strategies
7. Literature selection
8. Evidence tables

## 1. PICOs

PICO 1. Should we use NSAIDs over colchicine/corticosteroids in patients experiencing a gout flare to reduce the duration of the flare?

Patients	Patient experiencing a gout flare
Intervention	Using NSAID
Comparator	Using Colchicine/steroid
Outcome	Duration of the flare

PICO 2 Should clinicians initiate ULT during gout flares vs. after gout flares have resolved?

Patients	Patient experiencing a gout flare who did not receive ULT before
Intervention	Start ULT during a gout flare with a concomitant anti-inflammatory drug
Comparator	Use anti-inflammatory drug only
Outcome	Gout flares (duration, pain severity)

PICO 3. Prophylaxis vs. no prophylaxis in patients with gout starting ULT

Patients	Gout patients initiating ULT
Intervention	Use prophylactic anti-inflammatory drugs
Comparator	Initiate ULT without prophylactic anti-inflammatory drugs
Outcome	Gout flares

PICO 4. Should ULT be prescribed to achieve serum urate <6mg/dL in gout in order to prevent gout flares and bone erosion?

Patients	Gout patients
Intervention	prescribing ULT to achieve serum urate <6mg/dL
Comparator	serum urate ≥6mg/dL
Outcome	Gout flares, bone erosion

PICO 5. Should ULT be stopped vs. continued for patients with gout on ULT?

Patients	Gout patients
Intervention	Stopping ULT
Comparator	Continuing ULT
Outcome	Gout flares

PICO 6. Should xanthine oxidase inhibitors be prescribed over uricosuric agents in chronic tophaceous gout?

Patients	Patients with tophaceous gout
Intervention	Prescription of xanthine oxidase inhibitor
Comparator	Prescription of uricosuric agent
Outcome	Tophi size, bone erosion

PICO 7. Should ULT be used in gout patients vs. no treatment in order to preserve renal function?

Patients	Patients with gout
Intervention	Using ULT (allopurinol, febuxostat, benzbromarone, pegloticase)
Comparator	Not using ULT (allopurinol, febuxostat, benzbromarone, pegloticase)
Outcome	Benefit – renoprotective effect Harm – adverse events of ULT Patients' value and preference

PICO 8. Should prescribing ULT be used to improve cardiovascular outcomes in patients with gout vs. no treatment?

Patients	Patients with gout
Intervention	Prescribing ULT
Comparator	No treatment
Outcome	Cardiovascular outcomes

PICO 9. Should prescribing ULT vs. no treatment be used in CKD 3,4 patients with asymptomatic hyperuricemia in order to protect renal function?

Patients	Asymptomatic hyperuricemia patients with CKD stage 3,4
Intervention	Prescribing ULT
Comparator	Not prescribing ULT
Outcome	Renoprotective effect