Management of Gout

Indications for urate-lowering therapy, first-line agent selection, treat-to-target, genetic testing, flare management, and lifestyle guidance.

2020 ACR Guideline
Guideline for the Management of Gout
FitzGerald JD, et al. · Arthritis Care Res
2020;72:744–760

GRADE — Strong · Cond. For · Cond. Against · Strong Against

ULT = urate-lowering therapy; XOI = xanthine oxidase inhibitor; SU = serum urate.

1 When to Initiate ULT

INITIATE / CONSIDER

Strong	Initiate ULT — **≥1 subcutaneous tophi**, radiographic damage attributable to gout, or frequent flares (>2/yr).
Cond.	Consider ULT — >1 prior flare but infrequent (<2/yr).
Cond.	Consider ULT — first flare only if **CKD stage >3**, SU >9 mg/dL, or urolithiasis.

AGAINST ULT

Cond.	First flare **without** the above risk factors.
Cond.	**Asymptomatic hyperuricemia** (SU >6.8 mg/dL, no flares/tophi).

2 First-Line Agent & Dosing

AGENT SELECTION

Strong	**Allopurinol** preferred over all other ULT, including febuxostat and probenecid.
Strong	**XOI** preferred over probenecid if CKD stage >3.
Strong Against	Avoid **pegloticase** as first-line therapy.

DOSING & PROPHYLAXIS

Strong	Start **allopurinol/febuxostat low-dose** with titration to mitigate AHS risk.
Cond.	**Probenecid** — start low-dose 500mg 1–2×/day.
Strong	Start concomitant **anti-inflammatory prophylaxis** (colchicine, NSAIDs, or steroids); continue 3–6 mo, extend if flares/tophi persist.
Cond.	May start ULT **during an active flare** rather than after.

3 Treat-to-Target & Duration

STRATEGY & TARGET

Strong	**Treat-to-target** dose titration preferred over fixed-dose.
Strong	Titrate/maintain **SU <6 mg/dL**.
Cond.	Augmented monitoring protocol with SU checks and further titration.

DURATION & RESPONSE

Cond.	Continue ULT **indefinitely** rather than stopping once target/flare-free.
Strong	Frequent flares/nonresolving tophi despite target SU — **switch to alternate XOI**.
Strong Against	Infrequent flares, no tophi — do **NOT** add/switch agent.

4 Genetic Testing & Special Populations

HLA-B*5801 TESTING

Cond.	Test before allopurinol if **Southeast Asian** (Han Chinese, Korean, Thai) or **African-American** descent.
Cond.	Do **not** test in other populations.

OTHER CONSIDERATIONS

Cond.	Consider **desensitization** if history of allopurinol hypersensitivity.
Cond.	Prefer **allopurinol over febuxostat** if CVD history or new CV event.
Cond.	Do not routinely check urinary uric acid or alkalinize urine.

5 Managing Gout Flares

FIRST-LINE THERAPY

Strong	Oral **colchicine, NSAIDs, or glucocorticoids** (oral/IA/IM).
Strong	**Low-dose** preferred over high-dose colchicine.
Strong	**NPO patients** — IM, IV, or intra-articular glucocorticoids.

ALTERNATIVES & ADJUNCTS

Cond.	Colchicine-contraindicated — **IL-1 inhibition** over no therapy.
Cond.	**Topical ice** as adjuvant.

6 Lifestyle & Diet

Cond.	Limit **alcohol, purine intake, and high-fructose corn syrup**, regardless of disease activity.
Cond.	**Weight loss** recommended if overweight/obese.
Cond.	Do not add **vitamin C** as gout-specific therapy.

FitzGerald JD, Dalbeth N, Mikuls T, et al. 2020 American College of Rheumatology Guideline for the Management of Gout. *Arthritis Care Res.* 2020;72(6):744–760.