

# Uncover New Insights in Gout Flare Management

Gout should be viewed as an autoinflammatory disease instead of a purely metabolic disease, and the interplay of inflammatory pathways should be accounted for while approaching gout flare management.<sup>1</sup>

## Management

### Treatment goal for gout flares<sup>2-4</sup>

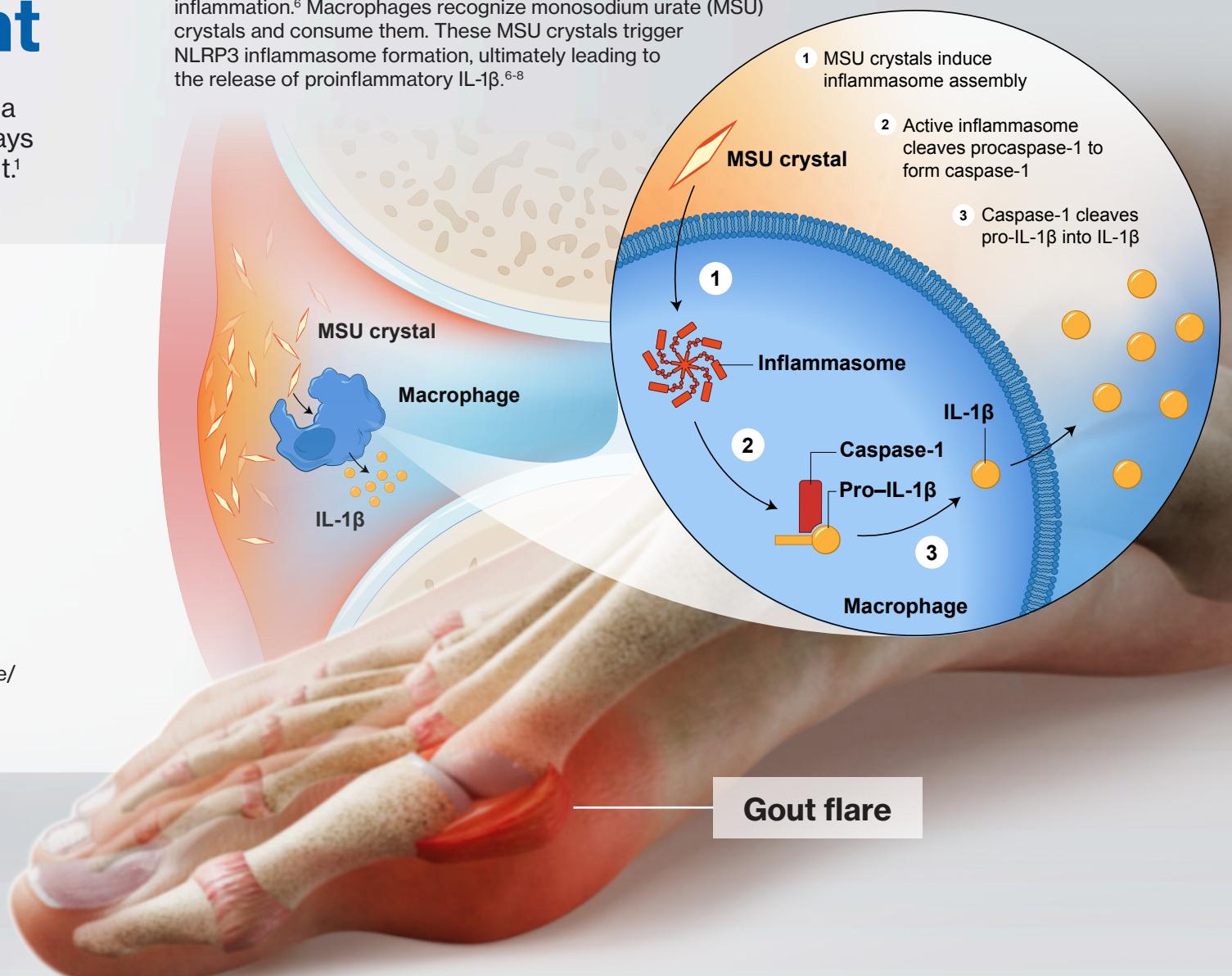
Decrease acute inflammation induced by MSU crystals during gout flares as quickly as possible.

### The American College of Rheumatology<sup>5</sup>

- Strongly recommends using colchicine, nonsteroidal anti-inflammatories, or glucocorticoids as appropriate first-line therapy over interleukin (IL)-1 inhibitors or adrenocorticotrophic hormone
- Conditionally recommends using an IL-1 inhibitor over no therapy (beyond supportive/analgesic treatment) for whom antiinflammatory therapies are either ineffective, poorly tolerated, or contraindicated

## Inflammatory response in gout flares mediated by IL-1

IL-1 is a crucial mediator of gout flare-associated pain and inflammation.<sup>6</sup> Macrophages recognize monosodium urate (MSU) crystals and consume them. These MSU crystals trigger NLRP3 inflammasome formation, ultimately leading to the release of proinflammatory IL-1 $\beta$ .<sup>6-8</sup>



NLRP3, NLR family pyrin domain containing 3.

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