

Pegloticase

Pegloticase is a recombinant uricase that works by converting uric acid to allantoin. It used as 3rd line agent for chronic gout. Infusion reactions and gout flares are common side effects and pegloticase is contraindicated in patients with G6PD deficiency.



PLAY PICMONIC

Characteristics

Recombinant Uricase

[Record-comb Unicorn-ace](#)

Pegloticase is a recombinant uricase that works by converting uric acid to allantoin by an oxidation process.

Converts Uric Acid to Allantoin

[Converting Unicorn Acidic-lemon to Alien-toe](#)

By metabolizing uric acid to allantoin, which is water-soluble, serum uric acid decreases. Water-soluble metabolites are more easily eliminated by the kidney.

3rd Line Agent

[3rd-place Agent with \(3\) Tree](#)

The American College of Rheumatology recommends using pegloticase as a third-line agent for chronic gout. This means that patients must fail to respond to xanthine oxidase inhibitors (e.g. allopurinol) and uricosuric drugs (e.g. probenecid) before pegloticase can be considered.

Indications

Chronic Gout

[Crone Goat](#)

Pegloticase is indicated for chronic gout that does not improve with xanthine oxidase inhibitors or uricosuric medications. It is also indicated for rapid relief of symptoms or to reduce tophus quickly.

Considerations

Infusion Reactions

[In-fused-IV Reaction](#)

Infusion reactions is the second most common side effect of pegloticase. This happens a few hours after or during administration. Symptoms that can occur are urticaria, erythema, flushing, musculoskeletal pain, dyspnea, nausea/vomiting, headache, and changes in blood pressure. To prevent this event, the patient should be premedicated with antihistamines and corticosteroids.

Contraindicated in G6PD Deficiency

Caution-tape and (Gluco) glue (6) sax P (dehydrogenase) dehydrator (deficiency) broken

Pegloticase is contraindicated in patients with glucose-6-phosphate dehydrogenase (G6PD) deficiency. This is because pegloticase can precipitate a hemolytic crisis from the hydrogen peroxide produced when uric acid is converted to allantoin.

Gout Flares

Caution-tap on Goat with Flare-gun

The most common side effect of pegloticase is a gout flare. This is due to rapid decrease in serum uric acid levels and monosodium urate dissolution. It occurs in 80% of patients within the first 3 months of treatment.