

Febuxostat

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The drugs currently available for the treatment of hyperuricaemia and gout are the uricosuric drugs and the xanthine oxidase inhibitors, such as allopurinol. It has been almost 40 years since a new oral treatment for chronic gout has been approved. Febuxostat is the first agent in a proposed class of non-purine selective inhibitors of xanthine oxidase, and is an orally administered once-daily medication.

In clinical studies, febuxostat, at a daily dose of 80 or 120 mg, was more effective than allopurinol at the commonly used fixed daily dose of 300 mg in lowering serum uric acid (sUA) below 6 mg/dL. Reduction of sUA below 6 mg/dL promotes decreased frequency of acute flares and reduction in tophus size. Although febuxostat was more effective than allopurinol in lowering sUA levels, a large percentage of patients taking this drug did not

achieve the primary endpoint of sUA levels <6 mg/dL. We need to know whether higher doses of febuxostat that can be given safely will achieve this outcome.

Febuxostat may be of most immediate value in patients with allopurinol hypersensitivity and in patients with renal disease. Allopurinol is effective in patients with renal insufficiency, but these patients may require a reduction in dose because allopurinol and its metabolites are excreted primarily by the kidney. Febuxostat, on the other hand, is metabolized mainly by the liver. In a study of subjects with impaired renal function, the ability of febuxostat to lower sUA levels was not altered in patients with mild to moderate renal insufficiency.

Febuxostat may become a leading choice in our treatment of patients with hyperuricaemia and gout. More studies are needed to better define the long-term safety profile of febuxostat, especially when it is administered in patients with renal or hepatic insufficiency. ▲