Canakinumab shown to reduce rates of gout in atherosclerosis by more than half

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The results of a study presented today at the Annual European Congress of Rheumatology (EULAR 2018) demonstrate that canakinumab significantly reduced the rate of gout by more than half compared to placebo, regardless of baseline serum urate level.

"These are significant results as they add to the evidence base demonstrating a potential preventative role for canakinumab in patients with gout," said Professor Robert Landewé, Chairperson of the Scientific Programme Committee, EULAR. "They will also contribute to our understanding of the interaction between gout, uric acid and cardiovascular disease."

Gout is a very common condition. It is caused by deposits of crystals of a substance called uric acid (also known as urate) in the joints, which leads to inflammation. Periods of time when gout symptoms occur are called flares. Flares can be unpredictable and debilitating, developing over a few hours and causing severe pain in the joints.

Canakinumab is a monoclonal antibody that blocks an inflammatory pathway mediated by interleukin-1β. It is licenced for the treatment of several rare auto-inflammatory disorders although it can also be used to treat flares in certain patients with gout who have contraindications to standard therapies.2 There have been some reports to date of efficacy in preventing flares, however canakinumab is currently not approved for this indication.

"Our results demonstrate a striking effect of canakinumab on reducing the risk of gout attacks in atherosclerosis patients," said Daniel Solomon, Professor of Medicine, Harvard Medical School and Brigham and Women's Hospital. "Moreover, these data illustrate serum urate as a risk marker for both gout and cardiovascular events, though canakinumab has no effect on serum urate levels due to its mechanism of action."

This report is a secondary analysis of the CANTOS (Canakinumab Anti-inflammatory Thrombosis Outcomes Study) trial which studied the impact of canakinumab in the secondary prevention of cardiovascular (CV) events.3 For this analysis, all participants were divided into three groups based on their serum urate level at baseline; low (