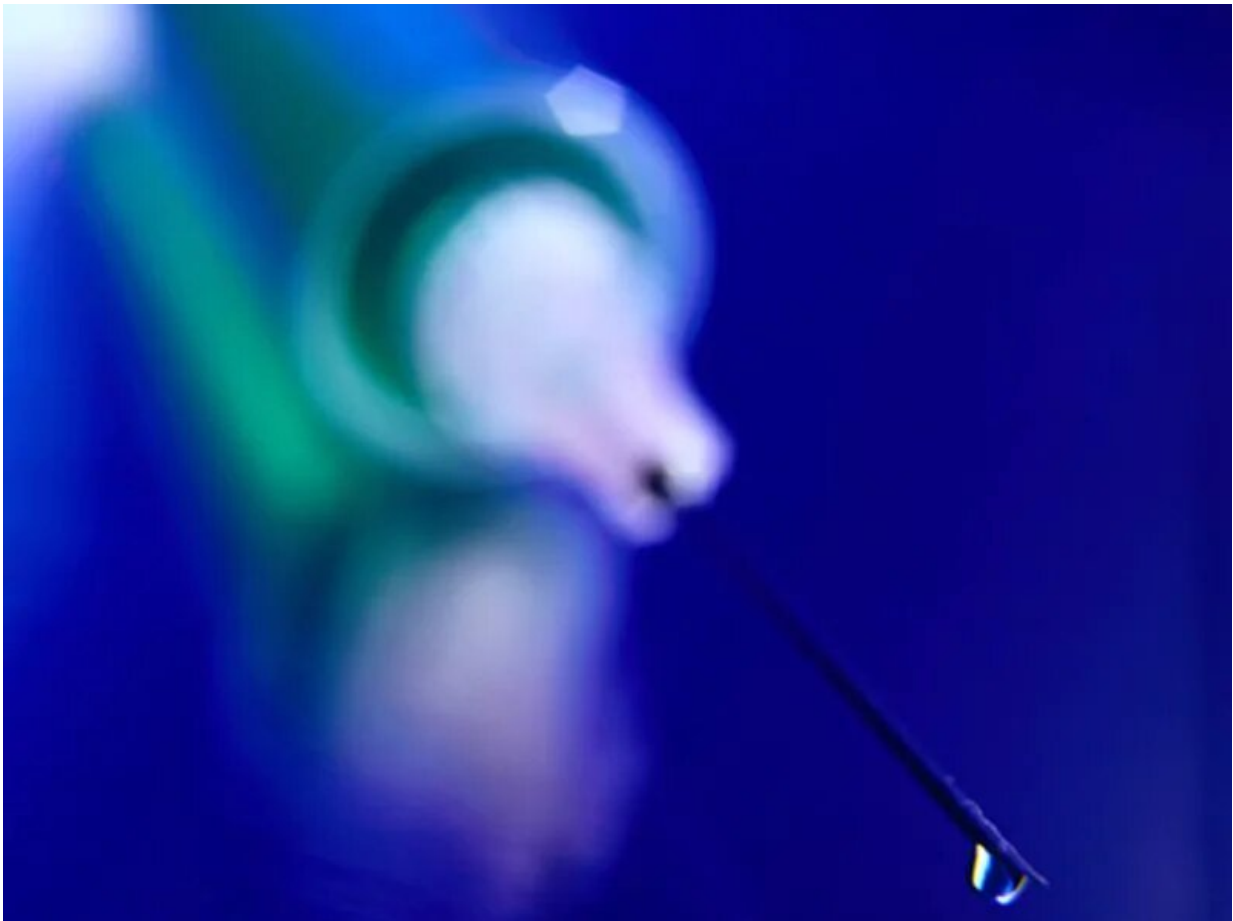


Interleukin-1 β inhibition linked to reduced incidence of anemia

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(HealthDay)—Inhibition of interleukin-1 β (IL-1 β) with canakinumab is

associated with reduced incident anemia as well as improved hemoglobin levels among patients with baseline anemia, according to research published online March 24 in the *Annals of Internal Medicine*.

Mounica Vallurupalli, M.D., from Brigham and Women's Hospital in Boston, and colleagues conducted an exploratory analysis of a multicenter randomized controlled trial. A total of 8,683 Canakinumab Anti-inflammatory Thrombosis Outcomes Study participants without anemia at trial entry and 1,303 with prevalent anemia at trial entry were randomly assigned to receive either [placebo](#) or canakinumab once every three months.

The researchers found that the incidence of anemia increased with rising baseline levels of high-sensitivity C-reactive protein (hsCRP); participants receiving canakinumab versus placebo had decreased hsCRP and IL-6. Participants without baseline anemia who received canakinumab had significantly less incident anemia than those who received placebo during a median follow-up of 3.7 years (hazard ratio, 0.84). The greatest benefits of canakinumab versus placebo on incident anemia were seen for participants with the most robust anti-inflammatory response. After two years of treatment, canakinumab increased mean [hemoglobin levels](#) by 11.3 g/L compared with placebo among those with baseline anemia.

"These hypothesis-generating data highlight the role of IL-1 β /IL-6 pathway signaling in anemia onset in a large population with [chronic inflammation](#) and motivate the design of prospective confirmatory studies to identify populations that might benefit from anti-inflammatory therapies for [anemia](#)," the authors write.

Several authors disclosed financial ties to [pharmaceutical companies](#), including Novartis, which manufactures canakinumab and funded the study.

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