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## **New Phase II data show ACZ885 gave better pain relief and flare prevention for patients with chronic gout than an injectable corticosteroid**

- *ACZ885 provided pain relief and reduced risk of flares by 94% versus an injectable corticosteroid in hard-to-treat patients unable to use common gout medicines<sup>1</sup>*
- *Gout is one of the most painful forms of arthritis involving acute attacks of inflammation that can damage joints and bone<sup>2,3</sup>*
- *ACZ885 blocks action of inflammatory protein interleukin-1 beta which plays key role in causing painful gout flares<sup>4,5,6</sup>*

**Basel, October 20, 2009** – New Phase II results show that the novel biological therapy ACZ885 (canakinumab) is significantly more effective than an injectable corticosteroid at reducing pain and preventing recurrent attacks or ‘flares’ in patients with hard-to-treat gout, one of the most painful forms of arthritis<sup>1</sup>.

The study met its primary endpoint by showing that during acute gout flares, ACZ885 reduced pain faster and more effectively than the injectable corticosteroid triamcinolone acetonide<sup>1</sup>, a potent steroid with sustained effect used to treat severe inflammatory conditions ( $p < 0.05$ )<sup>7</sup>.

At the end of the eight-week study, the risk of flare recurrence was 94% less for patients on ACZ885 than on the steroid ( $p = 0.006$ )<sup>1</sup>. The results were presented today at the American College of Rheumatology (ACR) Annual Scientific Meeting in Philadelphia, USA.

“If not appropriately treated, gout can be a devastating condition. Current therapies can have limited efficacy and tolerability, and may be unsuitable for some patients<sup>8,9</sup>,” said Professor Alexander So, MD, Department of Rheumatology at the University of Lausanne, Switzerland. “These results are important as they indicate that canakinumab may provide significant benefit in both the prevention and treatment of painful acute flares in these hard-to-treat patients.”

ACZ885 is a fully human monoclonal antibody which blocks the action of the inflammatory protein interleukin-1 beta (IL-1 beta). It has already been approved under the brand name Ilaris<sup>®</sup> in a number of countries for treating cryopyrin-associated periodic syndrome (CAPS), a rare life-long auto-inflammatory disease with debilitating symptoms and few treatment options.

Studies with ACZ885 are ongoing in other diseases in which IL-1 beta plays an important role, such as chronic obstructive pulmonary disease (COPD), type 2 diabetes and systemic juvenile idiopathic arthritis (SJIA). Not all potential patients with these diseases would be eligible for treatment with ACZ885, if approved.

Gout, also known as gouty arthritis, affects more than 1% of adults in Western countries<sup>10,11</sup>. It is more common in older people, with around 10% of men and 6% of women over 70 years old suffering from the disease<sup>6,12,13</sup>. Approximately one in 10 patients have poorly controlled gout resulting in more frequent flares<sup>14</sup>. They are regarded as being 'hard-to-treat' as they are often intolerant or unresponsive to standard medications such as colchicine or non-steroidal anti-inflammatory drugs (NSAIDs)<sup>15</sup>. Corticosteroids have traditionally been given to these patients as a last resort to treat acute pain, but they may have significant side effects<sup>7,16</sup>.

Gout is caused by the accumulation of uric acid crystals leading to severe inflammation in the joints and surrounding tissue<sup>2,3</sup>. Recent advances in the understanding of the disease have shown that uric acid crystals activate production of IL-1 beta, which is responsible for the inflammatory symptoms experienced by gout patients<sup>6</sup>. ACZ885 provides a potent and selective blockade of IL-1 beta for a sustained period, neutralizing it and reducing inflammation<sup>4,17,18</sup>.

"The devastating impact of chronic gout is often underestimated by both healthcare professionals and the general public, and there is a real unmet need among patients," said Trevor Mundel, MD, Head of Global Development at Novartis Pharma AG. "The latest data are encouraging for patients with hard-to-treat gout in whom the disease is not effectively managed, resulting in chronic pain. These findings also reinforce the potential of ACZ885 in a number of inflammatory diseases where IL-1 beta plays a key role."

The results presented at ACR were from a randomized, single-blind, double-dummy Phase II study involving 200 patients aged 18-80 years old with chronic gout, designed to assess the efficacy and optimum dose of ACZ885 in patients for whom current treatments (colchicine and/or NSAIDs) are ineffective or contraindicated<sup>1</sup>.

The study showed that patients given ACZ885 150 mg experienced faster and more effective pain relief than those given the corticosteroid triamcinolone acetonide from 24 hours up to seven days<sup>1</sup>. ACZ885 was given by subcutaneous injection, i.e. under the skin, whereas the steroid was given by intramuscular injection, i.e. into the muscle.

No pattern of adverse events was seen in any of the treatment groups and the incidence of adverse events was similar for both medicines<sup>1</sup>. Serious adverse events occurred in two patients receiving ACZ885 and one receiving triamcinolone acetonide. Investigators reported that these events were not related to the study drug<sup>1</sup>. There were no discontinuations due to adverse events<sup>1</sup>.

Ilaris has been launched in the US and Switzerland, and received a positive opinion recommending approval in the EU in July 2009 to treat adults and children over four years old with CAPS. In the US, Ilaris is approved to treat adults and children four years of age and older with CAPS, including Familial Cold Autoinflammatory Syndrome (FCAS) and Muckle-Wells Syndrome (MWS). Reviews are ongoing in other countries including priority review in Australia, Brazil and Canada. Ilaris has been designated as an orphan drug for treating SJIA in the US, EU and Switzerland, and has fast-track status for SJIA in the US.

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