Novartis data shows ACZ885 for severe gouty arthritis provided better pain relief and reduced risk of new attacks by up to 68% vs. steroid

May 25, 2011

- Two pivotal Phase III studies showed ACZ885 may meet significant unmet need for patients for whom many standard therapies are inadequate or inappropriate1,2
- Regulatory filings for the use of ACZ885 in gouty arthritis patients with limited treatment options have been submitted in the EU, US, Canada and Switzerland
- Gouty arthritis, commonly referred to as gout, is an inflammatory disease affecting 1-4% of adults, causing severe pain and other debilitating symptoms3-5

East Hanover, NJ, May 25, 2011 – Novartis announced today results of two pivotal Phase III trials in patients with severe gouty arthritis, showing that ACZ885 (canakinumab) provided superior pain relief and reduced the risk of suffering new attacks by up to 68% compared to an injectable steroid (triamcinolone acetonide, TA) used to treat gouty arthritis attacks1,2. ACZ885 is an investigational fully human monoclonal antibody.

The studies involved more than 450 gouty arthritis patients for whom the standard anti-inflammatory therapies, non-steroidal anti-inflammatory drugs (NSAIDs) or colchicine, were inadequate or inappropriate1,2. Results will be presented for the first time at the 2011 European League Against Rheumatism (EULAR) Congress in London.

“Patients describe gouty arthritis as agonizingly painful,” said Naomi Schlesinger, MD, Associate Professor of Medicine, Chief, Division of Rheumatology, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson University Hospital. “This new research demonstrates that ACZ885, which inhibits interleukin-1 beta, effectively treated and extended the time to new gouty arthritis attacks, thus reducing new attacks in gouty arthritis patients for whom many standard therapies were inadequate or inappropriate.”

Both trials used an internationally recognized pain scale to measure differences in pain 72 hours after treatment, and found ACZ885 reduced pain by an additional 11.4 millimeters (mm) ($p=0.0005$) in one study and 9.8 mm in the other ($p=0.0018$), compared to TA1. ACZ885 also significantly reduced the risk of suffering a new gouty arthritis attack within three months compared to TA, by 55% in one study ($p=0.0014$) and 68% in the other ($p<0.0001$)2.

Gouty arthritis, commonly referred to as gout, is a serious, chronic and progressive inflammatory disease that affects up to 8.3 million Americans3,5. The most common form of inflammatory arthritis in adults, gouty arthritis is estimated to be five times more prevalent than rheumatoid arthritis in the US5,6.

“We are very excited about these results, which indicate that ACZ885 may become a significant new alternative for gouty arthritis patients where many standard anti-inflammatory treatments are inadequate or inappropriate,” said David Epstein, Head of the Pharmaceuticals Division of Novartis. “Novartis is committed to meeting this unmet medical need and to further investigating the potential of ACZ885 in a number of other conditions where interleukin-1 beta may play a role.”

Gouty arthritis attacks occur when the body has a strong inflammatory response to uric acid crystals forming in the affected joint, typically of the toe, foot, ankle or knee7-9. This intense inflammatory response causes the severe pain and other debilitating symptoms associated with gouty arthritis attacks, which can last for a week or more3,9-11.

Treatments currently available to manage the pain and inflammation of gouty arthritis attacks, such as NSAIDs or colchicine, may be inadequate or inappropriate in patients who have coexisting medical problems12-14. This poses a significant unmet treatment need in gouty arthritis. In the US alone, more than 95% of patients with gouty arthritis or high uric acid levels (hyperuricemia) have at least one coexisting disease15, a portion of whom may be unable to take these standard therapies.

Regulatory filings for the use of ACZ885 in gouty arthritis patients with limited treatment options were submitted in the EU in 2010 and in the US, Canada and Switzerland in the first quarter of 2011. ACZ885 is currently approved in the US and other countries for a different disease state.

About the Studies

The two studies were Phase III, 12-week, randomized, multicenter, double-blind, double dummy, active-controlled studies involving 228 and 226 patients who met the American College of Rheumatology (ACR) criteria for acute gouty arthritis1,2. Patients had suffered from three or more gouty arthritis attacks in the previous 12 months and were either unresponsive or intolerant to common therapies like NSAIDs or colchicine, or these treatments were contraindicated. Patients were randomized to receive a single dose of ACZ885 150 milligrams (mg) via subcutaneous (s.c.) injection or TA 40 mg via intramuscular (i.m.) injection1,2. In the case of a new attack, patients received a new dose of the same treatment they were randomized to at baseline.

Both studies had the same two primary endpoints: pain intensity at 72 hours post-dose; and time to the first new gouty arthritis attack1,2. Pain in the affected joint was measured according to an internationally recognized pain scale, the Visual Analog Scale (VAS).

In one study, patients treated with ACZ885 had significantly lower mean pain scores at 72 hrs, with pain intensity decreasing from 73.3 mm at baseline to 28.1 mm for ACZ885 vs. 74.8 mm at baseline to 39.5 mm for TA (p=0.0005)1,16. Similarly, patients in the other study receiving ACZ885 had significantly lower mean pain scores at 72 hrs, with pain intensity decreasing from 74.9 mm at baseline to 22.1 mm for ACZ885 vs. 73.6 mm at baseline to 31.9 mm for TA (p=0.0018)17.

The number of patients with new attacks across both studies was also significantly reduced with ACZ885 compared to TA2. In the first study, nearly twice as many patients experienced a new gouty arthritis attack in the TA group compared to ACZ885 (40 vs. 21 patients respectively [p=0.0061])18. In addition, in the second study nearly three times as many patients in the TA group experienced a new attack compared to ACZ885 (42 vs. 15 patients respectively [p=0.0001])18. In the previous year, patients in both studies suffered an average of at least six attacks (6.5 for ACZ885 and seven for TA in study one; and 6.5 and 5.9 respectively in study two)16,17.

ACZ885 was generally well tolerated in the two studies. In one study, 55.8% of patients had adverse events (AEs) with ACZ885 vs. 38.3% with TA16. In the other study, 54.5% of patients had AEs with ACZ885 vs. 50.9% with TA17. Serious adverse events (SAEs), 10 for ACZ885 vs. five for TA in one study and three for ACZ885 vs. one for TA in the other study, were not considered to be related to study medication by the investigators16,17.

About ACZ885

ACZ885 is a fully human monoclonal antibody that inhibits interleukin-1 beta (IL-1 beta), which is part of the body's immune system defenses19. Excessive production of IL-1 beta plays a major role in many inflammatory diseases, including gouty arthritis19. ACZ885 works by neutralizing IL-1 beta for a sustained period of time, therefore inhibiting inflammation10.

Disclaimer

The foregoing release contains forward-looking statements that can be identified by terminology such as "may", "will", "committed", "potential" or similar expressions, or by express or implied discussions regarding potential new indications or labeling for ACZ885 or regarding potential future revenues from ACZ885. You should not place undue reliance on these statements. Such forward-looking statements reflect the current views of management regarding future events, and involve known and unknown risks, uncertainties and other factors that may cause actual results with ACZ885 to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no guarantee that ACZ885 will be approved for any additional indications or labeling in any market, or at any particular time. Nor can there be any guarantee that ACZ885 will achieve any particular levels of revenue in the future. In particular, management's expectations regarding ACZ885 could be affected by, among other things, unexpected regulatory actions or delays or government regulation generally; unexpected clinical trial results, including unexpected new clinical data and unexpected additional analysis of existing clinical data; competition in general; government, industry and general public pricing pressures; the company's ability to obtain or maintain patent or other proprietary intellectual property protection, the impact that the foregoing factors could have on the values attributed to the Novartis Group's assets and liabilities as recorded in the Group's consolidated balance sheet, and other risks and factors referred to in Novartis AG's current Form 20-F on file with the US Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated or expected. Novartis is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

About Novartis

Novartis Pharmaceuticals Corporation researches, develops, manufactures and markets innovative prescription drugs used to treat a number of diseases and conditions, including cardiovascular, dermatological, central nervous system, bone disease, cancer, organ transplantation, psychiatry, infectious disease and respiratory. The company's mission is to improve people's lives by pioneering novel healthcare solutions.

Located in East Hanover, New Jersey, Novartis Pharmaceuticals Corporation is an affiliate of Novartis AG, which provides healthcare solutions that address the evolving needs of patients and societies. Focused solely on healthcare, Novartis offers a diversified portfolio to best meet these needs: innovative medicines, eye care, cost-saving generic pharmaceuticals, consumer health products, preventive vaccines and diagnostic tools. Novartis is the only company with leading positions in these areas. In 2010, the Group's continuing operations achieved net sales of USD 50.6 billion, while approximately USD 9.1 billion (USD 8.1 billion excluding impairment and amortization charges) was invested in R&D throughout the Group. Headquartered in Basel, Switzerland, Novartis Group companies employ approximately 119,000 full-time-equivalent associates and operate in more than 140 countries around the world. For more information, please visit http://www.novartis.com.

Novartis is on Twitter. Sign up to follow @Novartis at http://twitter.com/novartis.

References

1. So A, Alten R, Bardin T, et al. Canakinumab vs triamcinolone in the treatment of acute flares in gouty arthritis patients contraindicated, intolerant and unresponsive to NSAIDs and/or colchicines. Abstract (EULAR11-2483) at: The 2011 Annual European Congress of The European League Against Rheumatism; 2011 May 25-28; London, United Kingdom.

2. Schlesinger N, Alten R, Bardin T, et al. Efficacy of canakinumab vs triamcinolone acetonide in preventing recurrent flares in acute gouty arthritis patients contraindicated, intolerated or unresponsive to NSAIDs and/or colchicine. Oral presentation (OP0107) at: The 2011 Annual European Congress of The European League Against Rheumatism; 2011 May 25-28; London, United Kingdom.

3. Schumacher HR Jr. The pathogenesis of gout. Cleve Clin J Med. 2008; 75(5):S2-4.

4. Annemans l, Spaepen E, Gaskin M, et al. Gout in the UK and Germany: prevalence, comorbidities and management in general practice 2000-2005. Ann Rheum Dis. 2008; 67(7):960-6.

5. Zhu Y, Pandya B, Choi H. Increasing gout prevalence in the US over the last two decades: The National Health and Nutrition Examination Survey (NHANES). Presented at: The American College of Rheumatology Annual Scientific Meeting; 2010 Oct; Atlanta, GA.

6. Myasoedova E, Crowson CS, Kremers HMet al. Is the incidence of rheumatoid arthritis rising?: results from Olmsted County, Minnesota, 1955-2007. Arthritis Rheum. 2010;62(6):1576-1582.

7. Martinon F, Glimcher LH. Gout: new insights into an old disease. J Clin Invest. 2006; 116(8):2073-5.

8. Martinon F, Petrilli V, Mayor A, Tardivel A, Tschopp J. Gout-associated uric acid crystals activate the NALP3 inflammasome. Nature. 2006; 440(7081):237-41.

9. Mandell BF. Clinical manifestations of hyperuricemia and gout. Cleve Clin J Med. 2008; 75(5):S5-8.

10. Busso N, So A. Mechanisms of inflammation in gout. Arthritis Res Ther. 2010; 12:206-13.

11. So A, De Meulemeester M, Pikhlak EA, et al. Canakinumab for the treatment of acute flares in difficult-to-treat gouty arthritis. Arthritis Rheum. 2010 October ; 62(10):3064-76.

12. Terkeltaub R, Edwards NL. Gout: Diagnosis and Management of Gouty Arthritis and Hyperuricemia. 1st ed. West Islip, NY: Professional Communications, Inc; 2010.

13. Schlesinger N, Dalbeth N, Perez-Ruiz F. Gout—what are the treatment options? Expert Opin Pharmacother. 2009;10:1319-28.

14. Jordan KM, Cameron JS, Snaith M, et al. British Society for Rheumatology and British Health Professionals in Rheumatology guideline for the management of gout. Rheumatology. 2007;46:1372-4.

15. Riedel AA, Nelson M, Wallace K, Joseph-Ridge N, Cleary M, Fam AG. Prevalence of comorbid conditions and prescription medication use among patients with gout and hyperuricemia in a managed care setting. J Clin Rheumatol. 2004 Dec; 10(6):308-14.

16. So A, Alten R, Bardin T, et al. A controlled trial of canakinumab vs triamcinolone acetonide in acute gouty arthritis patients: results of the -RELIEVED study (REsponse in acute fLare and In prEVEntion of episoDes of re-flare in gout). Oral presentation (OP0108) at: The 2011 Annual European Congress of The European League Against Rheumatism; 2011 May 25-28; London, United Kingdom.

17. Schlesinger N, Alten R, Bardin T, et al. Efficacy of canakinumab versus triamcinolone acetonide in acute

gouty arthritis patients: results of the -RELIEVED II study (REsponse in acute fLare and In prEVEntion of episoDes of re-flare in gout). Poster (THU0019) presented at: The 2011 Annual European Congress of The European League Against Rheumatism; 2011 May 25-28; London, United Kingdom.

18. Schlesinger N, Alten R, Bardin T, et al. Efficacy of canakinumab vs triamcinolone acetonide in preventing recurrent flares in acute gouty arthritis patients contraindicated, intolerated or unresponsive to NSAIDs and/or colchicine. Abstract (EULAR11-2018 for OP0107) at: The 2011 Annual European Congress of The European League Against Rheumatism; 2011 May 25-28; London, United Kingdom.

19. ILARIS [Prescribing Information]. East Hanover, NJ: Novartis Pharmaceuticals Corp; 2009.

Novartis Media Relations

Tina Tuttle
Novartis US Pharma Communications
+1 862 778 1625 (direct)
+1 862 222 6092 (mobile)
tina.tuttle@novartis.com

Michael Billings
Novartis US Pharma Communications
+1 862 778 86565 (direct)
+1 201 400 1854 (mobile)
michael.billings@novartis.com

Anna Frable
Novartis US Pharma Communications
+1 862 778 5388 (direct)
+1 732 673 5262 (mobile)
anna.frable@novartis.com

e-mail: media.relations@novartis.com

Novartis Investor Relations

Central Phone +41 61 324 7944

Susanne Schaffert +41 61 324 7944

Pierre-Michel Bringer +41 61 324 1065

Thomas Hungerbuehler +41 61 324 8425

Isabella Zinck +41 61 324 7188

e-mail: investor.relations@novartis.com

North America:

Richard Jarvis +1 212 830 2433

Jill Pozarek +1 212 830 2445

Edwin Valeriano +1 212 830 2456

email: investor.relations@novartis.com

List of links present in page

1. https://qa1.novartis.us/us-en/us-en/news/media-releases/novartis-data-shows-acz885-severe-gouty-arthritis-provided-better-pain-relief-and-reduced-risk-new-attacks-68-vs-steroid
2. http://www.novartis.com
3. http://twitter.com/novartis
4. mailto:tina.tuttle@novartis.com
5. mailto:michael.billings@novartis.com
6. mailto:anna.frable@novartis.com
7. mailto:media.relations@novartis.com
8. mailto:investor.relations@novartis.com
9. mailto:investor.relations@novartis.com