

## TiGenix strengthens European IP protection around lead development program Cx601

**Leuven (BELGIUM) – November 2, 2017, 07:00h CET – TiGenix NV (Euronext Brussels and NASDAQ: TIG), an advanced biopharmaceutical company focused on exploiting the anti-inflammatory properties of allogeneic, or donor-derived, stem cells to develop novel therapies for serious medical conditions, today announced that it has further strengthened its IP protection around the company's lead product Cx601, intended for the treatment of complex perianal fistulas in patients with Crohn's disease.**

The use of Cx601 in treating fistulas is protected by European patent EP 2292737 entitled "Use of adipose tissue-derived stromal stem cells in treating fistula". The validity of this patent has been found undisputed in an opposition proceeding before the European Patent Office (EPO) Opposition Division. In addition, the EPO has also granted TiGenix the divisional European patent EP 2944688 entitled "Use of adipose tissue-derived stromal stem cells in treating fistula", protecting pharmaceutical compositions comprising Cx601. These two events provide increased patent protection for the company's lead product.

"The successful outcome of the proceeding against our base Cx601 patent and the granting of the new European patent further strengthens TiGenix' intellectual property portfolio in the use of expanded adipose-derived stem cells (eASCs) in treating fistulas," said Wilfried Dalemans, Chief Technical Officer at TiGenix. "This patent protection supplements the Orphan Drug Designation for Cx601, which grants the product 10 years of market exclusivity following marketing approval in Europe."

Complex perianal fistulas are considered one of the most disabling complications of Crohn's disease<sup>i</sup> and can cause intense pain<sup>ii</sup>, infection and incontinence.<sup>iii</sup> Despite modern and surgical advancements, they currently remain challenging for clinicians to treat<sup>iv</sup> and have a significant negative impact patient quality of life<sup>v</sup>. Cx601, an allogeneic adipose stem cell derived preparation, has been developed to treat such fistulas.

Cx601 is under review for the treatment of complex perianal fistulas in adult patients with non-active/mildly active luminal Crohn's disease, when fistulas have shown an inadequate response to at least one conventional or biologic therapy. TiGenix has submitted a Marketing Authorization (MA) Application to the EMA, wherefore a CHMP opinion is expected to be received in 2017. Cx601 has been licensed to Takeda for the exclusive development and commercialization outside of the U.S. in the submitted indication.

Cx601 has been granted Orphan Drug status in Europe, Switzerland and in the U.S. TiGenix has a comprehensive patent portfolio protecting its stem cell therapy product candidates, including a granted patent for treating fistulas with Cx601 in the U.S.

### For more information

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## About TiGenix

TiGenix NV (Euronext Brussels and NASDAQ: TIG) is an advanced biopharmaceutical company developing novel therapies for serious medical conditions by exploiting the anti-inflammatory properties of allogeneic, or donor-derived, expanded stem cells.

TiGenix' lead product, Cx601, has successfully completed a European Phase III clinical trial for the treatment of complex perianal fistulas - a severe, debilitating complication of Crohn's disease. Cx601 has been filed for regulatory approval in Europe and a global Phase III trial intended to support a future U.S. Biologic License Application (BLA) started in 2017. TiGenix has entered into a licensing agreement with Takeda, a global pharmaceutical company active in gastroenterology, under which Takeda acquired the exclusive right to develop and commercialize Cx601 for complex perianal fistulas outside the U.S. TiGenix' second adipose-derived product, Cx611, is undergoing a Phase I/II trial in severe sepsis – a major cause of mortality in the developed world. Finally, AlloCSC-01, targeting acute ischemic heart disease, has demonstrated positive results in a Phase I/II trial in acute myocardial infarction (AMI). TiGenix is headquartered in Leuven (Belgium) and has operations in Madrid (Spain) and Cambridge, MA (USA). For more information, please visit <http://www.tigenix.com>.

## About Cx601

Cx601 is a local administration of allogeneic (or donor derived) expanded adipose-derived stem cells (eASCs) for the treatment of complex perianal fistulas in Crohn's disease patients that have previously failed conventional therapy. Crohn's disease is a chronic inflammatory disease of the intestine and complex perianal fistulas are a severe and debilitating complication for which there is currently no effective treatment. Cx601 was granted orphan drug designation by the European Commission in 2009 and by the U.S. Food and Drug Administration (FDA) in 2017. TiGenix completed a European Phase III clinical trial (ADMIRE-CD) in August 2015 in which both the primary endpoint and the safety and efficacy profile were met, with patients receiving Cx601 showing a 44% greater probability of achieving combined remission compared to control (placebo). A follow-up analysis was completed at 52 weeks and 104 weeks post-treatment, confirming the sustained efficacy and safety profile of the product<sup>i</sup>. The 24-week results of the Phase III ADMIRE-CD trial were published in *The Lancet* in July 2016<sup>vi</sup>. Based on the positive 24 weeks Phase III study results, TiGenix submitted a Marketing Authorization Application to the European Medicines Agency (EMA) and a CHMP opinion is expected in 2017. A global Phase III clinical trial (ADMIRE-CD II) intended to support a future U.S. Biologic License Application (BLA) started in 2017, based on a trial protocol that has been agreed with the FDA through a special protocol assessment procedure (SPA) ([clinicaltrials.gov](http://clinicaltrials.gov); NCT03279081). ADMIRE-CD II is a randomized, double-blind, placebo-controlled study designed to confirm the efficacy and safety of a single administration of Cx601 for the treatment of complex perianal fistulas in Crohn's disease patients. In July 2016, TiGenix entered into a licensing agreement with Takeda, a global pharmaceutical company active in gastroenterology, under which Takeda acquired exclusive rights to develop and commercialize Cx601 for complex perianal fistulas in Crohn's patients outside of the U.S.

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<sup>i</sup> Marzo M, Felice C, Pugliese D, *et al.*, Management of perianal fistulas in Crohn's disease: An up-to-date review. *World J Gastroenterol.* 2015; 21(5): 1394-1395.

<sup>ii</sup> Mahadev S, Young JM, Selby W, *et al.*, Quality of life in perianal Crohn's disease: what do patients consider important? *Dis Colon Rectum.* 2011; 54(5): 579-85

<sup>iii</sup> Juncadella, A. C., Alame, A. M., Sands, L. R., *et al.*, Perianal Crohn's disease: a review. *Postgrad Med.* 2015; 127: 266-272.

<sup>iv</sup> Geltzeiler C, Wieghard N and Tsikitis V. Recent developments in the surgical management of perianal fistula for Crohn's disease. *Ann Gastroenterol.* 2014; 27(4): 320-330.

<sup>v</sup> Panes, J. *et al.* OP009 Long-term efficacy and safety of Cx601, allogeneic expanded adipose-derived mesenchymal stem cells, for complex perianal fistulas in Crohn's disease: 52-week results of a phase III randomised controlled trial. *J Crohn's Colitis.* 2017; 11: S5-S5.

<sup>vi</sup> Panés J, García-Olmo D, Van Assche G *et al.*, Expanded allogeneic adipose-derived mesenchymal stem cells (Cx601) for complex perianal fistulas in Crohn's disease: a phase 3 randomized, double-blind controlled trial. *The Lancet.* 2016; 388(10051):1281-90.