# Licensing Opportunity

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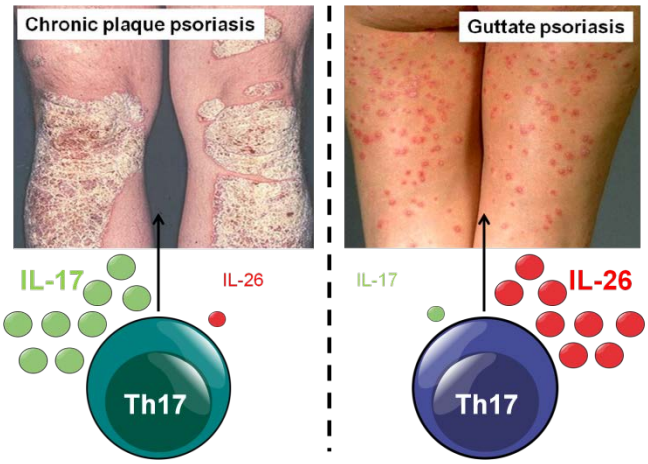
## IL-26 inhibitors to treat psoriasis and other inflammatory diseases




*Psoriasis is a life-long relapsing Th17-mediated inflammatory skin disease that affects around 2% of the worldwide population. Its most prevalent form is chronic plaque-type psoriasis, which appears to be pathogenetically related to TNF and IL-17, as their blocking is highly efficacious therapeutically. There are also acute forms of psoriasis, including guttate-type psoriasis, erythrodermic psoriasis and unstable psoriasis. These forms of psoriasis are highly inflammatory and exhibit high expression of IL-26 but not IL-17. Accordingly, the efficacy of treatments targeting the IL-17 pathway in those forms of psoriasis including disease relapses remains unclear.*

### DESCRIPTION

Th17 cells are characterized by the production of IL-17, IL-22, and IL-26. Whereas IL-17 expression by Th17 cells is associated with chronic plaque psoriasis, IL-26 production is rather associated to acute forms of psoriasis. The inventors have recently identified a unique mechanism by which Th17-derived IL-26 is linked to inflammation, based on its ability to bind extracellular DNA and to induce type I IFN in pDC. Therefore, they propose that IL-26 produced by Th17 cells but not IL-17 may drive acute forms of psoriasis (erythrodermic psoriasis, guttate psoriasis and paradoxical psoriasis) and trigger disease relapses.

### STAGE OF DEVELOPMENT

New anti-human IL-26 antibodies that block binding to DNA and IFN induction have been generated. These antibodies efficiently inhibit the pro-inflammatory function of IL-26 in IL-26 transgenic animals and are currently being tested in xenotransplant models of psoriasis. They will be humanized for human clinical trials.

### ADVANTAGES

Biologic therapies targeting TNF and IL-17 are highly efficacious for chronic plaque psoriasis. However, they may not be suitable for the therapy of acute forms of psoriasis and are unable to control relapses. Thus targeting IL-26 may be a novel therapeutic strategy for the treatment of acute forms of psoriasis and/or prevention of relapses.

These antibodies are also likely to impact therapy of other inflammatory diseases such as Crohn's disease, rheumatoid arthritis, ankylosing spondylitis, and multiple sclerosis. In fact, there is compelling evidence for an pathogenic role of IL-26 in these diseases.

### INTELLECTUAL PROPERTY

PCT/EP2016/066688 patent application
Priority date: July 13, 2015;
in the name of the University hospital of Lausanne and naming as inventors M. Gilliet, J. Di Domizio and S. Meller.

### COLLABORATION TYPE

PACTT offers to grant exclusive or non exclusive license to industrial partners able to develop and commercialize the technology.

### PUBLICATION

Meller S. et al, Nat Immunol. 2015 Sep;16(9):970-9

### REFERENCE

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