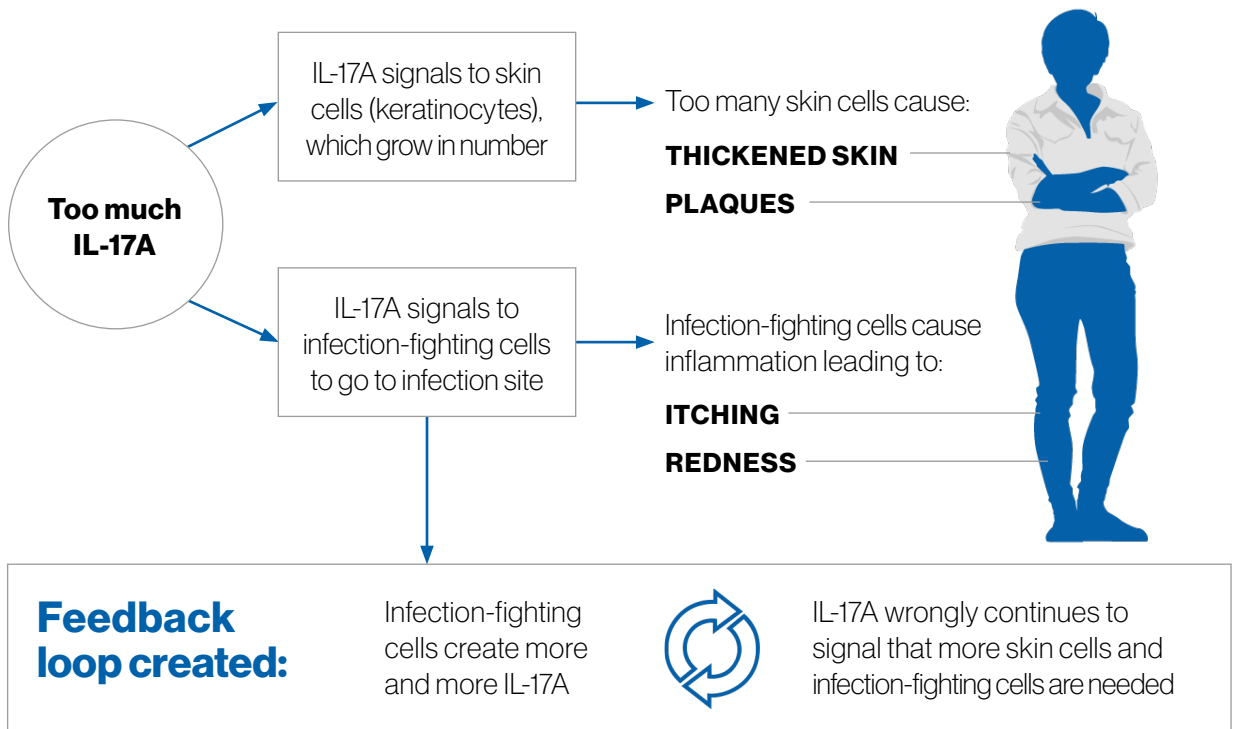


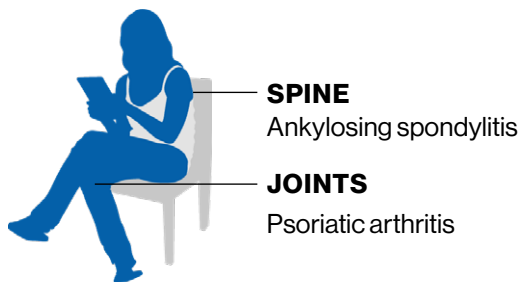
# Interleukin 17-A (IL-17A) in Psoriasis

A cornerstone cytokine (messenger protein) involved in the development of psoriasis and other autoimmune diseases<sup>1</sup>

## How increased levels of IL-17A affect the skin in psoriasis<sup>2-4</sup>



## IL-17A can affect other parts of the body<sup>3,4</sup>



## Higher IL-17A levels may cause more severe psoriasis symptoms<sup>5,6</sup>



## IL-17A: A new potential target

Newer, innovative treatments have been developed in response to this unmet need. These treatments specifically target the cytokines that trigger inflammation, such as IL-17A, and interrupt the inflammatory cycle in psoriasis. They have shown positive results in the treatment and management of psoriasis<sup>4</sup>.

1. Kirkham BW, Kavanaugh A, Reich K. Immunology. 2014; 141:133-142.  
2. Onishi RM, Gaffen SL. Immunology. 2010; 129: 311-21.  
3. Nestle FO, Kaplan DH, Barker J. N Engl J Med 2009; 361(5):496-509.  
4. Arthritis Foundation. FDA Approves Biologic Secukinumab for Ankylosing Spondylitis and Psoriatic Arthritis. Available at: <http://blog.arthritis.org/news/new-biologic-medication-fdaapproved-secukinumab/>. Accessed February 2016.  
5. National Psoriasis Foundation. The immune system and psoriatic disease. Accessed February 2016  
6. Kopf M, Bachmann MF, Marsland BJ. Nat Rev Drug Discov. 2010; 9(9):703-18.