Secukinumab is a biologic response modifier, or biologic, indicated for patients with inflammatory diseases of the skin and other systems. In January 2015, Secukinumab was FDA approved for moderate to severe plaque psoriasis.

Mechanism: Secukinumab is an injectable human monoclonal antibody against the interleukin-17A (IL-17A) cytokine, a large component of the Th17 pathway. Elevated levels of IL-17 are found in plaque psoriasis patients. By binding to IL-17A, the protein is inhibited and therefore the inflammatory response caused by this cytokine is also inhibited. Secukinumab is specific to neutralizing the effects of IL-17A, and leaves the remaining IL-17 function and Th17 pathway intact.

Uses:

- Moderate to severe plaque psoriasis. Specifically in adults who qualify for systemic or phototherapy.
- Ankylosing spondylitis in adults.
- Active psoriatic arthritis in adults.

Side Effects: Due to the anti-inflammatory nature of Secukinumab, infection is possible, just as any other biologic. In a 12-week trial of Secukinumab used for plaque psoriasis patients, the following were the most common adverse effects in order of greatest to least probable: nasopharyngitis, diarrhea, upper respiratory infections, rhinitis, oral herpes, pharyngitis, urticaria and rhinorrhea. Other reported effects include headache, dizziness, and neutropenia. Patients with any history of chronic inflammation should heed caution before starting this medication due to its high potential for exacerbation. In the same nature, patients with a history of tuberculosis should not receive Secukinumab.