

**Abstract N°: 2858****Interleukin-17 inhibitors for the management of severe rosacea**Sera Sarsam^{*1, 2}, Dédée Murrell^{1, 2}¹St George Hospital, Department of Dermatology, Kogarah, Australia, ²UNSW Sydney, Medicine, Sydney, Australia**Introduction & Objectives:**

Rosacea is a chronic inflammatory skin condition with unknown aetiology. It involves dysregulation in the immune system, vascular and nervous systems, as well as skin barrier function impairment. Rosacea has a significant impact on the patients' psychological, social, and occupational status. Challenges linked to treating rosacea include the risk of relapse after discontinuation and a limited range of options for severe and treatment-resistant cases.

Materials & Methods:

We report two cases of severe rosacea managed with an interleukin 17 (IL-17) inhibitors.

Results:

A 72-year-old female with psoriasis and severe papulopustular rosacea was commenced on brodalumab for treatment of her moderate to severe plaque psoriasis. At three-month review, there was marked improvement in her psoriasis, and incidentally her rosacea had cleared. Due to the unavailability of brodalumab, she was commenced on secukinumab 300mg SC weekly injections as a loading dose then every 4 weeks. Her rosacea remained clear with an ongoing reduced dose of secukinumab of 150 mg every 4 weeks.

A 42-year-old female presented with long-term severe erythematotelangiectatic rosacea including facial erythema and swelling. Based on our previous case and subsequent published study, she was commenced on a compassionate supply of secukinumab 300mg SC weekly injections for four weeks as a loading dose then 300mg SC every four weeks. The patient had marked improvement in her symptoms with only occasional flushing after 12 weeks of treatment. She remained on secukinumab 300mg SC every five weeks with good control of her rosacea.

Conclusion:

Recent literature has suggested that IL-17 plays a crucial in the pathogenesis of rosacea. A recent small study, assessing the efficacy of secukinumab in moderate-to-severe papulopustular rosacea, has shown that secukinumab could potentially have activity in rosacea. These two case reports contribute to the growing evidence that IL-17 inhibitors could play a role in managing rosacea. We advocate for larger randomised clinical trials to confirm these findings.

