

**Abstract N°: 1343****Successful treatment of a 15-year-old male with severe plaque psoriasis using Vunakizumab (anti-IL-17) - a case report**lanlin jiang¹, Wawa lin¹, Ledon xie¹¹Yulin Red Cross Hospital, Dermatology Department, Guangxi, China

Introduction & Objectives: IL-17 is a pro-inflammatory cytokine involved in the pathophysiology of various inflammatory skin conditions, including plaque psoriasis, which accounts for over 80% of psoriasis cases. Vunakizumab (SHR- 1314) is a novel humanized IgG1/k monoclonal antibody that selectively targets IL-17A. Although it is approved for adult plaque psoriasis, its effectiveness and safety in patients under 18 remains unclear. We present the case of a 15-year-old adolescent with severe plaque psoriasis treated under Vunakizumab. Despite extensive involvement of psoriasis on multiple body regions, the patient achieved PASI 90 after only 4-week treatment.

Materials & Methods: We report a 15-year-old male with a three-year history of severe plaque psoriasis, characterized by erythema and scaling on his trunk, limbs, scalp and face. Previous treatment with topical cream showed no improvement. He was diagnosed with severe plaque psoriasis (PASI 23.3, BSA 60%, DLQI 22). The patient subsequently received an injection of 240 mg vunakizumab at week 0,2,4, followed by maintenance dose of 240 mg every 4 weeks.

Results: After 4 weeks of treatment, his PASI score declined to 2.5, corresponding to a PASI90 response. Substantial improvement of erythema was also observed on difficult-to-treat areas such as scalp, face, nails and lower legs. Besides, his DLQI score was reduced to 2, reflecting enhanced quality of life. The patient was satisfied with the treatment results. Further clinical improvement was noticed at week 12, and this was maintained at the 28-week follow-up (PASI 2, DLQI 1). Despite receiving the standard adult dose (i.e., 240mg), the 15-year-old patient weighing 65kg responded well, with no adverse reactions.

Conclusion: We present the case of a 15-year-old adolescent patient with severe plaque psoriasis who was successfully treated with Vunakizumab. Clinical studies have demonstrated quick and meaningful responses to Vunakizumab in moderate-to-severe plaque psoriasis within 12 weeks. Likewise, our patient exhibited considerable improvement of both skin lesions and quality of life after just 4 weeks of treatment, with sustained response at 28 weeks. We demonstrate an early rapid response of this severe plaque psoriasis adolescent patient who was treated with adult dose of Vunakizumab. We also report no adverse events, which is in accordance with Vunakizumab favorable safety profile found in the literature. Further studies are needed in the future to evaluate the use of adult dosing of Vunakizumab in young plaque psoriasis patients and to investigate whether there is a relationship between the age at treatment initiation and response time.

