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Topic: Psoriasis

Psoriasis and depression challenges in biological treatment a systematicreview.

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Introduction
Psoriasis is a common, chronic, inflammatory skin disease consisting of a range of clinical symptoms. Depression is often diagnosed in patients suffering from psoriasis, which affects their quality of life and the effectiveness of treatment. Biological therapies, including TNF inhibitors, IL-17 inhibitors, and IL-23 inhibitors, have revolutionized the management of psoriasis. However, their effect on depressive symptoms in patients with psoriasis remains unexplored. This systematic review aims to assess the effect of biologic therapies on depressive symptoms in adult patients with plaque psoriasis. The goal is to evaluate whether these therapies reduce the severity of depression and improve patients' mental health.

Materials and Methods
A comprehensive literature search was conducted in PubMed, Embase, Scopus and MEDLINE using MeSH terms and free-text keywords including “psoriasis”, “depression”, “biologic therapy”, “TNF inhibitor”, “IL-17 inhibitor” and “IL-23 inhibitor”. The search included articles published in English between January 2015 and December 2025 and was performed in accordance with the PRISMA guidelines.
The search identified 642 records. After removal of duplicates and screening of titles and abstracts, 71 full-text articles were assessed for eligibility. Based on predefined inclusion criteria, 10 studies were included in the final analysis. Eligible studies involved adult patients with plaque psoriasis treated with biologic therapies and reported changes in depressive symptoms assessed using validated depression-specific instruments.

Results
Across the included studies, biologic treatment was consistently associated with improvement in depressive symptoms. Depression was most frequently assessed using HADS-D (8/10 studies), followed by QIDS-SR16, PHQ-9, BDI and MADRS. A primary follow-up at 12–16 weeks was available in 7 studies, while early follow-up at 4 weeks was reported in 2 real-world studies. IL-17 inhibitors were evaluated in 6 studies, IL-23 inhibitors in 3 studies, and TNF inhibitors in 2 studies, with some studies including more than one biologic class.
IL-17 inhibitors demonstrated the most rapid and consistent improvement in depressive symptoms. At week 12, ixekizumab reduced QIDS-SR16 scores by -6.1 to -7.1 points compared with -3.4 points with placebo (p<0.001). Secukinumab treatment resulted in mean HADS-D reductions ranging from -1.0 to -1.8 points at weeks 16-24. Brodalumab significantly reduced MADRS scores from 7.1 to 3.8 at week 12 (p=0.0007). In pooled analyses, 92.9% of patients treated with bimekizumab had PHQ-9 scores indicating no or

minimal depression at week 16, compared with 81.1% of placebo-treated patients, while the

proportion of patients with moderate-to-severe depressive symptoms was lower with active treatment (1.2% vs 6.3%).
IL-23 inhibitors were associated with significant but slightly slower improvements. Risankizumab demonstrated a greater reduction in depressive symptoms at week 16 compared with fumaric acid esters (LS mean difference -3.1, p<0.001), with effects sustained through week 24. Early real-world data indicated that reductions in depressive symptoms were detectable after 4 weeks of biologic therapy, while TNF inhibitors also reduced depression scores, though with greater heterogeneity and less consistent early effects.

Conclusions

This systematic review demonstrates that biologic therapies for plaque psoriasis are associated with significant and clinically relevant reductions in depressive symptoms, particularly within the first 12–16 weeks of treatment. The most rapid and consistent improvements were observed with IL-17 inhibitors, while IL-23 inhibitors showed sustained benefits over time. These findings support the role of biologic therapies in addressing both the physical and psychological burden of psoriasis and highlight the importance of incorporating mental health outcomes into treatment evaluation.