Comorbidities in Psoriasis

# Psoriasis and Obesity

## Obesity Impacts the Body's Homeostasis

Pathological increase of adipose tissue and dysfunction induces qualitative and quantitative changes in signal production[1]

These changes induce low-grade systemic inflammation[1-3], insulin resistance[1,4], endothelial dysfunction[4], synthesis of pro-clotting factors[4], and other metabolic disorders[1]; ultimately leading to the impairment of multiple organs and their functions[1]

## Up to 38% of patients with PsO have comorbid obesity[a,b,5,6]

## Patients With PsO and Comorbid Obesity Are More Likely to Have Involvement of Challenging Body Areas

| Palms and Soles[c,d,7] | Inverse PsO (intertriginous areas)[a,c,8] | Nails[a,c,9] |
|---|---|---|
| 3.5x | 2.2x | 1.8x |

Higher prevalence in patients with **comorbid obesity**

## 1.5x to 3x[e] higher risk of PsA in patients with PsO and comorbid obesity[f,10]

## Treatment Considerations

Patients with PsO and comorbid obesity[a] may have a **lower response to some biologics** for PsO, compared to those without comorbid obesity[11]

Weight loss is associated with a numerical **reduction in PASI score**[12]

## AAD/NPF Recommendations for Dermatologists[13]

Inform patients regarding the **association** between metabolic syndrome components and PsO

**Advise patients to practice a healthy lifestyle** (appropriate diet, regular exercise, smoking cessation, and mental wellness)

**Ensure that the patient is engaged** with their PCP for appropriate screening

**Communicate with the patient's PCP** to have them evaluated and appropriately treated for obesity/comorbidities (including referral to the appropriate HCP specialist to confirm diagnosis and treatment)

Explore the other infographics in the Comorbidities in Psoriasis series

[a]Obesity defined as BMI ≥30 kg/m². [b]The National Health and Nutrition Examination Survey (NHANES) is a nationally representative survey of the US civilian, non-institutionalized population conducted by the CDC National Center for Health Statistics (NCHS). The cross-sectional survey includes an in-home interview to obtain sociodemographic characteristics and medical history, and a physical examination and laboratory measures, including BMI, taken at a mobile examination center. Patients self-reported being diagnosed with PsO.[5,6] [c]Studies involved a small number of patients and not all studies consistently reported the same prevalence. [d]Obesity defined as BMI ≥25 kg/m². [e]Based on data from a study in US women. [f]Obesity definition ranged from BMI ≥30 kg/m² to ≥35 kg/m². AAD=American Academy of Dermatology; BMI=Body Mass Index; CDC=Centers for Disease Control and Prevention; HCP=Healthcare Professional; NPF=National Psoriasis Foundation; PCP=Primary Care Provider; PsA=Psoriatic Arthritis; PsO=Psoriasis.

1. Favaretto F, et al. *Rev Endocr Metab Disord*. 2022;23(1):71-85. 2. Guo Z, et al. *JID Innov*. 2022;2(1):100064. 3. Porta S, et al. *Front Immunol*. 2021;11:590749. 4. Russolillo A, et al. *Rheumatology (Oxford)*. 2013;52(1):62-67. 5. CDC NHANES questionnaires, datasets, and related documentation. https://wwwn.cdc.gov/nchs/nhanes/Default.aspx (Accessed January 30, 2024). 6. Data on file. Lilly USA LLC, DOF-IX-US-0341. 7. Rathod A, et al. *Indian Dermatol Online J*. 2022;13(5):606-610. 8. Herron MD, et al. *Arch Dermatol*. 2005;141(12):1527-1534. 9. Czarnecka A, et al. *Medicina (Kaunas)*. 2023;59(11):2006. 10. Scher JU, Ogdie A, et al. *Nat Rev Rheumatol*. 2019;15(3):153-166. 11. Pirro F, et al. *Clin Drug Investig*. 2021;41:917-925. 12. Jensen P, et al. *JAMA Dermatol*. 2013;149(7):795-801. 13. Elmets CA, et al. *J Am Acad Dermatol*. 2019;80(4):1073-1113.