Comorbidities in Psoriasis

Psoriasis and Cardiovascular Disease

PsO Is an Independent Risk Factor for CVD[1]

Patients with PsO are up to **50% more likely** to develop CVD compared to those without PsO[2]

PsO and Cardiometabolic Disease: Shared Inflammatory Pathways

The relationship between PsO and cardiometabolic disease is complex and may be **bidirectional**, reflecting shared physiological mechanisms involving chronic systemic inflammation[2-6]

Atherosclerosis in PsO may arise from immune activation, systemic inflammation, and cardiometabolic comorbidities, such as obesity, which further increase CV risk[2,7]

Premature Mortality in Severe PsO: CVD

Patients with severe PsO[a] have a reduced life expectancy, *dying ~5 years earlier than expected*[8,9]

CVD is the most common cause of this premature mortality[9]

This **increased mortality persists** independent of traditional CV risk factors[9]

Severe PsO Confers the Highest CV Risk

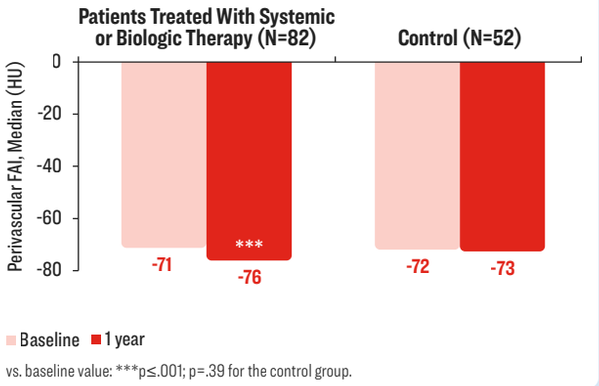
(compared with control subjects), including up to:[2]

3-fold increased odds of myocardial infarction

60% higher odds of stroke

40% higher odds of CV-related mortality

Biologic Therapy for PsO Is Associated With Reduced Coronary Inflammation[10]



vs. baseline value: ***p≤.001; p=.39 for the control group.

- **Significant decrease** in coronary inflammation after 1 year of systemic/biologic therapy
- FAI decrease **consistent among different biologic agents** (TNF, IL-12/23, and IL-17 inhibitors)
- **No significant change** in coronary inflammation in controls

AAD/NPF Recommendations[11]

Risk assessment:

- It is recommended that all patients with PsO are screened for CV risk factors—such as hypertension, diabetes, and hyperlipidemia—in line with national guidelines

Screening frequency:

Consider early and more frequent screening in patients with PsO who:

- Have >10% BSA involvement, or
- Are candidates for systemic therapy or phototherapy

Risk score adjustment:

Apply a 1.5 multiplication factor to risk score models if the patient:

- Has BSA >10%, or
- Is a candidate for systemic or phototherapy

Role of dermatology providers in CV risk management:

- Management of hypertension and dyslipidemia in patients with PsO should be carried out in line with national guidelines
- The targets for blood pressure and lipid levels are based on risk calculated for PsO
- Antihypertensives and statins may be used as in the general population
- CV risk management should be performed by a primary care physician, a healthcare provider experienced in CV risk management, or a dermatologist

Explore the other infographics in the *Comorbidities in Psoriasis* series

[a]Requiring systemic therapy or phototherapy.

AAD=American Academy of Dermatology; BSA=Body Surface Area; CV=Cardiovascular; CVD=Cardiovascular Disease; FAI=Fat Attenuation Index; HU=Hounsfield Units; IL=Interleukin; NPF=National Psoriasis Foundation; PsO=Psoriasis; TNF=Tumor Necrosis Factor.

1. Coumbe AG, et al. *Am J Med*. 2014;127(1):12-18. 2. Garshick MS, et al. *J Am Coll Cardiol*. 2021;77(13):1670-1680. 3. Hu SC, Lan CE. *Int J Mol Sci*. 2017;18(10):2211. 4. Kloock S, et al. *Pharmacol Ther*. 2023;251:108549. 5. Scala E, et al. *Life (Basel)*. 2024;14(6):733. 6. Gelfand JM, et al. *Nat Rev Cardiol*. 2025;22(5):354-371. 7. Guo Z, et al. *JID Innov*. 2022;2(1):100064. 8. Gelfand JM, et al. *Arch Dermatol*. 2007;143(12):1493-1499. 9. Abuabara K, et al. *Br J Dermatol*. 2010;163(3):586-592. 10. Elnabawi YA, et al. *JAMA Cardiol*. 2019;4(9):885-891. 11. Elmets CA, et al. *J Am Acad Dermatol*. 2019;80(4):1073-1113.

VV-MED-160078 07/2025 © 2025 LILLY USA, LLC. ALL RIGHTS RESERVED