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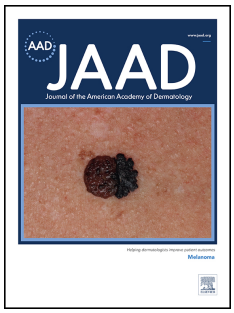

Bridging Psoriasis and Metabolic Comorbidities: Toward Comprehensive Patient Management. Priorities from the International Psoriasis Council

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Investigator: CorEvitas Psoriasis Registry, Incyte, Oruka

2 Alison M. Treichel has no relevant conflicts of interest.

3 Anne M. Bowcock has no relevant conflicts of interest.

4 K Cooper serves as a consultant for Therakos, PALA pharmaceuticals, and Treg Therapeutics. He has received research support from Leo Foundation, Castle Biosciences, and Amgen.

5 Gisondi P has received honoraria as consultant and/or speaker for AbbVie, Almirall, Bristol-Myers Squibb, Eli Lilly, LEO Pharma, Janssen,, Novartis, Pfizer, Takeda, UCB.

6, 7 Dr. Gonzalez-Cantero has served as a consultant for Abbvie, Janssen, Novartis, Lilly, Almirall, BMS, Amgen, Boehringer Ingelheim, UCB, Celgene, and Leo Pharma receiving grants/other payments.

8 J Lambert has received recent grant support from AbbVie, Almirall, Amgen, Bristol-Meyers-Squibb (BMS), J&J, Novartis, and UCB, and has served as an advisor to/speaker for AbbVie, argenx, Almirall, Bristol-Meyers-Squibb (BMS), MS Pharma inc., Celltrion, J&J, Novartis, and UCB. All fees are wired to an institutional scientific account, and not to personal benefit.

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11 NNM is a consultant and/or investigator: AbbVie, Amgen, Bristol Myers Squibb, Janssen, Lilly, Novartis, Pfizer, Sun Pharma, Tourmaline Bio, Abcentra; has received honoraria from Medscape, WebMD and Elsevier for academic content development.

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13 Peter van de Kerkhof received fees for consultancy services or lectureships from Almirall,Eli Lilly, Novartis, Janssen Pharmaceutical, Bristol-Myers Squibb, UCB, Boehringer Ingelheim, Centrion and Sandoz.

14 Dr. Gelfand served as a consultant for Abbvie, Artax (DSMB), BMS, Boehringer Ingelheim, Celldex (DSMB), FIDE (which is sponsored by multiple pharmaceutical companies) GSK, Inmagene (DSMB), Lilly, Leo, Moonlake (DSMB), Janssen Biologics, Novartis Corp, UCB (DSMB), Neuroderm (DSMB), Oruka, Inc, Teva (DSMB), and Veolia North America receiving honoraria; and receives research grants (to the Trustees of the University of Pennsylvania) from Amgen, BMS, Lilly, and Pfizer Inc.; and received payment for continuing medical education work related to psoriasis that was supported indirectly pharmaceutical sponsors. Dr Gelfand is a Deputy Editor for the Journal of Investigative Dermatology receiving honoraria from the Society for Investigative Dermatology, is Chief Medical Editor for Healio Dermatology (receiving honoraria) and is a member of the Board of Directors for the International Psoriasis Council and the Medical Dermatology Society, receiving no honoraria.

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Advances in genetics, immunology, metabolism, and epidemiology have redefined psoriasis as an inflammatory disease strongly associated with metabolic disease requiring comprehensive management to improve skin and joint outcomes while also addressing risks of obesity, diabetes, cardiovascular disease, and premature mortality. At the 2025 International Psoriasis Council (IPC) Think Tank (for report and references, see https://psoriasiscouncil.org/wp-content/uploads/2025/12/Think-Tank-Puerto-Rico-Congress-Report.pdf), experts reported that psoriasis is associated with greatly elevated risks of metabolic syndrome and major adverse cardiovascular events, with increasing skin disease severity heightening these risks[1]. Notably, obesity increases disease severity and hinders treatment response[2]. Furthermore, Mendelian randomization studies show obesity/visceral adiposity and cardiovascular disease risk contribute to psoriasis pathogenesis[3]. These findings highlight psoriasis as an inflammatory disease featuring contributions from immune cell function and cellular metabolism (Figure 1)[4]. Adiposity should be considered a primary target of effective psoriasis therapy in overweight or obese patients.

Th1, Th17, and innate immune activity are drivers of both psoriasis and cardiometabolic disease [5]. However, biologics show inconsistent cardiometabolic benefits. For example, whereas IL-17 inhibitors reduce skin inflammation and systemic inflammatory markers, with possible modest gains in endothelial function, liver fibrosis, and vascular health, they are metabolically neutral regarding glucose, lipids, and blood pressure. Conversely, GLP-1 receptor agonists show promising disease-modifying effects via weight loss and direct anti-inflammatory actions on immune cells that may reduce psoriatic arthritis

incidence. Genetic studies simulating GLP-1 receptor signaling suggest it protects against psoriatic disease[3]. Initial reports of psoriasis improvement with GLP-1 receptor agonists are promising, but randomized, placebo-controlled monotherapy trials are needed.

While the majority of laboratory and vital sign assessments represent standard primary care evaluations, dermatologists, rather than acting as primary care providers, are well-positioned to screen for increased metabolic risk in psoriasis patients by leveraging the frequent dermatology visits these patients already attend. Screening protocols, focusing on body mass index, glucose, triglycerides, LDL cholesterol, hemoglobin A1c, and blood pressure, should be used to identify patients with increased risk of cardiometabolic disease. Subsequent coordination with other specialties would increase preventative benefit. These patients would undergo obesity management via low-calorie or anti-inflammatory diets, exercise, pharmacologic weight-loss therapies (prescribed by the dermatologist or another provider), and possibly bariatric surgery, with dermatologists serving in a screening, educational, and coordinating capacity, or actually prescribing weight-loss therapies, resulting in improved treatment-independent disease severity and potentially enhanced efficacy for psoriasis medications.

During IPC's Think Tank, a multi-step priority-setting exercise employed 1-5 point rankings (77 responses), yielding 12 initial priorities; these were refined via a second weighted survey (81 responses), resulting in a final list of 5 prioritized action items, shown in Table 1 (see https://psoriasiscouncil.org/rapid-communication-metabolic-methodology/ for the full methodology). These priorities serve as a practical roadmap to raise the standard of care by bridging dermatology and metabolic medicine. They emphasize improved screening algorithms, guideline advocacy for payer coverage, additional clinical trials of GLP-1 agonists, educational programs for dermatologists, and data-mining to identify optimal subgroups. They promote multidisciplinary collaboration, early identification of

cardiometabolic risks, and targeted research, particularly beneficial for younger patients who often lack regular primary care follow-up.

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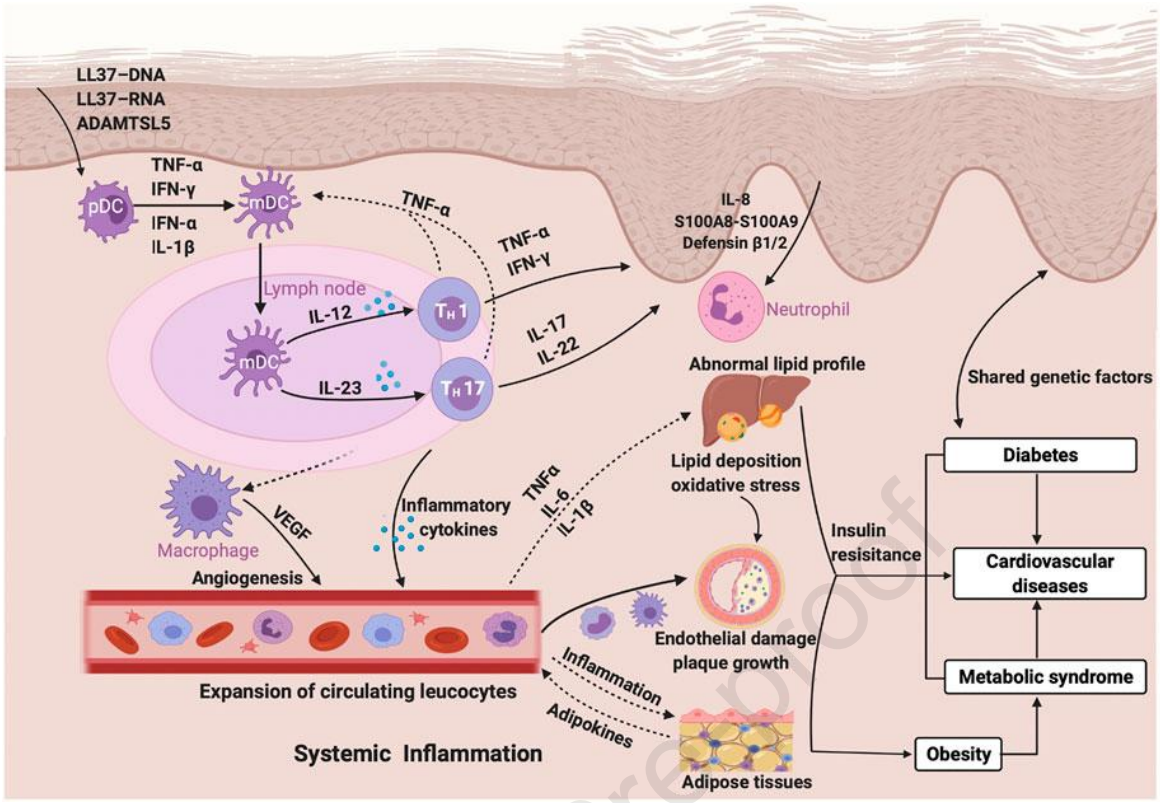
Figure 1. *An integrated view of immunometabolism to link metabolic pathways, immune cell biology, and system metabolism.*[5] *(Reproduced from Cai X, Cui Y, Wang J, et al. Cardiometabolic Comorbidities in Patients With Psoriasis: Focusing on Risk, Biological Therapy, and Pathogenesis. Frontiers in Pharmacology. 2021;12:774808. https://doi.org/10.3389/fphar.2021.774808. Licensed under Creative Commons Attribution 4.0 (CC BY 4.0).)*



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170 **Table 1.** Top 5 priorities identified at the IPC Think Tank regarding screening and treatment

171 related to psoriasis and metabolic health.

Top 5 Priorities	Weighted Average*
1. Develop practical screening algorithms for metabolic and cardiovascular comorbidities in psoriasis to guide routine practice, enhance early identification and interventions for cardiometabolic risks, and strengthen dermatologists' roles in coordinating appropriate and timely specialty referrals for patients.	2.08
2. Advocate for international guidelines to explicitly emphasize the necessity of comorbidities screening in psoriasis, addressing frequent denials of coverage and payment by private and governmental payers.	2.64

3. Conduct properly powered, randomized, placebo-controlled clinical trials evaluating GLP-1 agonists as monotherapy versus placebo in patients with mild to moderate psoriasis, assessing efficacy on disease severity, mechanisms of action, weight loss, and cardiometabolic outcomes, while identifying patient subgroups most likely to benefit.	2.81
4. Develop guidance and educational programs for dermatologists on responsibly endorsing, communicating, and integrating GLP-1 agonists with multitargeted therapies (e.g., statins, antihypertensives) for managing obesity and metabolic comorbidities in psoriasis patients, without overstating the evidence.	2.97
5. Assess efficacy and synergistic impacts of GLP-1 agonists on psoriasis and cardiometabolic outcomes, utilizing data mining to identify biologic-treated or comorbid subgroups most likely to benefit.	3

172 * Lower weighted averages indicate higher priority.