

Casual Friday Series

# **Undercover Arthritis: Psoriatic Destruction**

A Biogenetix Clinical Presentation

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# Disclaimer

- *Information in this presentation is not intended, in itself, to diagnose, treat, reverse, cure, or prevent any disease. While this presentation is based on medical literature, findings, and text, The following statements have not been evaluated by the FDA.*
- *The information provided in this presentation is for your consideration only as a practicing health care provider. Ultimately you are responsible for exercising professional judgment in the care of your own patients.*





Lifestyle + Genetics = Chronic Health Condition



## Psoriasis (Mayo's public stance)

- Psoriasis is a skin disease that causes red, itchy scaly patches, most commonly on the knees, elbows, trunk and scalp.
- Psoriasis is a common, long-term (chronic) disease with no cure. It tends to go through cycles, flaring for a few weeks or months, then subsiding for a while or going into remission. Treatments are available to help you manage symptoms. And you can incorporate lifestyle habits and coping strategies to help you live better with psoriasis.



## Five Main Types of Psoriasis



**PLAQUE**  
Psoriasis



**GUTTATE**  
Psoriasis



**INVERSE**  
Psoriasis



**PUSTULAR**  
Psoriasis



**ERYTHRODERMIC**  
Psoriasis





## Psoriatic Arthritis: Mayo Definitions

Psoriatic arthritis is a form of arthritis that affects some people who have psoriasis — a disease that causes red patches of skin topped with silvery scales. Most people develop psoriasis years before being diagnosed with psoriatic arthritis. But for some, the joint problems begin before skin patches appear or at the same time.

Joint pain, stiffness and swelling are the main signs and symptoms of psoriatic arthritis. They can affect any part of the body, including your fingertips and spine, and can range from relatively mild to severe. In both psoriasis and psoriatic arthritis, disease flares can alternate with periods of remission.

There's no cure for psoriatic arthritis. Treatment is aimed at controlling symptoms and preventing joint damage. Without treatment, psoriatic arthritis can be disabling.



## Physical Examination

Psoriatic arthritis may be present with or without obvious skin lesions, with minimal skin involvement (eg, scalp, umbilicus, intergluteal cleft), or with only nail malformations. Less joint tenderness possibly occurs with psoriatic arthritis than with rheumatoid arthritis (RA).

Recognition of the patterns of joint involvement seen in psoriatic arthritis, as follows, is essential to the diagnosis:

- Asymmetrical oligoarticular arthritis
- Symmetrical polyarthritis
- Distal interphalangeal arthropathy
- Arthritis mutilans (seen in the image below)
- Spondylitis with or without sacroiliitis







As in other spondyloarthropathies, the condition termed enthesopathy or enthesitis, reflecting inflammation at tendon or ligament insertions into bone, may be seen in psoriatic arthritis. Enthesopathy is observed more often at the attachment of the Achilles tendon and the plantar fascia to the calcaneus with the development of insertional spurs.



Ocular involvement may occur in 30% of patients with psoriatic arthritis, including conjunctivitis in 20% of patients and acute anterior uveitis in 7% of them. In patients with uveitis, 43% have sacroiliitis and 40% are HLA-B27–positive. Scleritis and keratoconjunctivitis sicca are rare. Possible ocular findings also include iritis.





Erosive disease frequently occurs in patients with either DIP involvement or progressive deforming arthritis and may lead to subluxation and, less commonly, to bony ankylosis of the joint.

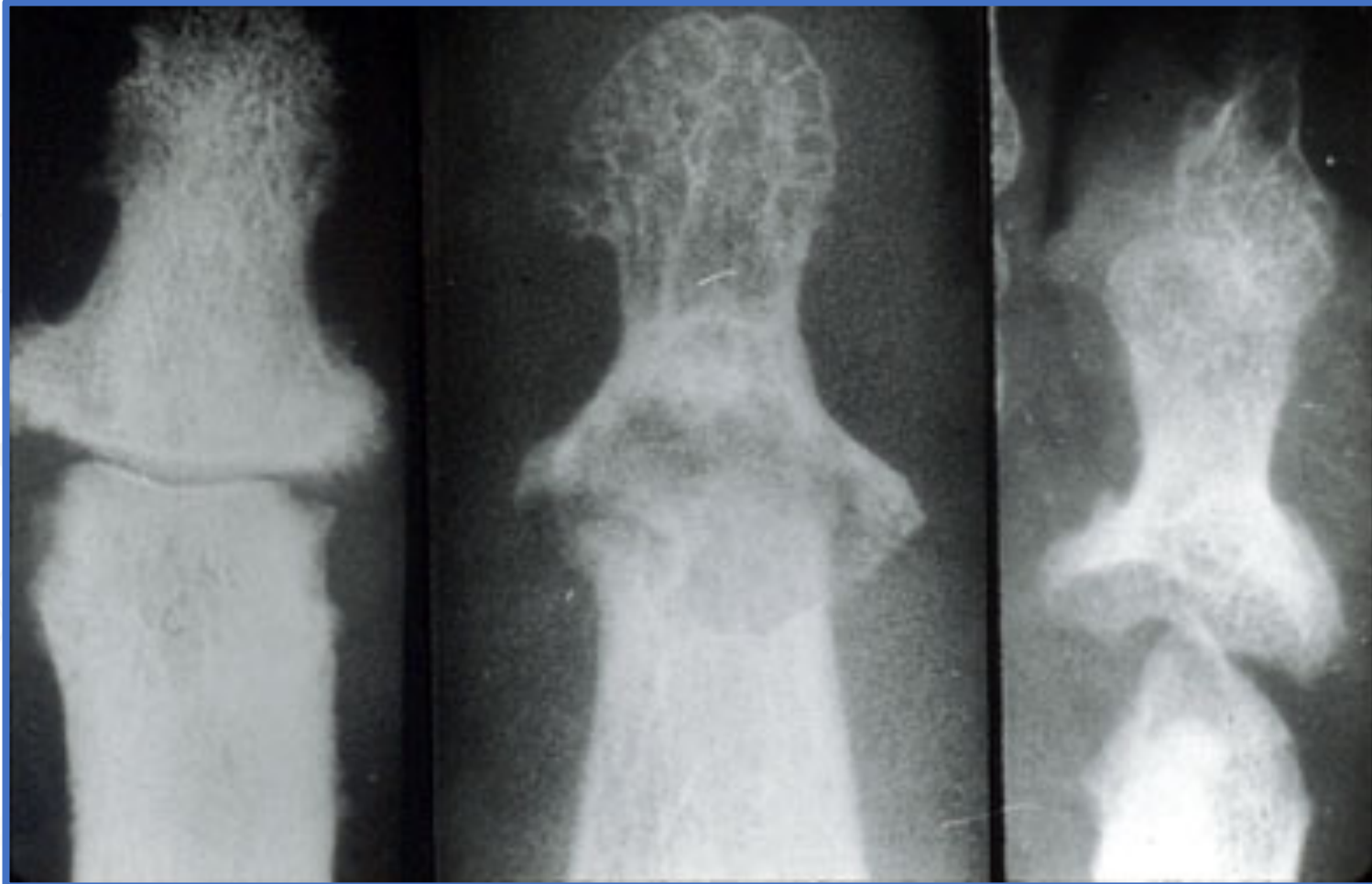
Erosion of the tuft of the distal phalanx, and even of the metacarpals or metatarsals, can progress to complete dissolution of the bone. Although this form of acro-osteolysis is not diagnostic, it is highly suggestive of psoriatic arthritis.

The pencil-in-cup deformity observed in the hands and feet of patients with severe joint disease usually affects the DIP joints but also may involve the proximal interphalangeal joints.









## Medication Summary

Pharmacologic therapy for psoriatic arthritis includes drugs in the following classes:

- Medication for symptomatic treatment: nonsteroidal anti-inflammatory drugs (NSAIDs), glucocorticoids, local glucocorticoid injections
- Oral small molecules (OSM): methotrexate, sulfasalazine, cyclosporine, leflunamide, apremilast
- Tumor necrosis factor (TNF) inhibitors: etanercept, infliximab, adalimumab, golimumab, certolizumab pegol
- Interleukin (IL12/23) inhibitor: ustekinumab, guselkumab
- IL-17 inhibitor: secukinumab, ixekizumab, brodalumab
- Cytotoxic T lymphocyte–associated antigen-4 immunoglobulin fusion protein (CTLA4-Ig): abatacept
- Janus kinase (JAK) inhibitor: tofacitinib

Take a breather.

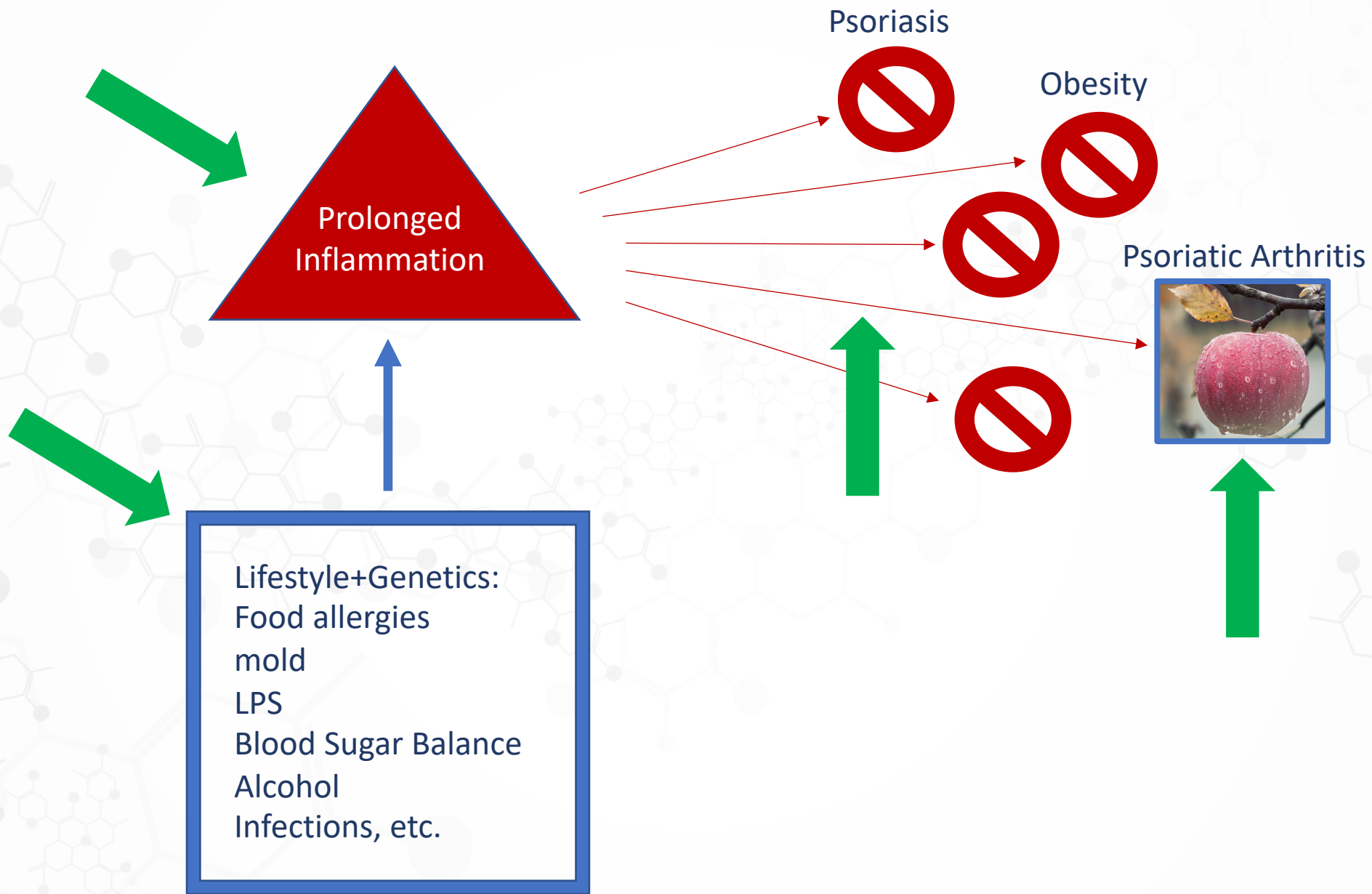
This is where they are.

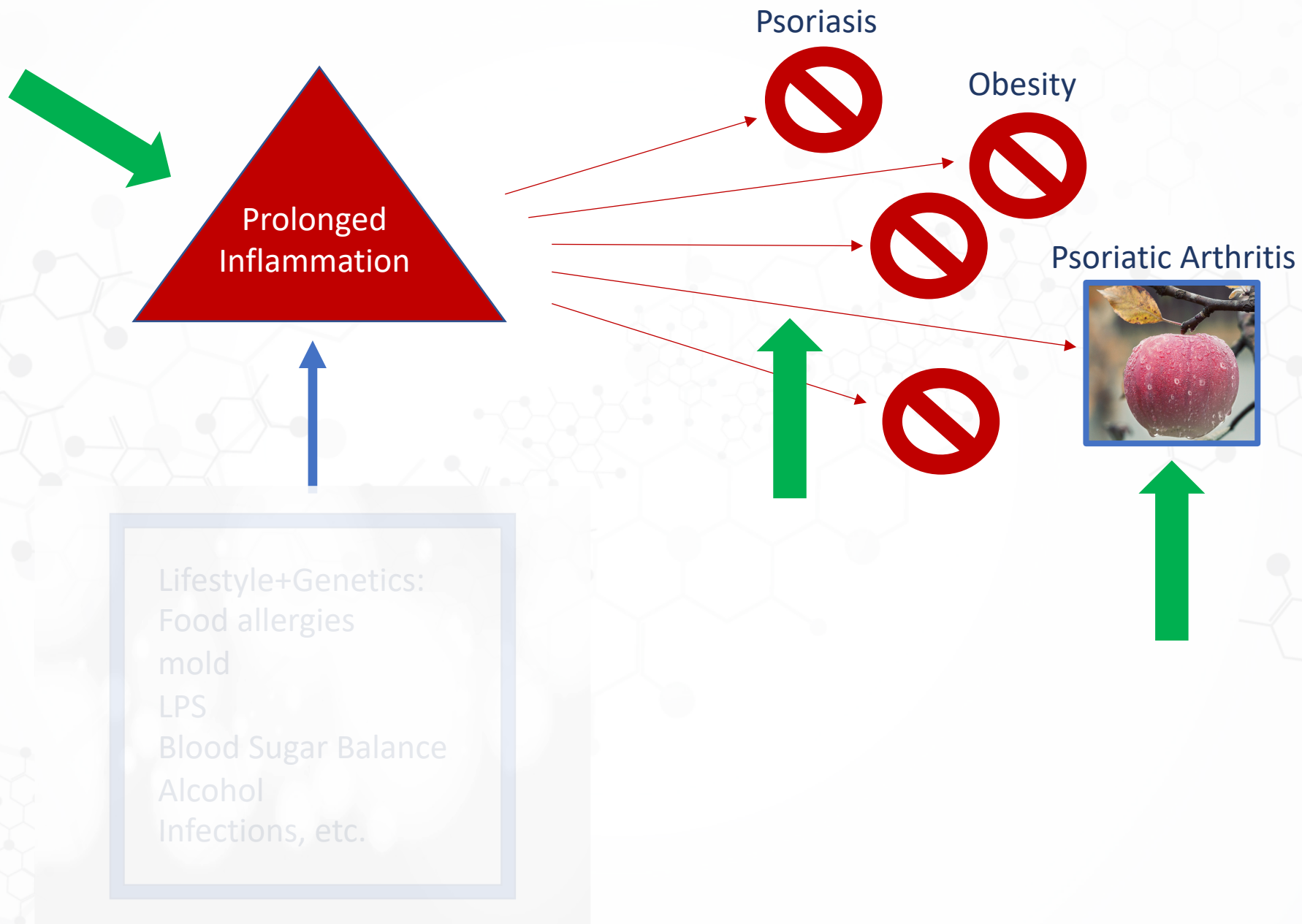
How can I help and what can I expect?













## Integrating lifestyle-focused approaches into psoriasis care: improving patient outcomes?

[Angelo](#)

► Author

Obesity has reached epidemic proportions in the global population, with obesity rates doubling since 1980.<sup>22</sup> While many factors contribute to obesity, certain disease states, psoriasis among them, have been found to be independent risk factors for the development of obesity.<sup>23</sup> Several meta-analyses have found that patients with psoriasis have >50% increased odds of obesity, and that this association is greater with increased severity of cutaneous disease.<sup>18,24</sup> Furthermore, more profound cutaneous disease is associated with a greater degree of obesity.<sup>24</sup> These associations are reflected in epidemiologic data demonstrating that psoriasis patients have a higher prevalence of obesity and a greater average body mass index when compared to the general population.<sup>25</sup>

Obesity is similar to psoriasis in that it is largely understood as a pro-inflammatory state. Adipose tissue is immunologically active, releasing soluble signals in the form of adipokines in response to pro-inflammatory signals from macrophages.<sup>18</sup> The result of this process is augmentation of circulating pro-inflammatory cytokines, including IL-6 and TNF- $\alpha$ , which are dysregulated and used as treatment targets in psoriasis and psoriatic arthritis.<sup>26</sup> While these correlations provide a basis for understanding the association between obesity and psoriatic disease, a mechanism of progression from one condition to the other has not been identified. Given the known links that both psoriasis and obesity have to cardiovascular and cerebrovascular disease, one pro-inflammatory etiology may link these conditions, their comorbidities, and their ultimate outcomes.





## Integrating lifestyle-focused approaches into psoriasis care: improving patient outcomes?

[Angelo Landriscina](#)<sup>1</sup> and [Adam J Friedman](#)<sup>2,3</sup>

Tobacco smoking represents one of the greatest public health risks, due to its widespread use (estimated at 22% of the population)<sup>1</sup> and role as a risk factor for the development of cerebrovascular disease, coronary artery disease, myocardial infarction, COPD, and a host of malignancies.<sup>2,3</sup> Evidence has also shown that tobacco smoking is associated not only with the development of psoriasis, with a larger effect seen in women, but also worsening severity of cutaneous disease in a dose-dependent fashion and altered response to treatment.<sup>4–8</sup> These effects are well described in a systematic review and meta-analysis by Armstrong et al, which found an increased risk of developing psoriasis with both greater duration of smoking and quantity of cigarettes smoked per day in both current and former smokers, as well as a higher likelihood of current or former tobacco use in psoriasis patients versus controls.<sup>7</sup>

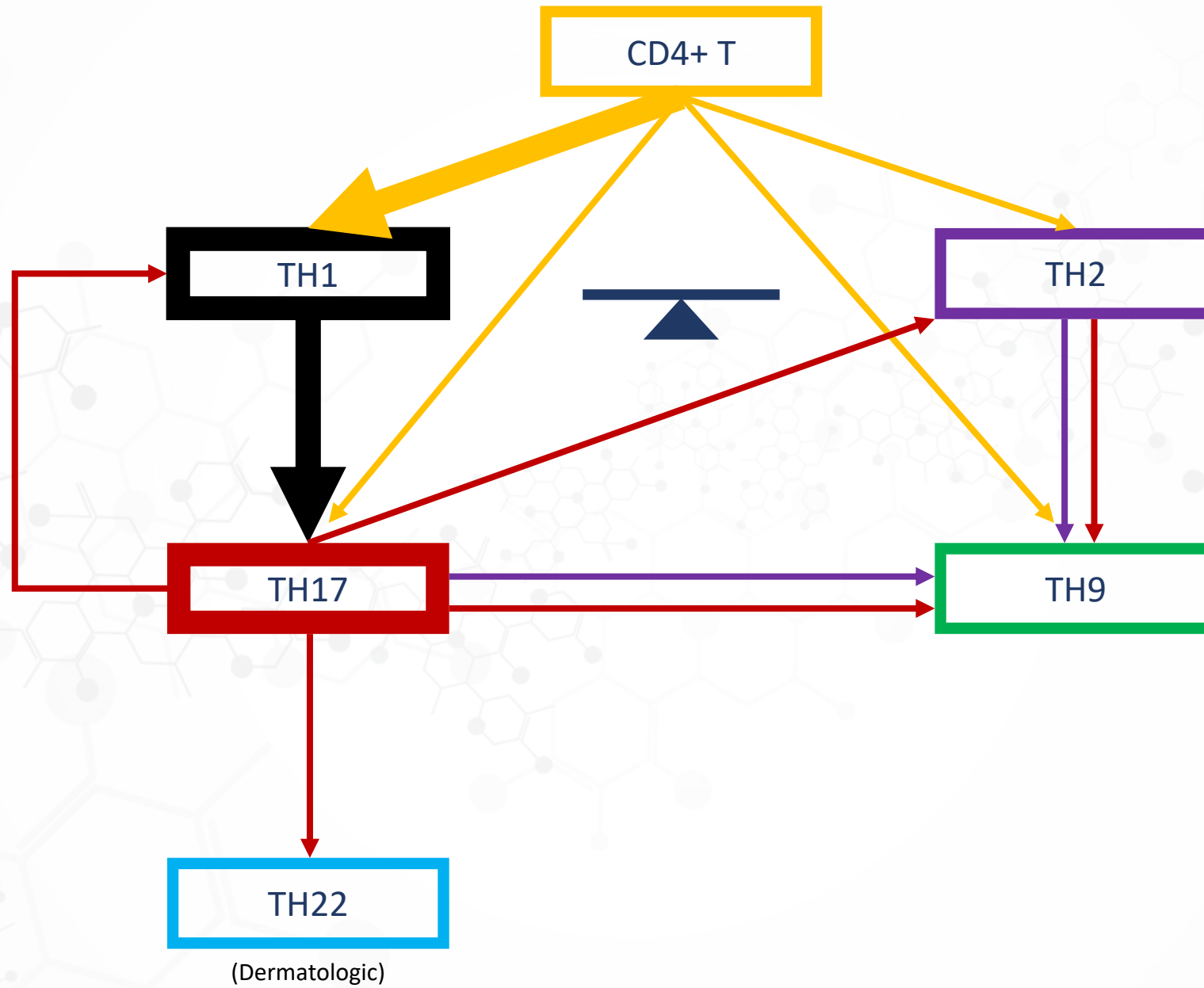


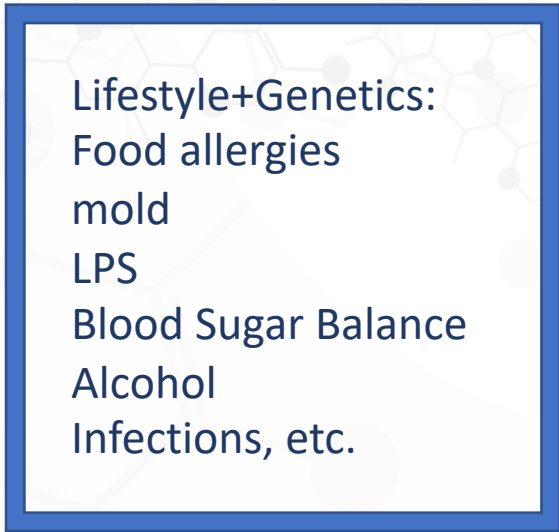
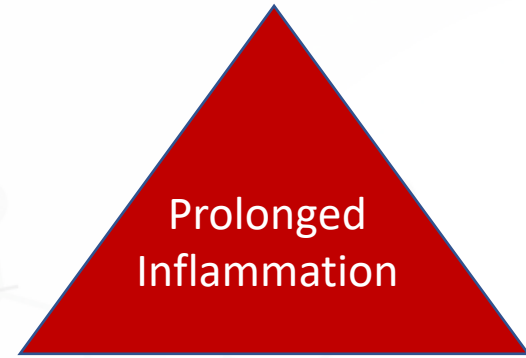
## Integrating lifestyle-focused approaches into psoriasis care: improving patient outcomes?

[Angelo Landriscina](#)<sup>1</sup> and [Adam J Friedman](#)<sup>2,3</sup>

The association between alcohol abuse and psoriatic disease has been known for decades, though the mechanism of this association is still unknown.<sup>32</sup> While low level alcohol consumption may be protective against some disease states, the correlation between psoriasis and alcohol use is troubling. Studies have suggested that the amount of alcohol consumed by patients on a regular basis correlates with severity of cutaneous disease.<sup>33</sup> A recent study by Zou et al found that alcohol intake as measured by serum measures or phosphatidylethanol correlated with increasing Psoriasis Area and Severity Index scores.<sup>33</sup> Furthermore, it has been shown that psoriasis puts patients at risk for non-alcoholic fatty liver disease.<sup>34</sup> This combined with the hepatic damage caused by alcohol and the widespread use of hepatotoxic drugs such as methotrexate for the treatment of psoriasis create a concerning constellation of risk factors for liver disease.







Heart Disease



Obesity

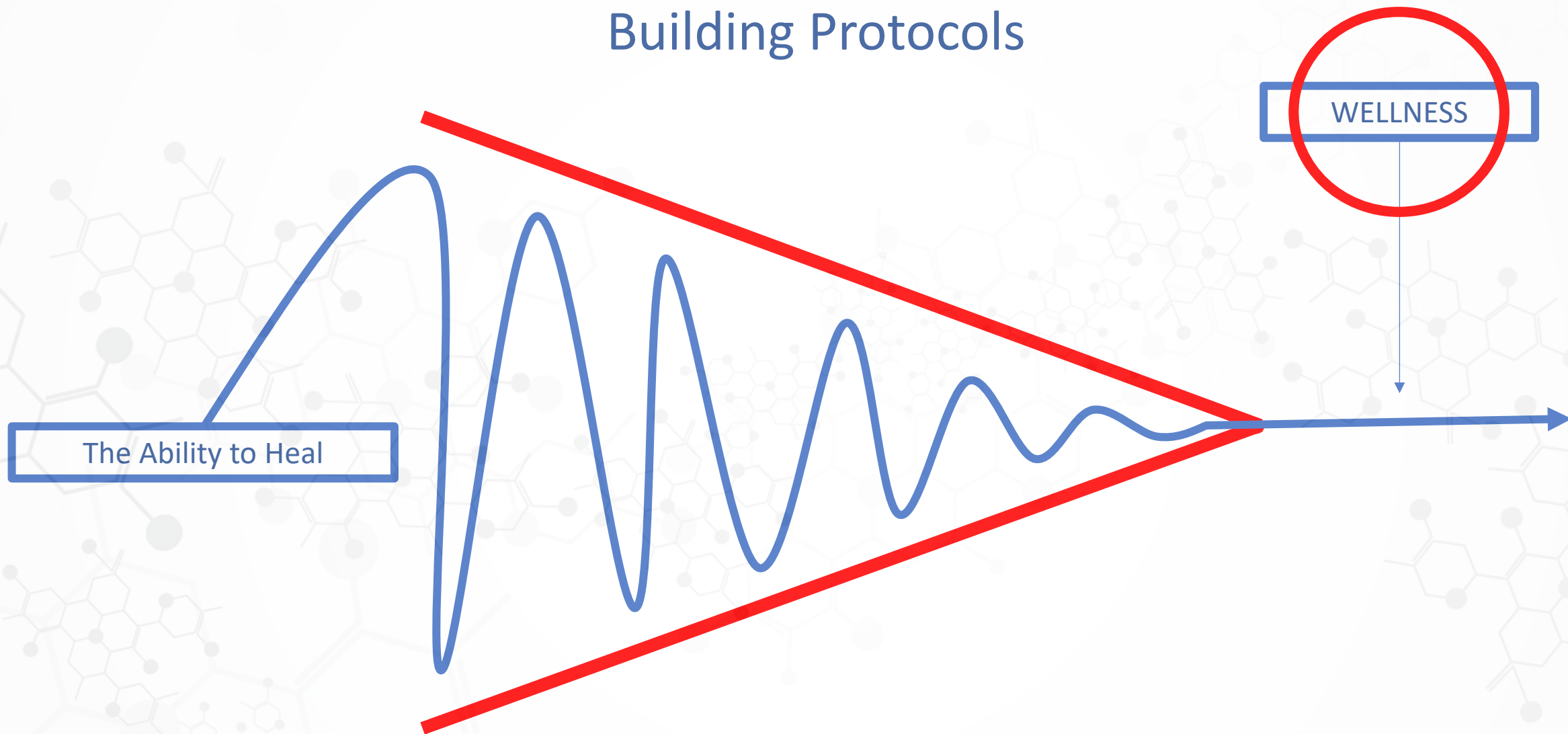


Psoriatic Arthritis





# Building Protocols



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