

Pop Quiz: AAD-NPF Psoriasis Guidelines

Over the past 2 years, the American Academy of Dermatology and the National Psoriasis Foundation have jointly released updated guidelines of care for patients with psoriasis. Test your knowledge of the recommendations with this pop quiz!



Affecting approximately 3% of the United States population, psoriasis is a multisystem disease that requires a multifactorial approach to care. Recognizing this layered approach, the American Academy of Dermatology (AAD) and the National Psoriasis Foundation (NPF) jointly published detailed guidelines of care, including recommendations for:

- Disease management with attention to comorbidities¹
- Biologics²
- Phototherapy³
- Pediatric patients⁴
- Systemic nonbiologic therapies⁵
- Topical and complementary medicines⁶

Test your knowledge of the six published AAD-NPF guidelines of care for psoriasis with this pop quiz!

What laboratory monitoring is recommended before starting a biologic?

- a) Complete blood count and comprehensive metabolic panel
- b) Complete blood count, comprehensive metabolic panel, tuberculosis, and hepatitis B and C
- c) Complete blood count, tuberculosis, plus hepatitis B and C
- d) Comprehensive metabolic panel and hepatitis B and C

For psoriasis treated with biologic agents, what is the strategy for dose escalation?

- a) Shortening intervals between injections
- b) Increasing dosing
- c) Adding other modalities such as topical corticosteroids or phototherapy
- d) All of the above

Which of the following comorbid conditions does not have recommendations for care in the guidelines?

- a) Inflammatory bowel disease
- b) Cardiovascular disease
- c) Metabolic syndrome
- d) Malignancy

What phototherapy modality is recommended as a possible treatment for nail psoriasis?

- a) Methyl aminolevulinic acid (MAL) photodynamic therapy
- b) 5-aminolevulinic acid (ALA) photodynamic therapy
- c) Pulsed dye laser
- d) Goeckerman therapy

Which of the following complementary medicine modalities is not discussed in the AAD-NPF guidelines?

- a) Hypnosis
- b) Cannabinoids
- c) Gluten-free diet
- d) Fish oil

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What laboratory monitoring is recommended before starting a biologic?

Prior to starting a patient on a biologic, the guidelines recommend testing for **complete blood count, comprehensive metabolic panel, tuberculosis, and hepatitis B and C.**² Ongoing monitoring of complete blood count and comprehensive metabolic panel are not supported by evidence and may be assessed at the discretion of the physician. An exception to ongoing monitoring is patients being treated with infliximab, for whom it is recommended that liver function tests be repeated 3 months after initiation; if the results for this patient fall within a normal range, then liver function may be monitored on an annual or semiannual basis.

Systemic nonbiologic therapies have similar recommendations for baseline laboratory monitoring. The AAD-NPF guidelines⁵ recommend the following baseline laboratory testing for FDA approved systemic nonbiologic agents:

- Methotrexate: complete blood count, blood urea nitrogen, liver function testing, hepatitis B and C, and tuberculosis
- Apremilast: routine laboratory screening on an individual basis
- Cyclosporine: complete blood count, blood pressure, blood urea nitrogen, creatinine, urinalysis, tuberculosis, liver function testing, lipid profile, magnesium, uric acid, and potassium (pregnancy test may also be indicated)
- Acitretin: complete blood count, liver function testing, lipid profile, and renal function testing (pregnancy test may also be indicated)

For psoriasis treated with biologic agents, what is the strategy for dose escalation?

According to Menter et al,² strategy for dose escalation can involve **shortening intervals between injections, increasing dosing, and adding other modalities such as topical corticosteroids or phototherapy.**

Definitive response to treatment may be evaluated after 12 weeks of continuous therapy for patients receiving IL-12/IL-23, IL-17, and IL-23 inhibitors. For tumor necrosis factor inhibitors, definitive response may be ascertained after 12 to 16 weeks of continuous therapy, though infliximab should be evaluated after 8 to 10 weeks. For patients who only partially respond to therapy, all of the above options may be suitable and should be considered on an individual basis. While there is limited published data regarding combination therapy for IL-23 and IL-17 inhibitors, there is no reason to consider this an unsafe option, according to the guidelines.²

Which of the following comorbid conditions does not have recommendations for care in the guidelines?

While Elmets et al¹ outlined evidence-based recommendations for a number of psoriasis comorbidities, **malignancy** was not one of them. Research has shown an increased incidence of certain malignancies, such as lymphohematopoietic, head and neck, and digestive tract cancers. Nonmelanoma skin cancers are also of concern, particularly if patients are receiving psoralen UV-A therapy as well

as possibly those who have received cyclosporine or TNF inhibitors. There does not appear to be an increased risk of malignancy with anti-interleukin biologic agents, though the guidelines note further long-term study is needed to understand the risks.

Other comorbidities without recommendations are renal disease, sleep apnea, chronic obstructive pulmonary disease, uveitis, and hepatic disease.

What phototherapy modality is recommended as a possible treatment for nail psoriasis?

Of the options listed, only **pulsed dye laser** is supported by the literature as an effective treatment for nail psoriasis.³ In fact, photodynamic therapy with topical MAL and with topical ALA are not recommended for nail psoriasis, as there is no significant difference in Nail Psoriasis Severity Index scores between MAL photodynamic therapy and pulsed dye laser alone. Goeckerman therapy, while safe and effective overall for patients with severe or recalcitrant psoriasis, does not have any supporting literature specifically to nail psoriasis.

An additional phototherapy option for nail psoriasis may be intense pulsed light, though more study is needed.

Which of the following complementary medicine modalities is not discussed in the AAD-NPF guidelines?

The latest update to the guidelines, which highlights topical therapy, complementary medicine, and severity measures,⁶ does not explicitly discuss or recommend **cannabinoids** as an alternative medicine modality for psoriasis. This is due to a dearth of literature examining its use as a psoriasis therapy. The guidelines do discuss stress reduction, hypnosis, curcumin, zinc, gluten-free diet, vitamin D supplementation, fish oil supplementation, topical St John's wort, topical aloe vera, and traditional Chinese medicine as complementary alternative medicine. ■

References

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6. Elmets CA, Korman NJ, Farley Prater E, et al. Joint AAD–NPF guidelines of care for the management and treatment of psoriasis with topical therapy and alternative medicine modalities for psoriasis severity measures. *J Am Acad Dermatol.* 2021;84(2):432-470. doi:10.1016/j.jaad.2020.07.087