CME Questions:

A 55 year old obese male presents with plaque psoriasis with 15% BSA involvement. His medical history is remarkable for diabetes, chronic kidney disease, Crohn’s disease, and a history of optic neuritis. Current medications include lisinopril and insulin. He is a current smoker with a 35 pack-year smoking history and drinks six alcoholic drinks per week.

1. Which of the following is the most appropriate and likely to be effective treatment:

   a. Methotrexate
   b. Apremilast
   c. Adalimumab
   d. Ustekinumab
   e. Secukinumab

Answer: d

Discussion: Indirect comparisons of clinical trial efficacy suggest that the biologics (adalimumab, ustekinumab, secukinumab) are more efficacious than oral systemic (methotrexate, apremilast) medications. Additionally, the patient’s alcohol intake, obesity, and diabetes put him at greater risk for hepatic complications with concurrent methotrexate treatment. The patient’s history of optic neuritis is a relative contraindication to treatment with TNF inhibitors, including adalimumab, as
rare cases of demyelinating disease have been reported with TNF inhibitor treatment. Lastly, the patient’s history of Crohn’s disease is a relative contraindication to treatment with secukinumab considering reports of exacerbation of inflammatory bowel disease in clinical trials. Thus, ustekinumab is the most appropriate treatment choice and is also the most likely to be effective for this obese patient given its weight-based dosing.


2. You decide to start a biologic therapy. Which of the following evaluations or interventions is not appropriate at this time?

   a. Hepatitis B serologies
   b. Pneumococcal vaccine
   c. Chest x-ray
   d. Weight-loss counseling
   e. Low-dose chest CT

Answer: c

Discussion: The Centers for Disease Control and Prevention and the Medical Board of the National Psoriasis Foundation recommend screening all patients for hepatitis B infection prior to initiating immunosuppressive therapy (including biologics) with triple serology and baseline liver function tests. Keeping up-to-date with recommended vaccinations, including pneumonia vaccinations, is also recommended for patients requiring immunosuppressive therapy per The Advisory Committee for Immunization Practices and the Medical Board of the National Psoriasis Foundation. Considering the increased cardiovascular risk that may be associated particularly with more severe psoriasis, patients should be counseled about managing their cardiovascular
risk factors including weight among those who are overweight or obese. Lastly, the patient’s smoking history qualifies him for lung cancer screening with low dose computed tomography per the U.S. Preventative Services Task Force’s recommendations to perform yearly screening on all individuals aged 55 to 80 with a smoking history of at least 30 pack-years and who are currently smoking or quit within the last 15 years. Chest x-ray is not recommended for lung cancer screening, nor is it recommended for tuberculosis screening among asymptomatic individuals without evidence of latent tuberculosis.


