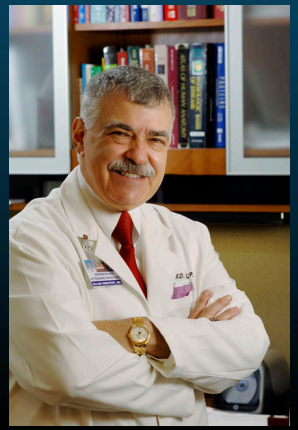
CMEO Snack

Pathogenesis of Psoriatic Arthritis: A Broader Understanding to Inform Next Steps

Supported by an educational grant from Bristol-Myers Squibb Company



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Today's Activity Is Eligible for ABIM MOC Credit and as a CME for MIPS Improvement Activity

Complete your post-test and evaluation at the conclusion of the activity

ABIM CME MOC ACCREDITED

Be sure to fill in your **ABIM ID number** and **DOB** (MM/DD) on the evaluation so we can submit your credit to ABIM

CME for MIPS IMPROVEMENT ACTIVITY

Over the next 90 days, actively work to incorporate improvements in your clinical practice from this presentation

- Complete the follow-up survey from CME Outfitters in approximately 3 months
- CME Outfitters will send you confirmation of your participation to submit to CMS attesting to your completion of a CME for MIPS Improvement Activity

CME Outfitters

CME Outfitters
CONTINUING MEDICAL EDUCATION

Learning Objective

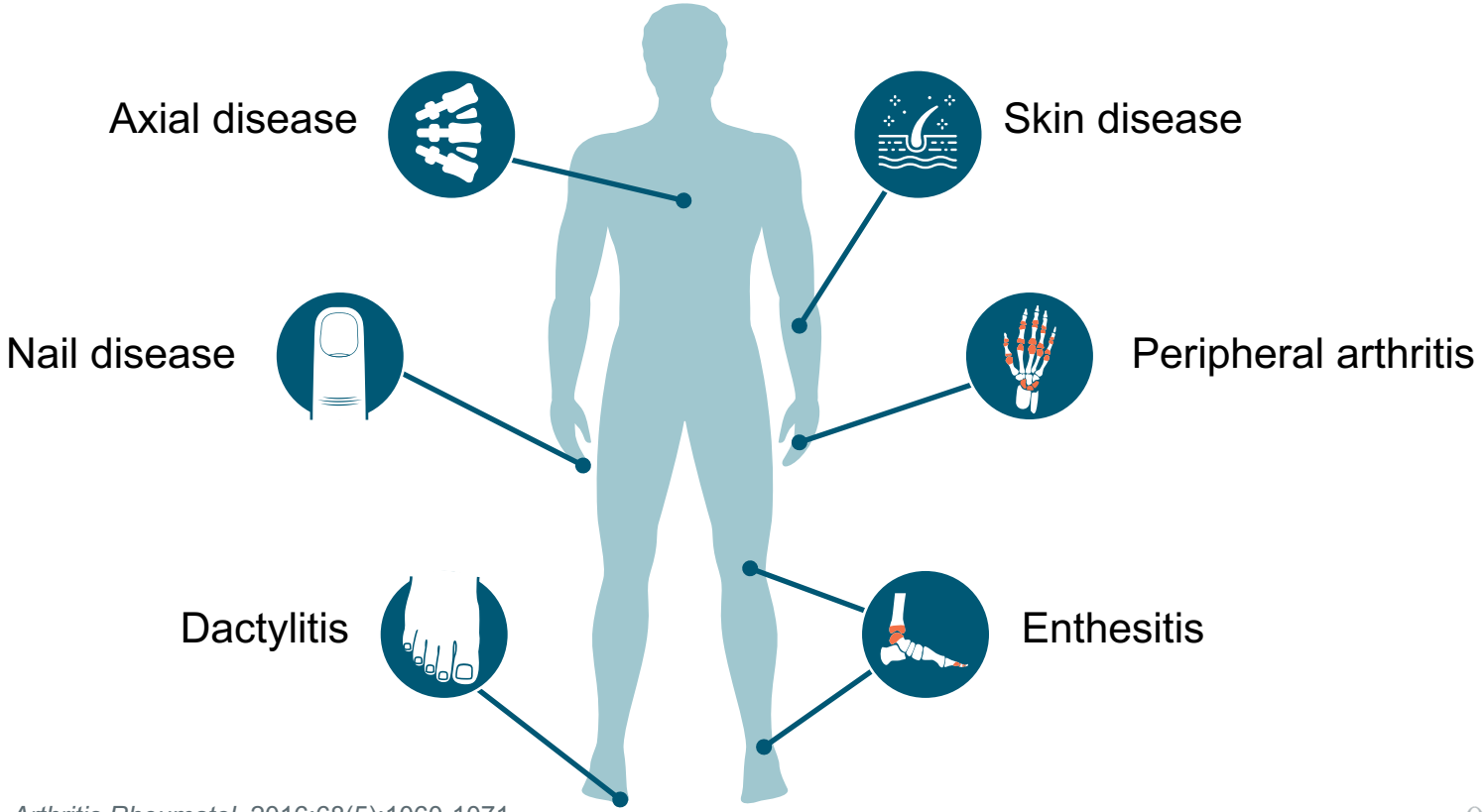
Describe clinically relevant pathophysiologic processes that contribute to the development of psoriatic arthritis.

Does a Psoriatic Arthritis Diagnosis Begin in the Dermatology or Rheumatology Office?

- Psoriatic arthritis (PsA) presents in up to 30% of patients with psoriasis (PsO)
- PsA may precede, occur concurrently with, or occur after the development of PsO
- Data suggest that the majority of patients present with PsO, compared to patients who present with joint pain

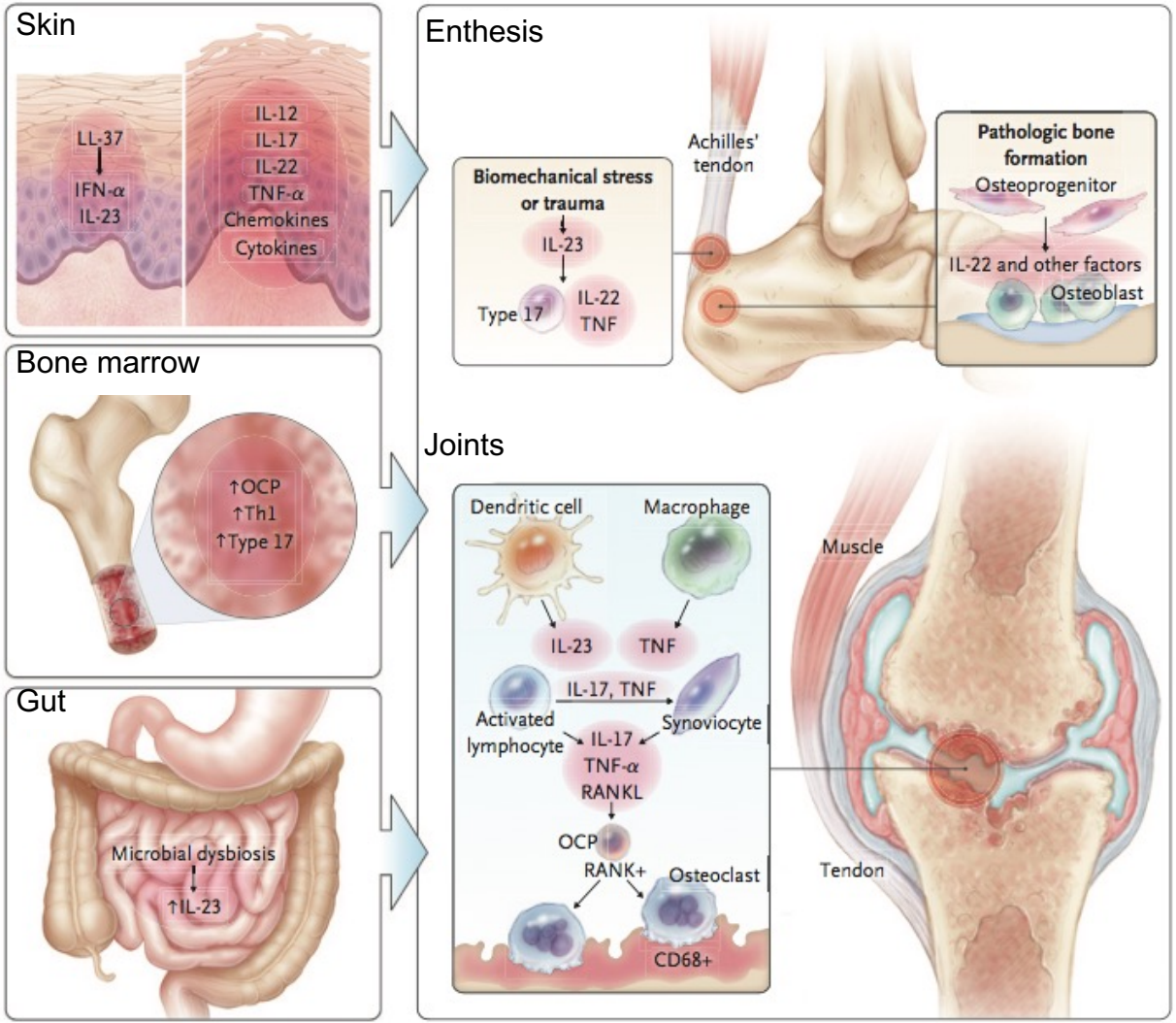
Ritchlin C, et al. *N Engl J Med.* 2017;376:957-970.

Clinical Domains of PsA



Coates LC, et al. *Arthritis Rheumatol*. 2016;68(5):1060-1071.

Pathogenic Pathways in PsA

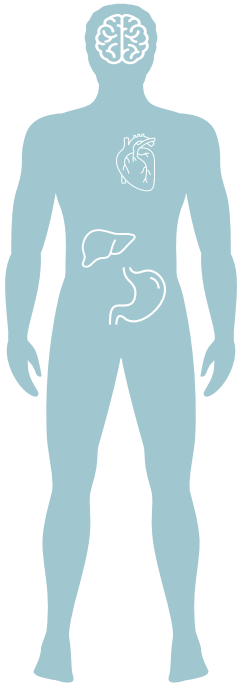


Ritchlin C, et al. *N Engl J Med.* 2017;376:957-970.

Common Comorbidities in PsA

Ocular inflammation[1]
(eg, uveitis/iritis)

Inflammatory bowel disease[2]



Psychosocial burden[3,4]
- Anxiety
- Depression
- Suicidal ideation
- Substance use

Increased risk of CVD[5-8]
- Hyperlipidemia
- Hypertension
- Insulin resistance
- Diabetes
- Obesity

CVD = cardiovascular disease

1. Au S, et al. *Psoriasis Forum*. 2011;17:169-179. 2. Li WQ, et al. *Ann Rheum Dis*. 2013;72(7):1200-1205. 3. Husni E, et al. *Semin Arthritis Rheum*. 2017;47:351-360. 4. Chisholm A, et al. *Rheumatology (Oxford)*. 2016;55(6):1047-1052. 5. Egeberg E, et al. *Rheumatology Advances in Practice*. 2018;0:1-5. 6. Mallbris L, et al. *Curr Rheumatol Rep*. 2006;8(5):355-363. 7. Neimann Al, et al. *J Am Acad Dermatol*. 2006;55(5):829-835. 8. Tam LS, et al. *Rheumatology (Oxford)*. 2008;47(5):718-723.

PsA Screening Tests

- PEST[1-4] →
- PASE[2]
- ToPAS[3]
- EARP[2]
- PASQ[3]

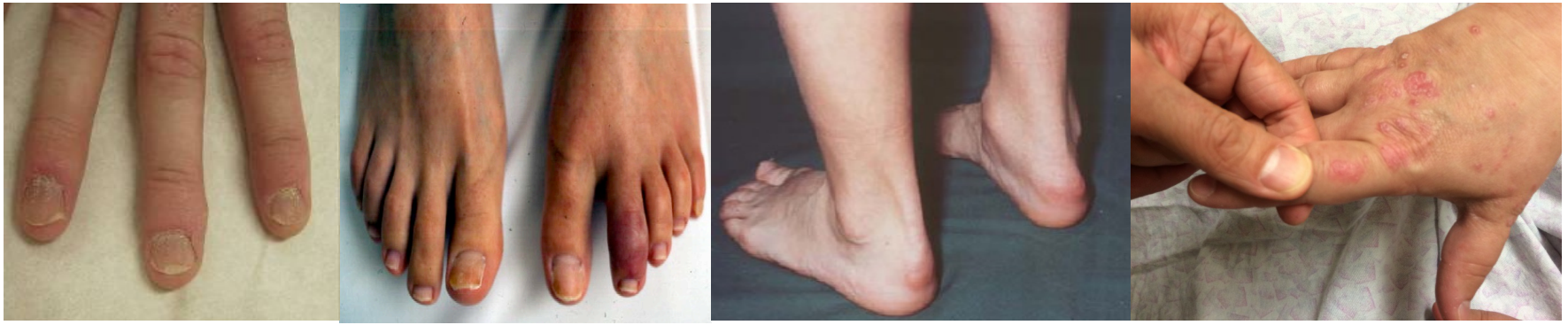
Please answer the questions below and score 1 point for each question answered 'yes'		
	Yes	No
1. Have you ever had a swollen joint (or joints)?		
2. Has a doctor ever told you that you have arthritis?		
3. Do your fingernails or toenails have holes or pits?		
4. Have you had pain in your heel?		
5. Have you had a finger or toe that was completely swollen and painful for no apparent reason?		
	Total	**/5**
A total score of 3 or more out of 5 is positive and indicates that a referral to rheumatology should be considered.		

1. Helliwell PS, et al. *J Rheumatol.* 2011;38:551-552. 2. Ibrahim GH, et al. *Clin Exp Rheumatol.* 2009;27(3):469-474. 3. Karreman MC, et al. *Rheumatology.* 2017;56(4):597-602. 4. National Psoriasis Foundation Website. https://www.psoriasis.org/psoriatic-arthritis-screening-test/.

Screening for PsA in Clinical Practice

Identify symptoms/signs of PsA

- Morning-joint stiffness, joint pain that improves with activity
- Swollen tender joints, dactylitis, enthesitis, inflammatory back pain, uveitis
- Check X-rays of affected joints and CCP, CRP, RF



CCP = cyclic citrullinated peptide; CRP = C-reactive protein; RF = rheumatoid factor

Fourth image courtesy of Joel M Gelfand, MD, MSCE

Gisondi P, et al. *J Eur Acad Dermatol Venereol*. 2017;31(12):2119-2123.

Workup

- Lab testing
  - Complete blood count with differential
  - Blood urea nitrogen, creatinine, uric acid, and urinalysis
  - ESR and CRP
  - RF, anti-CCP antibody, and ANA
  - HLA-B27 testing in patients with PsO who present with arthritis and if PsA is suspected despite absence of psoriasiform skin lesions
- Arthrocentesis and synovial fluid analysis
- Radiographs of involved joints (e.g., hands, feet, sacroiliac joints)

ANA = antinuclear antibody; anti-CCP = anti–cyclic citrullinated peptide; ESR = erythrocyte sedimentation rate

Rida MA, Chandran V. *Clin Immunol*. 2020;214:108390.

CASPAR Criteria for the Classification of PsA

Inflammatory musculoskeletal disease (arthritis, spondylitis, enthesitis) with ≥ 3 points from the following:	
Evidence of PsO:	
Current PsO	2
Personal history of PsO	1
Family history of PsO	1
Psoriatic nail dystrophy	1
Negative rheumatoid factor	1
Dactylitis (current or recorded by a rheumatologist)	1
Radiographic evidence of juxta-articular new bone formation	1

CASPAR = **Clas**sification Criteria for **P**soriatic **Ar**thritis
Taylor W, et al. *Arthritis Rheum.*2006;54:2665-2673.

Defining Conditions and Considerations: Examples of Severe Disease

Severe PsO	Severe PsA
• PASI ≥ 12 • BSA ≥ 10% • Significant involvement in specific areas (e.g., face, hands or feet, nails, intertriginous areas, scalp) where disease burden causes significant disability • Impairment of physical or mental functioning can warrant a designation of moderate-to-severe disease despite the lower amount of skin surface area involved	• Erosive disease • Elevated markers of inflammation (ESR, CRP) attributable to PsA • Long-term damage that interferes with function (i.e., joint deformities) • Highly active disease that causes a major impairment in quality of life • Active PsA at many sites, including dactylitis, enthesitis • Function-limiting PsA at a few sites • Rapidly progressive disease

BSA = body surface area; PASI = Psoriasis Area and Severity Index

Singh JA, et al. *Arthritis Care Res (Hoboken)*. 2019;71(1):2-29.

Differentiating Axial PsA from AS

- Axial PsA and AS are part of the spectrum of spondyloarthritis
  - Overlapping features but different genetic, clinical, radiographic, and prognostic characteristics
- HLA-B27 occurs less frequently in axial PsA but is a genetic risk factor for both diseases
- Axial PsA develops at older age, is less symptomatic, and is associated with distinct radiographic features
- Lack of universally accepted definition of axial PsA
- True comparison of two diseases is challenging

AS = ankylosing spondylosis

Feld J, et al. *Nat Rev Rheumatol*. 2018;14(6):363-371.

SMART Goals

Specific, Measurable, Attainable, Relevant, Timely

- Recognize that PsA can present in the dermatology or rheumatology clinic depending on the primary symptom
- Accurately diagnose PsA by utilizing simple and easy-to-administer screening questionnaires
- Screen patients with PsA for common comorbidities

CMEO Snack

Mechanistic Rationales for Novel and Emerging Treatments for Psoriatic Arthritis: Plugging the Data into the Equation

Joining Forces in the Coordination of Care of Patients with Psoriatic Arthritis

www.CMEOutfitters.com/PsA-hub/

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To receive CME/CE credit, click on the link to complete the post-test and evaluation online.

www.cmeoutfitters.com/TST44781

Be sure to fill in your **ABIM ID number** and **DOB** (MM/DD) on the evaluation so we can submit your credit to ABIM

Participants can print their certificate or statement of credit immediately.

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