Psoriatic arthritis: "itis" of the skin and joint

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Disclosures

- Member, National Commission on Certification of Physician Assistants Board of Directors

Objectives

After completing this session, attendees will be able to

- utilize the latest diagnostic approaches when evaluating persons with psoriatic arthritis.
- identify the currently approved medications for psoriatic arthritis.
- describe the risks, benefits and expectations of biologics in treating psoriatic arthritis.

References

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Psoriasis (PsO)

Etymology

Greek-*psora*-itch *iasis*-action, condition

”itching condition”, “being itchy”

- **Autoimmune**
- **Chronic**
- **Inflammatory**
- **Dermatologic**

PsO: Epidemiology

- Prevalence: varied 0.5 to 11.4% (adult), 0 to 1.4% (children)
- Geographic location: distance from equator
- Male = Female
- Bimodal Age Peaks:
  - 30-39
  - 50-69
- ?Increasing incidence

PsO: Risk Factors

- Genetic factors
  - 40% with PsO have 1st degree relative with PsO
  - Monozygotic > Dizygotic twins
- Smoking
- EtOH
- Obesity
- Stress
- Trauma
- Vitamin D deficiency
- Drugs (β-blockers, lithium, antimalarials, TNF-i, others)
- Infections (bacterial or viral---guttate w/ poststreptococcal, HIV)

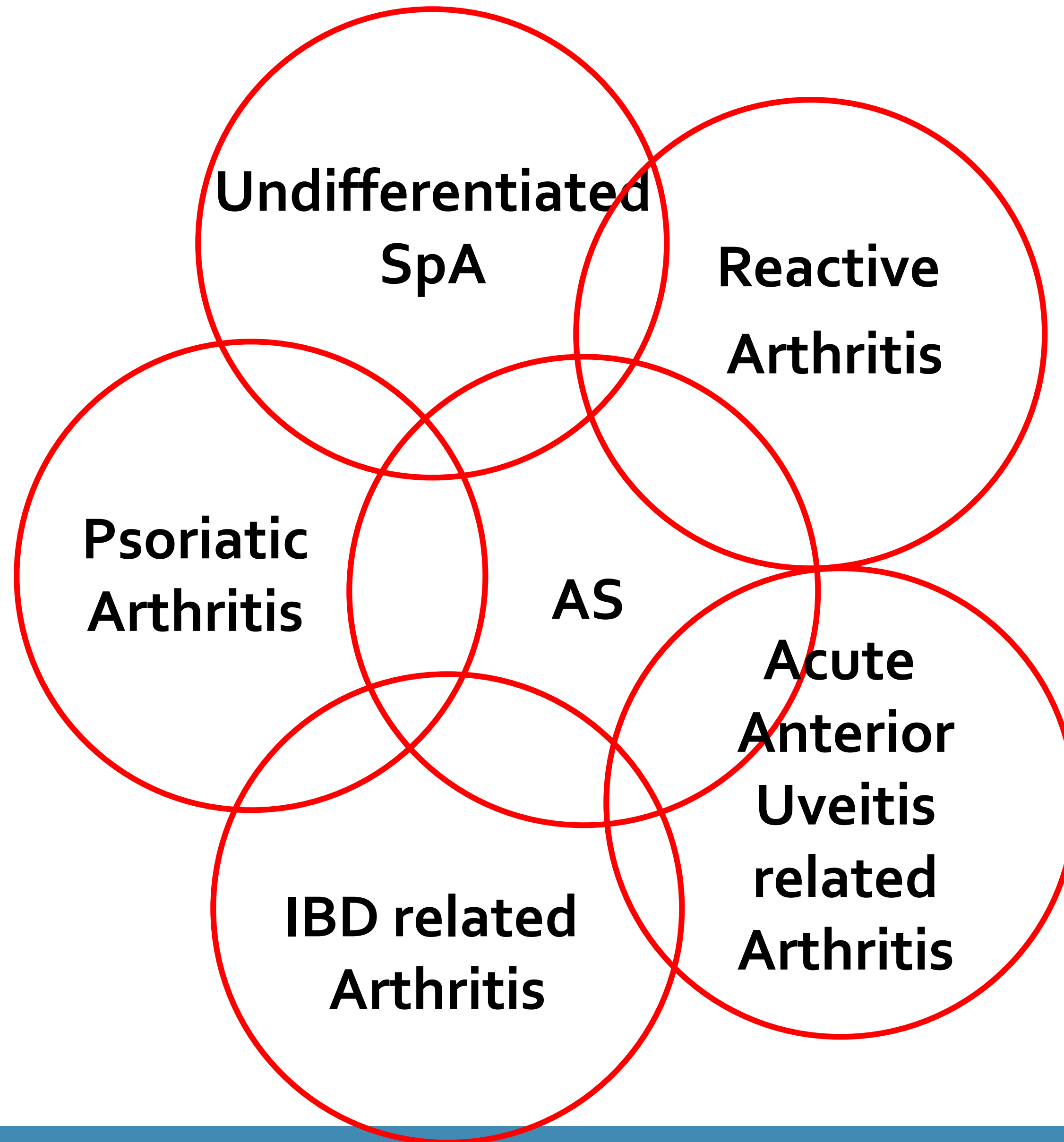
PsO: 6 Main Types

- **Chronic Plaque** – most common
- **Guttate** – “drop like”
- **Pustular** – aseptic pustules
- **Erythrodermic** – generalized intense erythema
- **Inverse** – intertriginous, flexural areas
- **Nail** – nail bed & matrix

Classic Signs

- Koebner phenomenon: skin disease at site of skin trauma
- Ausptiz sign: pinpoint bleeding after removal of scale overlying psoriatic plaque

The Spondyloarthritis (SpA) Group



SpA are a group of rheumatic disorders that share several common factors:

1. **Synovitis *and* enthesitis**
2. **Similar association with HLA-B27**
3. **Usually RF -ve**

PsA: Epidemiology

- **Psoriasis** affects approximately 3% caucasian population, rare in African Americans
- **25-31%** of pts with psoriasis **may have PsA**
- **Male = Female**
- **Peak Onset 30 – 50 yrs**
- Skin psoriasis precedes arthritis 85% (5-10 % develop arthritis prior to or simultaneously)

Cush, J., Kavanagh, A., & Stein, M. (2005). Rheumatoid Diseases. In Danette Somers, (Ed.), Rheumatology Diagnosis & Therapeutics, 2nd edition (pp 323-333). Philadelphia, PA: Lippincott, Williams & Wilkins.

Psoriatic Arthritis (PsA)

A chronic inflammatory arthritis - usually occurs with established cutaneous psoriasis, with or without nail changes.

- **Axial** or **peripheral** joint involvement
- May present as **oligoarthritis**, **asymmetric**
- **Insidious** onset
- “**Sausage digits**” – dactylitis
- **Enthesopathy** – tendon insertion sites

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Definitions

- Dactylitis-diffuse swelling of an entire finger or toe.
- Enthesitis-inflammation at the site of the insertion of tendons, ligaments, and joint capsule. (Lower > Upper extremity)
  - Plantar fascia
  - Achilles tendon
  - Spine
  - Pelvis
  - Ribs

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CATCH ALL OF THE CLUES!!!

ARTHRITIS MUTILANS

Clinical Features PsA

- **DIP involvement**
- **Asymmetric distribution**
- **Nail lesions (pitting or oncholysis)**
- **Hidden PsO plaques (scalp, gluteal fold, umbilicus)**
- **Dactylitis** (40-50%)
- **Enthesitis** (30-50%)
- **Eye involvement** (iritis, conjunctivitis, scleritis)
- **Spine involvement** (sacroiliitis which may be asymmetric)

Psoriatic Arthritis (PsA)

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Nail Pitting

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Psoriatic Arthritis (PsA)

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Psoriatic Arthritis (PsA)

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PsA: Characterisitics

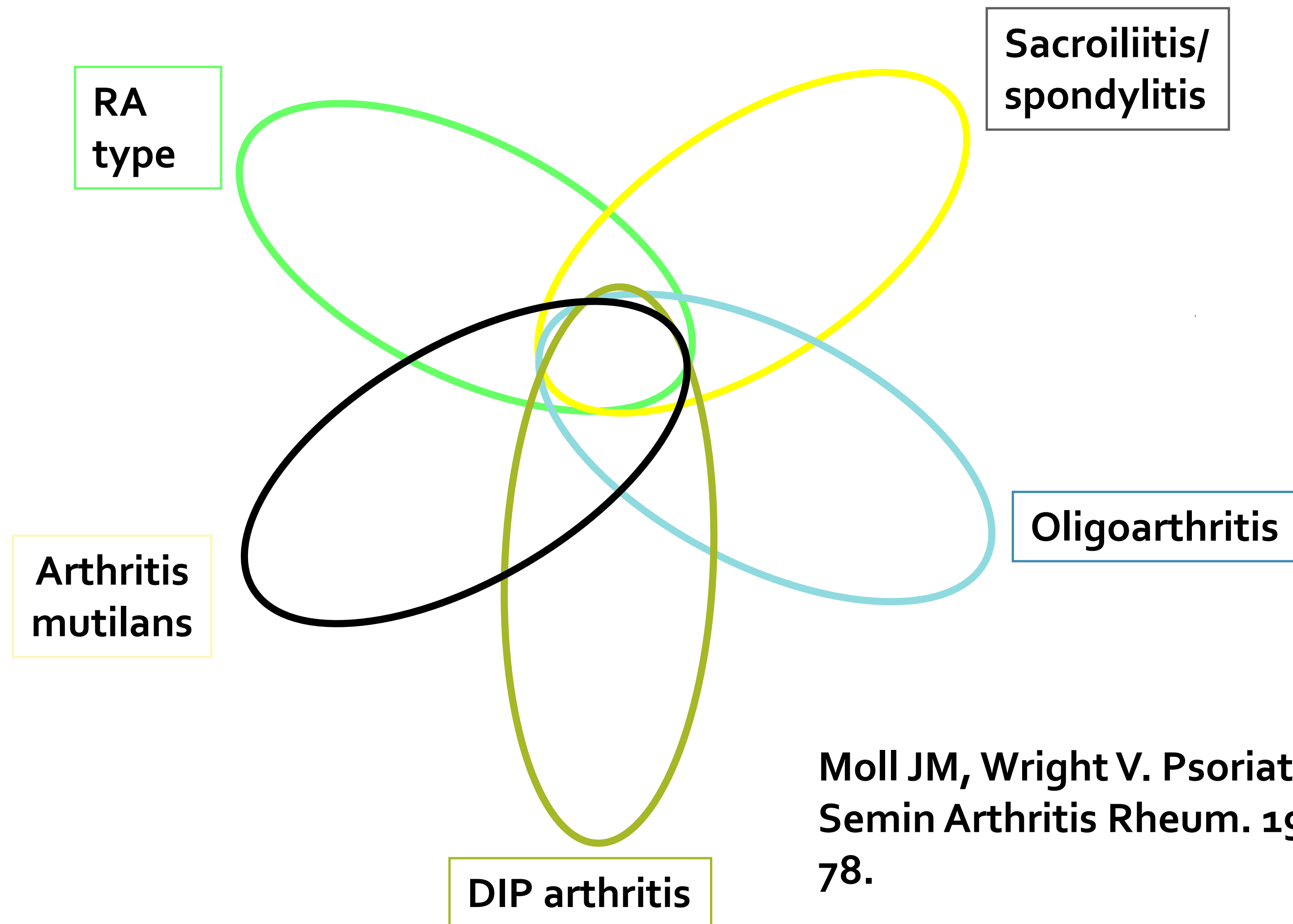
Persons with PsO more likely to develop PsA if…

-increased PsO severity (??)

-presence of nail lesions

-scalp and intergluteal lesions

Moll & Wright Classification of Psoriatic Arthritis



Moll JM, Wright V. Psoriatic arthritis. Semin Arthritis Rheum. 1973;3:55-78.

PsA Presentation

- Enthesitis
- Arthritis Mutilans
- DIP involvement
- Dactylitis
- Oligoarticular (usually LE)
- Symmetric, Polyarticular
- Sacroillitis

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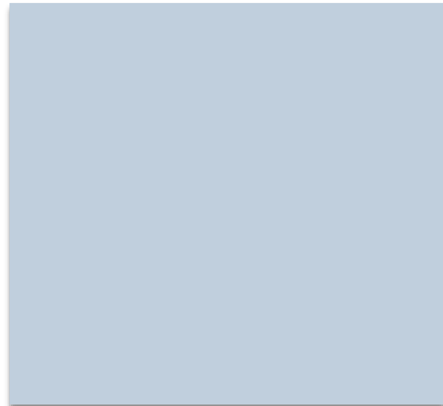
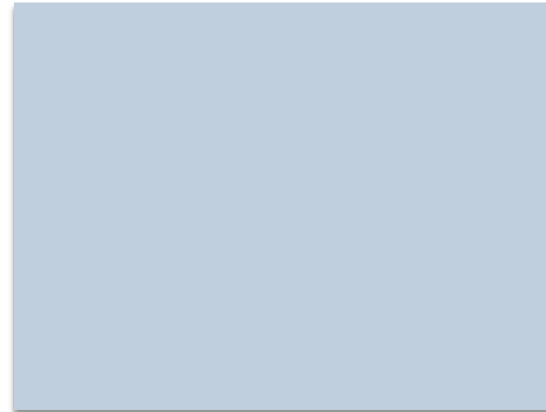
PsA: Findings on Physical Exam

Nail Pitting

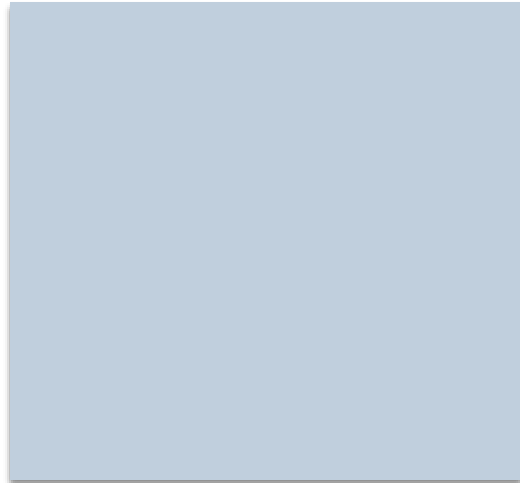
Psoriasis

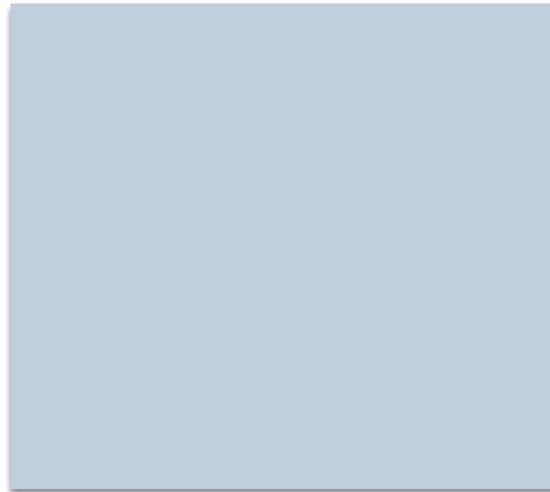




Dactylitis "Sausage Digit"

Joint Swelling





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PsA: Diagnostic Pearls

- "**All over**" pain can sometimes be due to enthesopathy (Tenderness @ trochanteric bursae, epicondyles, plantar fascia)
- **Physical Exam**: Nail pitting, scalp plaques with scale and erythema, "sausage digit" (dactylitis)
- **History**: chronic foot pain (plantar fasciitis)
- **Fam History**: Psoriasis
- **Xray**: Heel spur, PIP soft tissue swelling

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Systemic Treatments for PsA

Oral DMARDs	Biologic DMARDs TNF Blockers	Biologic DMARDs Novel MOA
Immunosuppressant Leflunomide (Arava) MTX (methotrexate) SSZ (sulfasalazine)	**TNF blockers** Adalimumab (Humira) Certolizumab (Cimzia) Etanercept (Enbrel) Golimumab (Simponi) Infliximab (Remicade)	**IL-17A blocker** Secukinumab (Cosentyx) Ixekizumab (Taltz)
		CTLA4-Ig Abatacept (Orencia)
PhosphoDiestErase 4 (PDE4) inhibitor Apremilast (Otezla)	**Janus Kinase inhibitor** Tofacitinib (Xeljanz)	**IL 12 & 23** Ustekinumab (Stelara)

Biologics: Potential Risks

- **Injection site/infusion reaction**
- **Infection risk (bacterial, TB/other granulomatous, opportunistic)**
- **Malignancy risk ?**
- **Demyelinating Disease, MS or Family Hx**
- **Heart failure**
- **Drug induced syndromes (ANA, dsDNA)**
- **Cytopenias**

My Pre- Biologic Questions

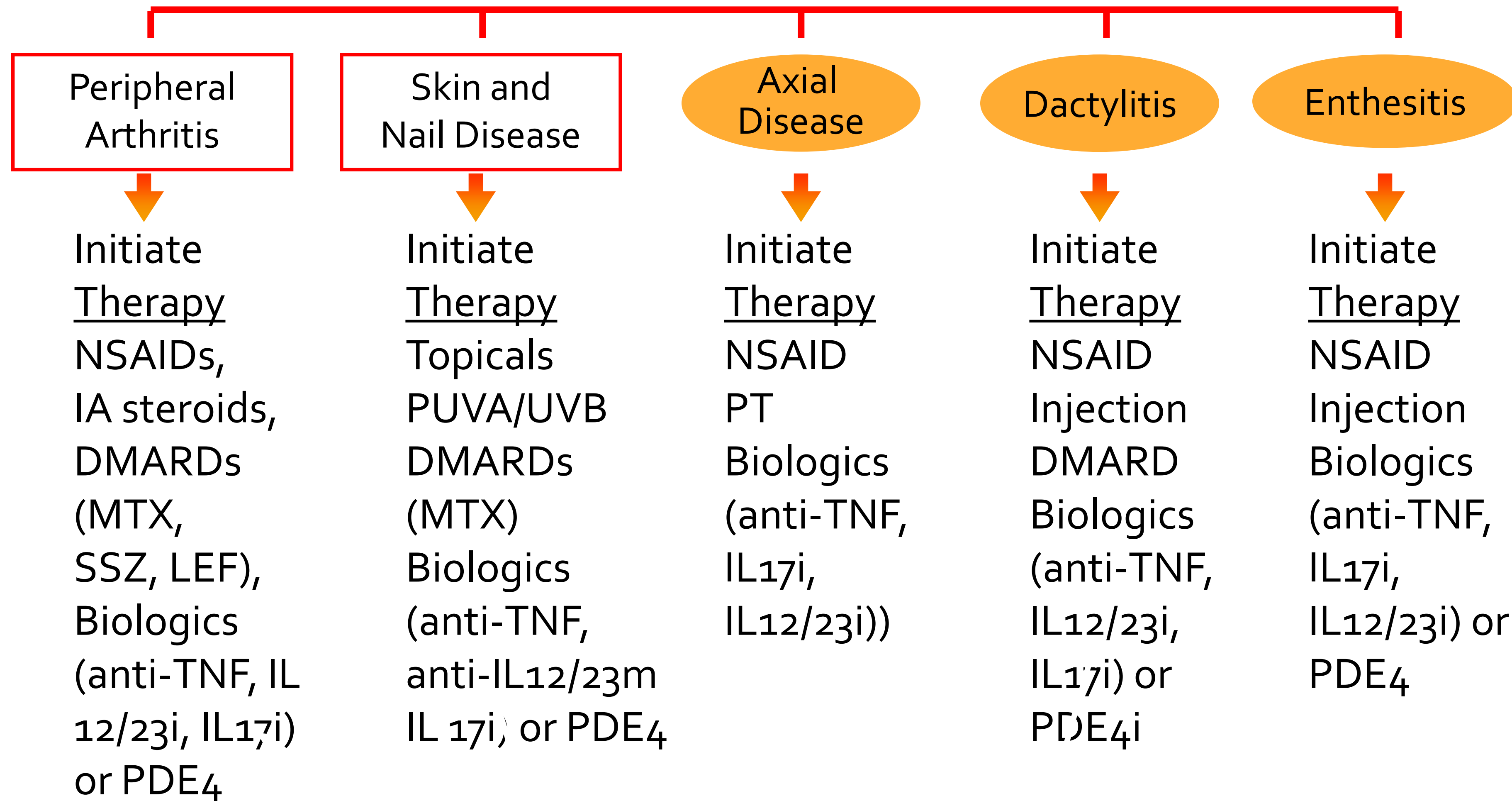
- **Current/recurrent infxns**
- **Cancer (CA)**
- **Congestive Heart Failure (CHF)**
- **Chronic Obstructive Pulmonary Disease (COPD)/asthma**
- **Tuberculosis (TB)**
  - **PPD hx**
  - **Exposure**
- **Multiple Sclerosis (MS)**
- **Hepatitis B/C**
- **Hyperlipidemia**

Pre-Biologic Screeing

Pre-drug screening

- **CXR**
- **PPD/Interferon-gamma release assays (IGRAs)**
- **Pneumonia vaccine**
- **Influenza vaccine**
- **Hepatitis B and C serologies**

GRAPPA PsA Treatment Guidelines



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