

Summary of GCA and PMR

GCA and PMR share:



Burden of disease is likely to increase with aging population¹



High rates of comorbidities²



There are limited steroid-sparing options available for these conditions²



The pathophysiology is thought to involve promotion of proinflammatory Th17 cells and inhibition of regulatory T cells³



GCA

- Diagnosis should be considered a **neuro-ophthalmic emergency**⁴
- **80%** of patients present with **isolated cranial symptoms**: headache, scalp tenderness, jaw claudication, and vision issues¹
- Diagnostic delays are more common in patients with noncranial symptoms⁵
- **Complications can be serious**⁶:
 - Permanent vision loss: 20%
 - Stroke: 3% to 7%
- First-line treatment has limitations⁷:
 - High rate of relapse: 34% to 62%
 - Treatment-related adverse events: 85%
 - Low rates of remission: Up to 20%
- Mean time from **symptom onset to diagnosis was 8 weeks**⁸



PMR

- Characteristically presents as **rapid onset of symmetrical pain and stiffness** in and around the shoulders, neck, and hip girdle⁹
- Involves inflammation in the **connective tissues surrounding the tendons and muscles**^{9,10}
- **Pain restricts the active shoulder range of motion** and may impair sleep and routine daytime activities
- Diagnosis is challenging with **nonspecific features** that overlap with other rheumatological disorders^{10,11}
- **Prognosis is favorable with prompt diagnosis** and appropriate treatment; however, up to 50% of patients experience flares upon glucocorticoid tapering or discontinuation^{10, 12}
- Carries an **increased risk ratio of CVD** (1.15 to 2.70) and inflammatory arthritis¹³
- Average delay from **symptom onset to diagnosis is ~12 weeks**¹⁴

CVD, cardiovascular disease; GCA, giant cell arteritis; PMR, polymyalgia rheumatica; Th, T-helper.

1. Bond M et al. *Ther Adv Musculoskel Dis*. 2022;14:1-20. 2. Charlton R. *Ther Clin Risk Manag*. 2012;8:173-179. 3. Robinette ML et al. *Front Immunol*. 2021;12:623716. 4. Borg FA et al. *Curr Allergy Asthma Rep*. 2008;8(4):323-330. 5. Helliwell T et al. *BMJ Open*. 2018;8(2):e019320. 6. Bajko Z et al. *Exp Ther Med*. 2021;22:876. 7. Dejaco C et al. *Nat Rev Rheumatol*. 2017;13(10):578-592. 8. Prior JA et al. *BMC Med*. 2017;15(1):120. 9. Lundberg IE et al. *J Intern Med*. 2022;292(5):717-732. 10. Nielsen BD, Dasgupta B. *Reumatismo*. 2018;70(1):1-9. 11. Dejaco C et al. *Arthritis Rheumatol*. 2015;67(10):2569-2580. 12. Smutny T et al. *J Clin Med*. 2019;8(5):582. 13. Hancock AT et al. *CMAJ*. 2014;186(13):E495-E501. 14. Frolund LL et al. *Joint Bone Spine*. 2021;88(5):105185.