## SJÖGREN'S DISEASE:

### **Beyond sicca symptoms**





Sjögren's disease (SjD) is a serious, systemic, heterogeneous autoimmune disease<sup>1</sup>

No 2 patients with SjD present the same, and their glandular and extraglandular disease can be variable 1,2



mouth and/or

ocular sicca3,\*





of patients experience fatigue<sup>3,5,\*</sup>



of patients experience joint pain<sup>6,\*</sup>



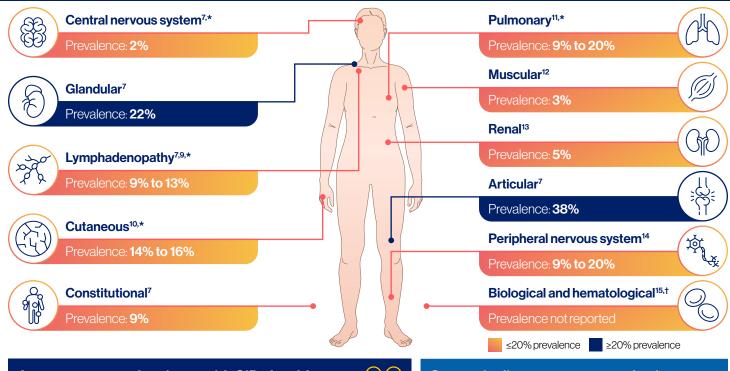
**30% to 40**%

of patients may have systemic disease<sup>7,\*</sup>

# There is growing appreciation of the systemic and serious nature of this disease by the medical community<sup>8</sup>

 $\mathcal{O}\mathcal{O}$ 

Sara McCoy, MD, PhD



An assessment of patients with SjD should include monitoring for systemic disease, and may include areas that are routinely assessed such as the joints, glands lymph nodes, and skin<sup>16</sup>

Sara McCoy, MD, PhD

Systemic disease may precede sicca symptoms in patients with SjD<sup>13,17–19</sup>

Articular manifestations precede sicca in

17% of ca

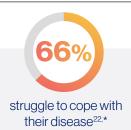
<sup>\*</sup>Prevalence can be variable and range depending on a multitude of factors (ie, definition of the manifestation, study inclusion, specificity of symptom).

<sup>\*</sup>Prevalence can be variable and range depending on a multitude of factors (ie, definition of the manifestation, study inclusion, specificity of symptom); †Prevalence not reported – domains based on measurement of various proteins and immune components.

#### Significant burden

SjD can significantly impact patient QoL and carries a risk for serious and life-threatening complications<sup>3,21</sup>





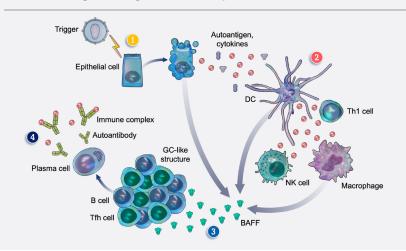


Our patients with SjD face significant burdens, impacts on their overall QoL, and on activities of daily living

Sara McCoy, MD, PhD

#### Hallmark B-cell disease

Hyperactive B cells drive a pathological cycle of immune activation leading to chronic inflammation and irreversible tissue damage throughout the body7,23-25



- In genetically susceptible individuals, environmental factors may trigger inflammation and release of autoantigens from SGECs<sup>25,26</sup>
- Innate immune cells respond, activating T cells and producing inflammatory cytokines<sup>25</sup>
- **BAFF** is produced, driving activation of **autoreactive B cells** and their differentiation into plasma cells<sup>24-26</sup>
  - Plasma cells secrete autoantibodies, which bind autoantigen to form immune complexes. 26,27 These are deposited in different tissues, triggering chronic systemic inflammation and tissue damage<sup>26</sup>

#### Management of Sjögren's

There are no FDA-approved disease-modifying drugs for SiD. Current management does not address systemic complications and provides only partial and symptomatic relief 16,28,29



Systemic treatments have demonstrated limited improvements in systemic disease outcomes 16,30,31



4

of patients somewhat or strongly agree that they wish there were better treatments available for SiD<sup>22,\*</sup>

\*From a survey of 3622 adults with SjD living in the United States.

## There is a need to improve standards of care in SjD

The content provided herein is for your background and educational purposes only. The material is for your sole use and may not be altered or further disseminated in any fashion for further use.

BAFF, B-cell-activating factor; DC, dendritic cell; FDA, US Food and Drug Administration; NK, natural killer; QoL, quality of life; SGEC, salivary gland epithelial cell; Tfh, T-follicular helper cell; Th1. T-helper 1 cell.

1. McCoy SS et al. Arthritis Rheumatol. 2022;74(9):1569-1579. 2. Maleki-Fischbach M et al. Arthritis Res Ther. 2024;26(1):43. 3. McCoy SS et al. Clin Rheumatol. 2022;41:2071-2078.

4. McCoy S et al. Poster presented at: American College of Rheumatology Convergence 2023; November 10-15, 2023; San Diego, CA. Abstract 2179.

5. Negrini S et al. Clin Exp Med. 2022;22:9-25. 6. Rozis M et al. J Clin Med. 2021;10. 7. Mariette X, Criswell LA. N Engl J Med. 2018;178:931-939. 8. Sjogren's Foundation. Accessed April 1, 2025.

https://sjogrens.org/blog/2024/language-matters-the-international-sjogrens-community-changes-sjogrens-syndrome-to **9.** Stergiou IE et al. Clin Exp. Rheumatol. 2022;40:2357-2362. **10.** Andre F, Bockle BC. J Dtsch Dermatol Ges. 2022;20:980-1002. **11.** Flament T et al. Eur Respir Rev. 2016;25:110-123. **12.** Colafrancesco S et al. Clin Exp. Rheumatol. 2015;33:457-464.

13. Aiyegbusi O et al. Rheumatol Ther. 2021;8:63-80. 14. McCoy SS, Baer AN. Curr Treatm Opt Rheumatol. 2017;3:275-288. 15. Seror R et al. RMD Open. 2015;1:e000022. 16. Ramos-Casals M et al. Ann Rheum Dis. 2020;79:3-18. 17. Moreira L et al. Rheum Int. 2015;35-289-294. 18. Sambataro G et al. Autoimmun Rev. 2020;19:102447.

19. Gao H et al. Int J Rheum Dis. 2018;21(7):1423-1429. 20. Fauchais AL et al. Rheumatology (Oxford). 2010;49:1164-1172. 21. Brito-Zeron P et al. eClinical/Medicine. 2023;61:102062.

22. Sjogren's Foundation. Accessed February 23, 2024. https://sjogrens.org/sites/default/files/inline-files/LivingwithSjogrens-8.5x11-2022-Mar31\_7pm.pdf
23. Verstappen GM et al. Nat Rev Rheumatol. 2021;17(6):333-348. 24. Nocturne G, Mariette X. Nat Rev Rheumatol. 2018;14:133-14. 25. Baldini C et al. Nat Rev Rheumatol. 2024;20:473-491.

26. Chivasso C et al. Int J Mol Sci. 2021;22:658. 27. Yamane K et al. Clin Exp Immunol. 2021;204:212-220. 28. Vitali C et al. Front Med (Lausanne). 2021;8:676885

29. Birt JA et al. Clin Exp Rheumatol. 2017;35(1):98-107. 30. Devauchelle-Pensec V et al. Ann Intern Med. 2014;160(4):233-242. 31. Gottenberg JE et al. JAMA. 2014 312(3):249-258

Scan the QR code to download this infographic





<sup>\*</sup>From a survey of 3622 adults with SjD living in the United States.