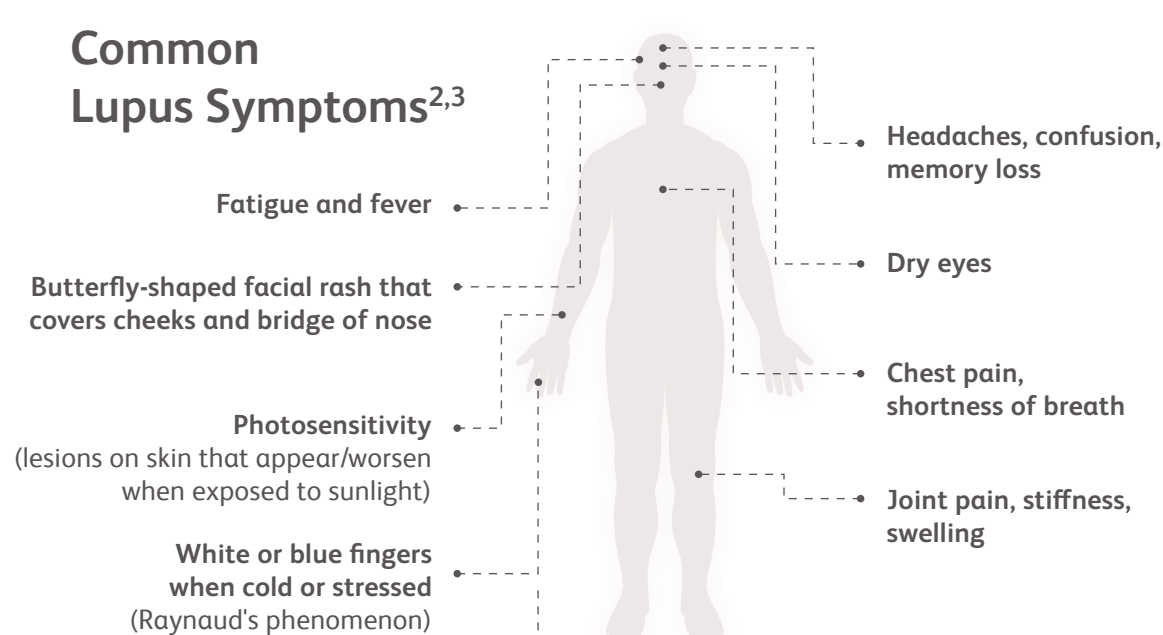


Systemic Lupus Erythematosus (SLE)

What is Systemic Lupus Erythematosus (SLE)?

SLE is a chronic autoimmune disease that can affect almost any organ system.¹



Prevalence

OVER 90 PERCENT of SLE patients are young women around childbearing age.¹

There are more than **2.1 MILLION** patients worldwide with moderate-to-severe lupus.⁴

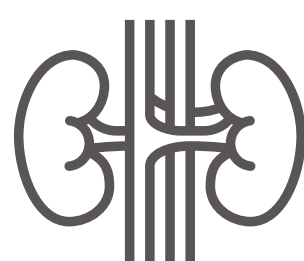
20 PERCENT of people with lupus have a parent or sibling who already has lupus or may develop lupus.⁵

SLE is **TWO TO FOUR** times more frequent, and more severe, among nonwhite populations around the world.⁶

Impact and Progression

SLE has a significant impact on patients' lives:

- Disease flares can be unpredictable and many patients experience waxing and waning of symptoms.
- Around **25 percent** of SLE patients develop lupus nephritis (inflammation of the kidney).⁷ This represents a significant risk to morbidity and mortality as it can lead to kidney failure.



Diagnosis & Treatment

Signs and symptoms vary considerably from person to person and overlap with other diseases.⁸ There is a lack of reliable diagnosis markers,⁹ and no one test can diagnose lupus.⁷

Tests include:

- Complete blood count and erythrocyte sedimentation rate
- Liver and kidney assessments
- Urine analysis
- Antinuclear antibody test
- X-rays and echocardiograms
- Skin biopsy



Treatment

Limited treatment options exist for SLE.

Bristol Myers Squibb is committed to identifying and pursuing new treatment options and innovative development approaches to help deliver transformational medicines for patients with systemic lupus erythematosus, lupus nephritis and other immune-mediated diseases.



1. Bartels, C.M. and Muller, D. "Systemic Lupus Erythematosus (SLE)." Medscape. Available from: <http://emedicine.medscape.com/article/332244-overview> Accessed December 2016. 2. "What is Lupus." Piedmont Healthcare. Available from: <http://www.piedmont.org/living-better/what-is-lupus> Accessed December 2016. 3. "Symptoms." Mayo Clinic. Available from: <http://www.mayoclinic.org/diseases-conditions/lupus/basics/symptoms/con-20019676>. Accessed January 2017. 4. BMS Epidemiology Data on File. 5. "Statistics on Lupus." Lupus Foundation of America. Available from: <http://www.lupus.org/about/statistics-on-lupus> Accessed December 2016. 6. Pons-Estel, et al. Understanding the Epidemiology and Progression of Systemic Lupus Erythematosus. Semin Arthritis Rheum. 2010 Feb; 39(4): 257. 7. Whittier, W.L., and Lewis, E.J. Lupus Nephritis. Nephrology Secrets. 2003; 244. 8. "Lupus." Mayo Clinic. Available from: <http://www.mayoclinic.org/diseases-conditions/lupus/basics/tests-diagnosis/con-20019676> Accessed December 2016. 9. Liu, C. et al. Biomarkers in systemic lupus erythematosus: challenges and prospects for the future. Ther Adv Musculoskelet Dis. 2013 Aug; 5(4): 210-233.