

## **COVID-19 outcomes in individuals with systemic lupus erythematosus (SLE)**

During the COVID-19 pandemic, individuals with systemic lupus erythematosus (SLE) have been of particular concern for two reasons: (1) SLE disproportionately impacts populations most severely affected by COVID-19, including those from non-white racial and ethnic groups, and those with low socioeconomic status; and (2) individuals with SLE are often heavily immunosuppressed and have comorbidities (more than one condition at the same time), which increases their risk for worse COVID-19 outcomes.

This study included 1606 individuals with SLE and COVID-19 during the period of March 2020 to June 2021. These cases were reported in the COVID-19 Global Rheumatology Alliance (C-19 GRA) and the European Alliance of Associations for Rheumatology (EULAR) COVID-19 registries. We found that older age, male sex, and the presence of comorbidities such as kidney and cardiovascular disease were associated with more severe COVID-19 outcomes. Individuals living outside Europe and North America had worse outcomes, and patients with SLE diagnosed later in the pandemic had better outcomes. These findings are consistent with the general population.

Glucocorticoids (such as prednisone), even at low doses, as well as having untreated or active lupus, were associated with worse COVID-19 outcomes. When adjusted for age and sex, some other immune suppressing medications were also associated with worse outcomes. Chronic kidney disease, a common and serious complication of SLE, has one of the strongest associations with poor COVID-19 outcomes.

SLE is a relatively uncommon disease. This is the largest study of SLE and COVID-19 to date. One limitation of the study is that the data comes from a physician reported registry; therefore, severe cases might be over-represented. Another limitation is that the study cannot take into account factors such as access to healthcare or socioeconomic status. This study shows that people with lupus should be prioritized for close monitoring, counseled to receive vaccinations, and they should receive preventive therapies such as monoclonal antibodies (when available), when exposed to COVID-19.

We would like to thank the participants, physicians, and researchers for their part in advancing knowledge about the characteristics associated with poor outcomes in individuals with SLE.

---

### **Study Title**

Characteristics associated with poor COVID-19 outcomes in individuals with systemic lupus erythematosus: data from the COVID-19 Global Rheumatology Alliance

### **Link to original paper**

<https://ard.bmj.com/content/81/7/970>

---

### **Date original paper published:**

February 16, 2022

### Authors of original paper

---

Manuel Francisco Ugarte-Gil, Jinoos Yazdany, et al.

### Lay summary contributors & reviewers

---

Maureen Smith, Annie-Danielle Grenier, Nadine Lalonde

---

This section is **not** printed to the website.

---

### Process

Date	Task (please don't change this)	Name
2023-03-27	Draft Completed By	Maureen Smith
2023-03-28	First Editor/Reviewer	Annie-Danielle Grenier
2023-03-29	Second Editor/Reviewer	Nadine Lalonde
	Review by Original Study Author	
	Posted in Comms for graphics	
	Request to post on GRA website	
	Training or Additional Review	

### Details for Graphics

---

What are the 3 main take-a-ways for infographics? Provide brief statements of most importance for the Comms team to create infographics.

Glucocorticoids (such as prednisone) even at low doses, some other immunosuppressant drugs, and having untreated or active lupus are associated with more severe COVID-19 outcomes.

Kidney disease, which is a serious complication of lupus, is most strongly associated with worse COVID-19 outcomes.

This is the largest study to date looking at SLE and COVID-19. People with lupus should be vaccinated and they should receive preventive therapies such as monoclonal antibodies (when available), when exposed to COVID-19.