

**SUPPLEMENTARY MATERIAL FOR:****Impact of SARS-CoV-2 Infection on Patients With Systemic Lupus Erythematosus in England Prior to Vaccination: A Retrospective Observational Cohort Study**

Adrian Paul J. Rabe<sup>1,2</sup> (ORCID: 0000-0001-5237-0677), Wei Jie Loke<sup>3</sup> (ORCID: 0000-0003-2266-5938), Rubana N. Kalyani<sup>4</sup> (ORCID: 0000-0003-1198-3391), Raj Tummala<sup>4</sup> (ORCID: 0000-0002-5506-4445), Heide A. Stirnadel-Farrant<sup>5</sup> (ORCID: 0000-0003-0734-0422), John Were<sup>6</sup>, and Kevin L. Winthrop<sup>7</sup> (ORCID: 0000-0002-3892-6947)

<sup>1</sup>AstraZeneca, BioPharmaceuticals Medical, Cambridge, United Kingdom

<sup>2</sup>Primary Care and Public Health, Imperial College London, London, United Kingdom

<sup>3</sup>Lister Hospital, East and North Hertfordshire NHS Trust, Stevenage, United Kingdom

<sup>4</sup>AstraZeneca US, BioPharmaceuticals R&D, Gaithersburg, MD, USA

<sup>5</sup>AstraZeneca, Oncology Business Unit, Global Medical Affairs, Cambridge, United Kingdom

<sup>6</sup>Health iQ Limited, Research Department, London, United Kingdom

<sup>7</sup>Oregon Health and Science University, Department of Infectious Diseases, Portland, OR, USA

**Corresponding author:**

Dr. Adrian Paul J. Rabe

AstraZeneca

Academy House

136 Hills Rd.

Cambridge, UK CB2 8PA

**Phone:** +44 (0)7385 083 190

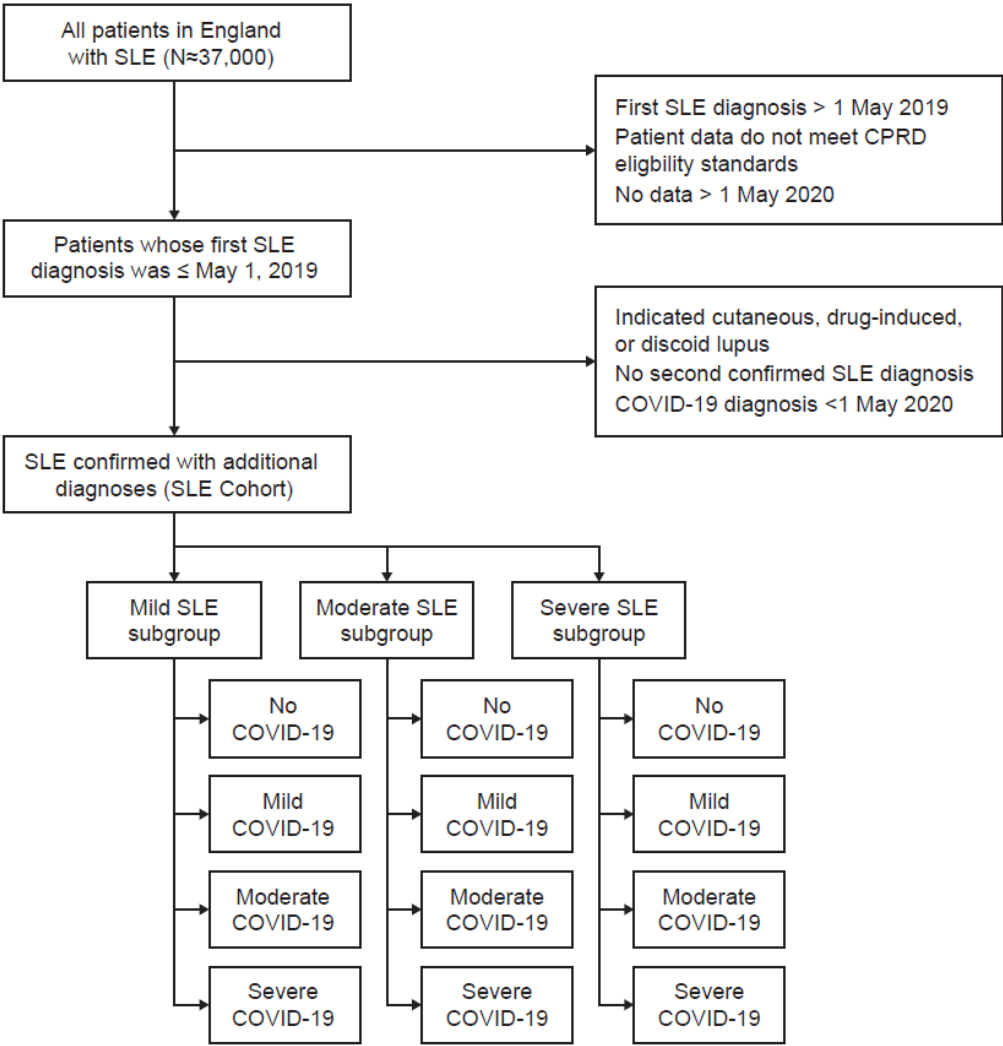
**Email:** adrian.rabe@astrazeneca.com

**Supplemental Table 1** Summary table of the datasets used in the analysis

Dataset	Data Provider	Data
Hospital Episode Statistics (HES)	NHS Digital	Diagnoses, comorbidities, and complications
		Inpatient activity (admissions, procedures, bed days, readmissions, tariffs, specialities including CC)
		Outpatient activity (appointments, procedures, tariffs)
		A&E activity (attendances, interventions, tariffs)
		Healthcare Provider of Treatment and other interventions
		Geography of CCG
Clinical Practice Research Datalink Aurum Database (CPRD)	MHRA	Diagnoses, comorbidities, and complications
		Symptoms
		Diagnostic tests
		GP attendances
		Nursing visits and attendances
		Prescriptions, component medications (including brands where feasible)
		Pathway mapping in primary care
		Costs through PSSRU
Office of National Statistics	ONS	Cause of death
		Reported date of death

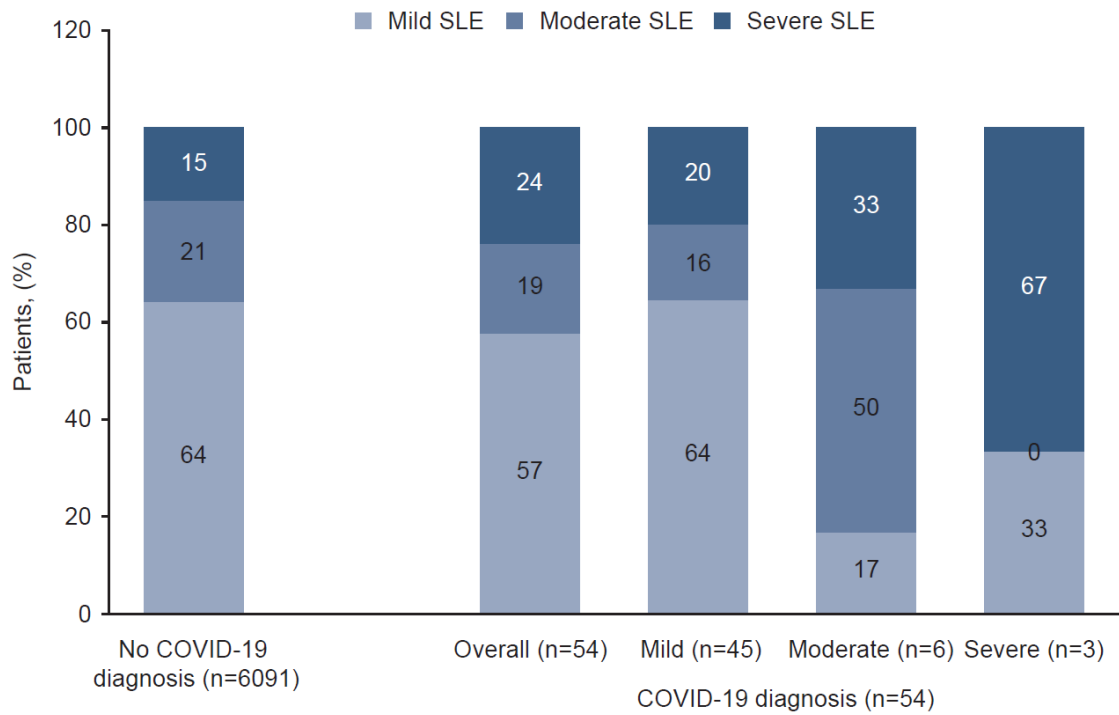
A&E, accident and emergency; CC, critical care; CCG, clinical commission groups; CPRD, Clinical Practice Research Database; HES, Hospital Episode Statistics; GP, general practitioner; MHRA, Medicines and Health Products Regulatory Agency; NHS, National Health Service; ONS, Office for National Statistics; PSSRU, Personal Social Security Services Research Unit.

**Supplemental Figure 1** Flow diagram of patient identification for the final SLE cohort and subgroups



COVID-19, coronavirus disease 2019; CPRD, Clinical Practice Research Database; SLE, systemic lupus erythematosus.

**Supplemental Figure 2** Proportions of patients with mild, moderate, or severe SLE according to COVID-19 disease diagnosis



No comparative inferential statistical analyses were performed.

COVID-19, coronavirus disease 2019; SLE, systemic lupus erythematosus.