51/1000 py, 26% of SIs were pneumonia and 1% were opportunistic infections. The HR for SI was 5.4 (95% CI: 4.8 to 6.2) comparing SLE to non-SLE. Six percent of the SLE group experienced more than one SI over the study period. The rate of SI allowing for multiple events was 92/1000 py which varied over time since diagnosis (figure 1).

Conclusions The rate of SI in SLE is five times the rate in the general population, and remains high in the years following SLE diagnosis. The role of SLE treatments in infection risk should be investigated.

S6a – Mantenaince Therapy

S6A:4 A POPULATION-BASED STUDY ON MORTALITY AND THE INFLUENCE OF MEDICATION USE IN 4356 PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND 21845 MATCHED CONTROLS FROM THE UNITED KINGDOM

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Purpose To estimate the magnitude of the risk from all-cause, age-specific, sex-specific, and cause-specific mortality in patients with SLE and relative risks compared with matched controls, and to evaluate the influence of medication exposure on mortality risk in SLE.

Methods We conducted a population-based cohort study using the Clinical Practice Research Datalink, Hospital Episode Statistics, and national death certificates (from 1987 to 2012). Each SLE patient (n=4356) was matched with up to 6 controls (n=21845) by age and sex. Multivariate Cox regression analysis estimated adjusted relative rates (RR) of mortality, and time interaction terms to evaluate mortality timing patterns. Time-dependent Cox models were used to evaluate the association of glucocorticoid use and hydroxychloroquine use on mortality and were adjusted for age, sex, lifestyle parameters, comorbidities and comedication.

Results A total of 442 out of 4356 SLE patients died during the study period. Patients with SLE had an increased mortality rate for all-cause mortality compared with age- and sex-matched subjects, after adjustment for confounders (adjusted RR 1.80, 95% CI: 1.57 to 2.08). The RR was highest in patients aged 18–39 years (adjusted RR 4.87, 95% CI: 1.93 to 12.3). Moratlity rates were not defferent between male and female patients. Glucocorticoid use in the previous six months raised the mortality rate while the adjusted RR was 45% decreased with low dose hydroxychloroquine use. SLE patients had increased cause-specific mortality rates for cardiovascular disease, infectious disease, noninfectious respiratory disease and for death due to accidents or suicide, while mortality rate for cancer was reduced, compared to age- and sex-matched subjects.The mortality rate was significantly increased for patients with a history of dementia, seizures, diabetes, cancer, and renal disease (table 1).

Conclusions Patients with SLE have a 1.8-fold increased mortality rate compared with the general population. Gluococorticoid use, female sex and young age are associated with an increased mortality risk while low dose hydroxychloroquine use significantly reduces the mortality rate. In addition, special attention should be paid to lupus patients with neuropsychiatric complications, diabetes, malignancy or renal disease since these subgroups of patients are at high risk of death.

S6A:5 THE 3RS STRATEGY ONE YEAR LATER: STILL REACHING THE GOAL

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Abstract S6A:4 Table 1 Risk of all-cause monthly within SLE patients (n=4356), stratified according to organ damage (reference = no risk factor)

	Person years (x1000)	Deaths	IR (/1000)	Adjusted RR* (95% CI)
Dementia	**0.1**	**14**	**140.0**	**2.99 (1.74-5.14)**
Seizures	**1.4**	**37**	**26.4**	**2.33 (1.66-3.28)**
Cerebrovascular event	1.9	73	38.4	1.28 (0.99-1.65)
Renal disease	**2.0**	**86**	**43.0**	**1.40 (1.09-1.78)**
Osteoporotic fracture	5.1	110	21.6	1.06 (0.85-1.32)
Use of antidiabetics	**0.9**	**45**	**50.0**	**1.90 (1.39-2.59)**
Malignancy	**2.0**	**95**	**47.5**	**1.90 (1.50-2.40)**

* Adjusted for: recent use of corticosteroids, recent use of antimalarials, and recent use of benzodiazepines