Results During the study period, we identified 4,283 prevalent cases with SLE (85% female) of whom 1092 were incident cases. SLE incidence was 2.8 per 100,000 (95%CI 2.6–2.9), with an annual decline of 8% (p<0.0001). Incidence was 5-times higher among females (sex incidence rate ratio: 5.00 95% CI 4.25–5.87 p<0.0001), with a peak at 30–39 years for women. At diagnosis, women were significantly younger (45 years, IQR 33–58) than men (52, IQR 38–64). SLE standardized point prevalence increased from 66.7/100,000 (95%CI 64.3–69.0) in 2012 to 72.9/100,000 residents (95% CI 70.5–75.3) in 2020, with an annual increment of 1.4% (p<0.0001). The highest prevalence rate was observed in females aged 60–69 years.

Conclusions Over the last 9 years, in northeastern Italy, SLE incidence has declined, while prevalence has increased in both sexes. SLE onset occurred earlier in life among women and was significantly more common in women compared to men. The highest incidence was observed among females aged 30–39 years.

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S09.2 GENDER DIFFERENCES IN TRENDS OF INCIDENCE IN SYSTEMIC LUPUS ERYTHEMATOSUS IN NORWAY; ESTIMATES FROM A POPULATION-BASED COHORT

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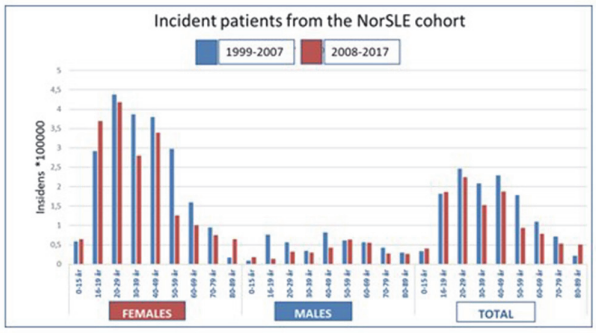
Purpose Norway is one of the few countries worldwide where societal factors facilitate complete population-based cohorts on rare diseases. Due to the organization of the specialist health services all patients with systemic lupus erythematosus (SLE) are likely to be captured at public hospitals. In addition, national identity numbers prevent lost to follow-up

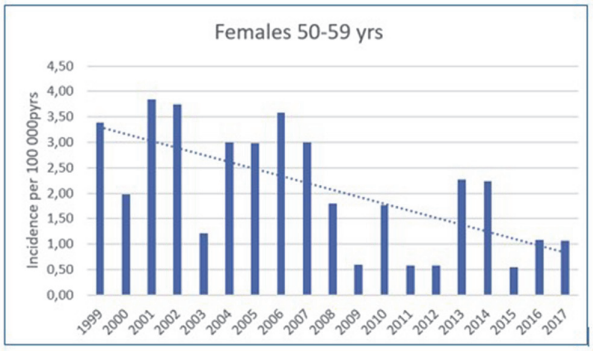
The aim of this study was to estimate the annual incidence of SLE in South-East Norway (population 2.9 million) in the years 1999–2017 and look for trends over time by gender.

This study has a large population over a long timespan making it possible to investigate age and gender differences over time.

Methods Through research of the databases of the 12 public hospitals in the area, we identified patients coded by ICD-10 as M32. We reviewed all patients charts and recorded demographic and clinical parameters. Only individuals with clinical SLE meeting the 1997 American College of Rheumatology (ACR) classification criteria for SLE were included. Adult-onset SLE was defined as disease-onset ≥ 16 years. We looked for secular trends by dividing the cohort into two decades and stratified by age and gender. Incidence rate was estimated per 100 000. To investigate whether the incidence of SLE had changed over the years 1999–2017 chi-squared test for linear trend was used.



1a.



1b.

Abstract S09.2 Figure 1 Age and gender specific incidence-rates
1a. Incidence-rates from two time specific decades.
lb. Decreasing incidence for females age 50–59 (1999–2017).

Results Out of 3490 individuals coded as M32 1558 still had this diagnosis in their medical record. The 1997 ACR criteria for SLE were met by 1300 patients, and 673 patients were diagnosed between 1999–2017. The peak incidence rate was pointed at 4,3 for females aged 20–29 years, and more flattened at 0,6 for men aged 40–69 years.

The average incidence rate for adult-onset SLE in the time-period 1999–2017 was 1,4; in females 2,4 and in males 0,5.

The incidence rate for adult-onset SLE for 1999–2007 and 2008–2017 was respectively 2,6 and 2,2 for females and 0,5 and 0,4 for males, see Figure 1a. for incidence by age.

We found that females age 50–59 years had a significant reduction of yearly incidence rate from the first to the second decade from 3,0–1,3 (p<0,001).

Females 50–59 years of age also showed a significant decline in annual incidence over the years 1999–2017 (p=0,003) (Figure 1b).

The overall time-trend for incidence rate from 1999–2017 showed a significant decline from 1999–2017 (p=0,004) for both females (p=0,003) and males (p=0.033).

Conclusion We find decreasing incidence rate of SLE from 1999–2017, most pronounced in females 50–59 years of age. This might be due to the reduction of Hormone Replacement Therapy in the same time-period.[1]

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