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A Trend Analysis of Lupus Erythematosus Patients' Physician Office-Based Visits and Medications Prescribed

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OBJECTIVES

The objective of this study is to characterize the ambulatory visits and medication burden among patients diagnosed with lupus

The study specific aims:

- To assess trends in medical visits for patients diagnosed with lupus
- To evaluate lupus patients' medication utilization
- To identify comorbidities and chronic conditions reported during lupus patients' visits

METHODS

Data source:

National Ambulatory Medical Care Survey (NAMCS) is a nationally representative dataset of medical office visits for patients in the U.S.

Inclusion & exclusion criteria:

- + All ambulatory visits from 2006-2016
- + Visits of patients with a lupus diagnosis captured by ICD-9-CM and ICD-10-CM codes
- Patients under 18 years old

Study design:

Retrospective review
Survey years grouped into consecutive blocks:
2006-2009 vs. 2010-2012 vs. 2013-2016

Statistical analysis:

Descriptive statistics
Bivariate analyses with $p < 0.05$

Nonparametric test for trends between time periods
Survey weights applied to account for multistage probability design for national estimates

Measures:

Demographic characteristics (age, sex, race, ethnicity, insurance type, region)
Patient comorbidities and reported chronic conditions

Outcome variable:

Medications dispensed, prescribed, or continued during medical visit
Identified using Cerner Multum Lexicon drug codes



RESULTS

- Total weighted visits for patients diagnosed with lupus was 27,183,195 (969 unweighted)
- Visits for lupus patients increased 12% from 2006-2009 to 2010-2012 and decreased 7% from 2010-2012 to 2012-2016
- Most frequent medications prescribed were hydroxychloroquine (N= 8,126,154) and prednisone (N= 6,159,101)

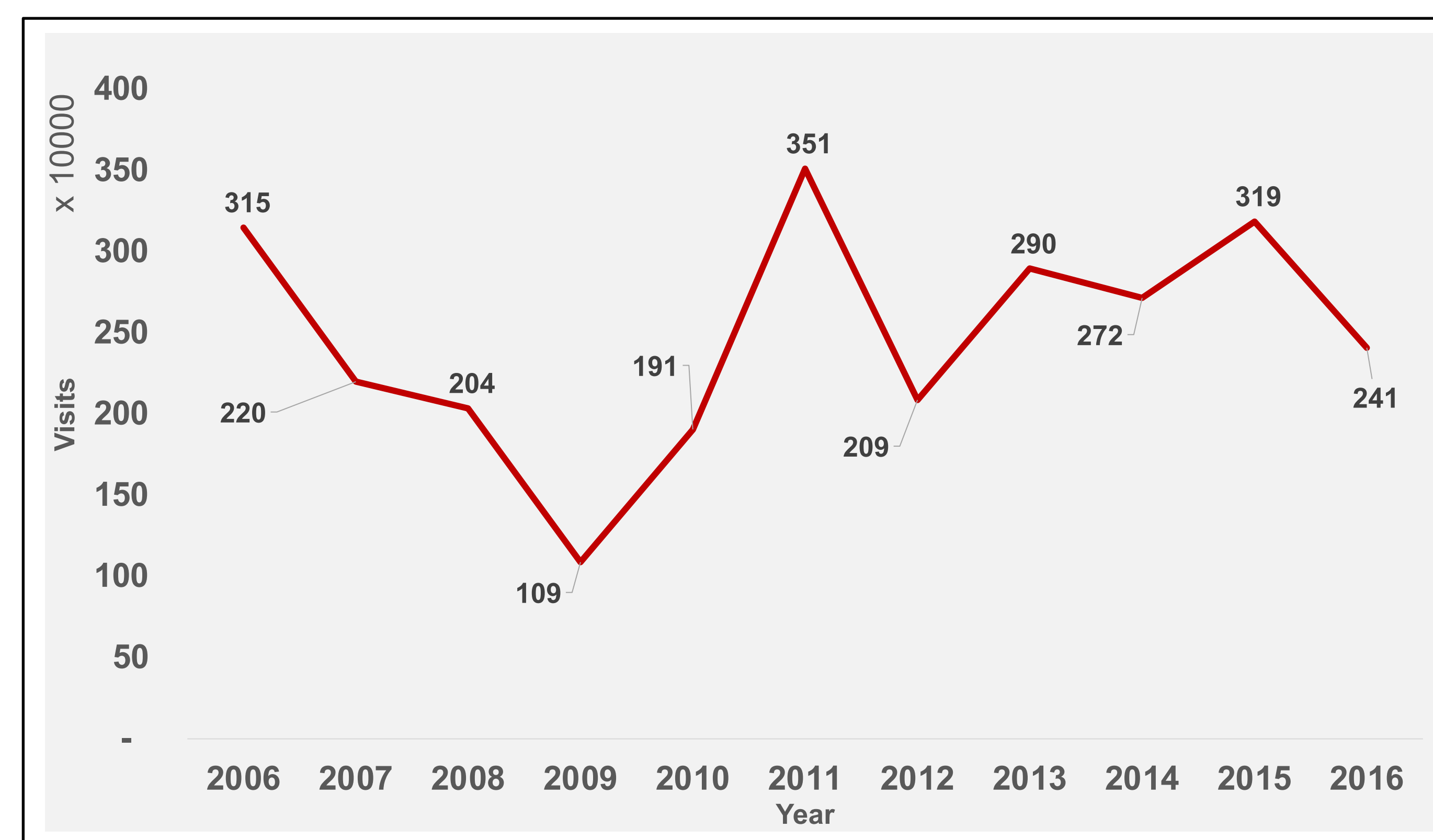


Figure 1. Trends in visits for patients diagnosed with lupus (2006-2016)

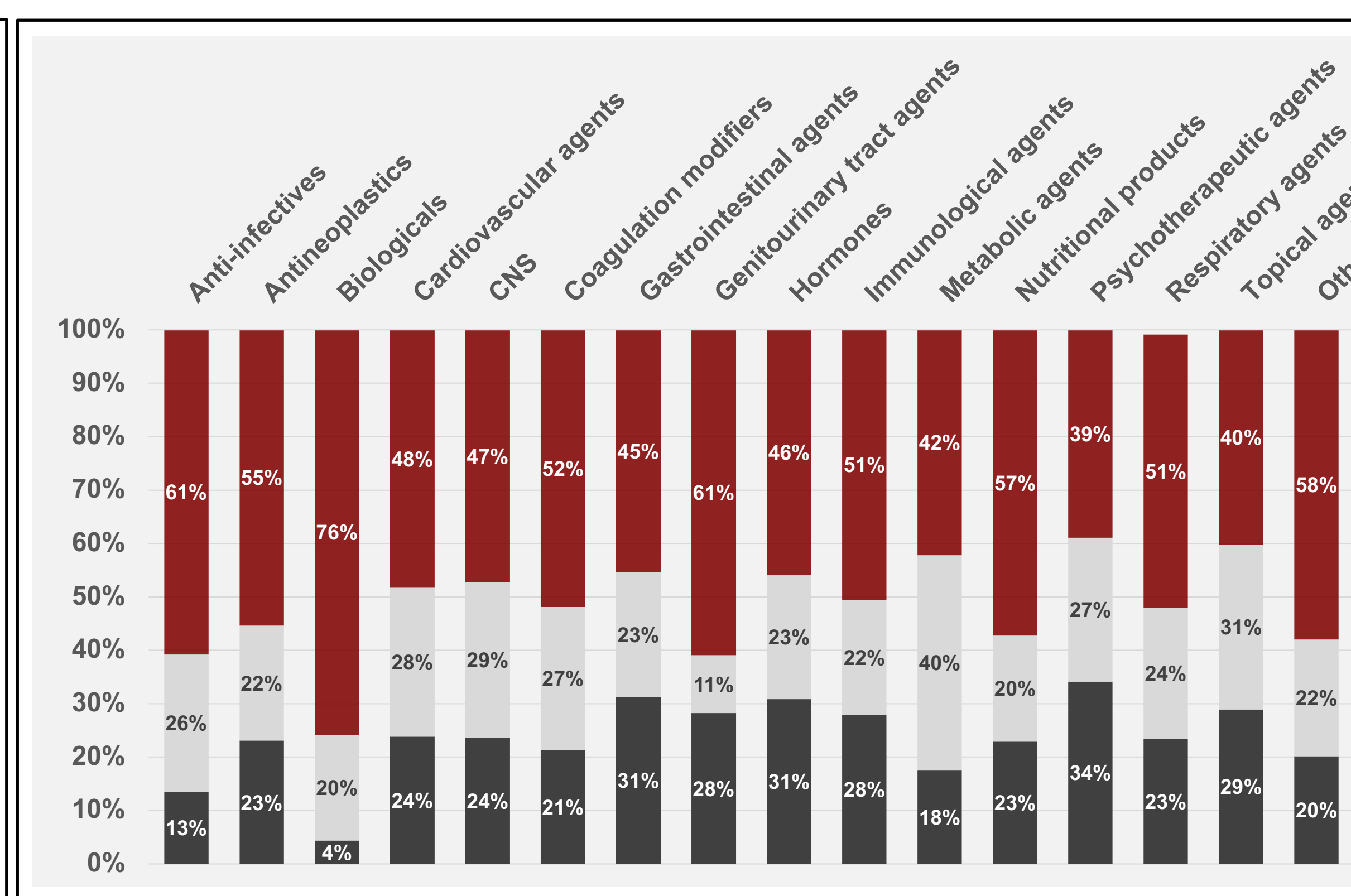


Figure 2. Medications prescribed for lupus patients (2006-2016)

Patient visit characteristics

Visits were greater among women (N= 23,793,298; 88%), patients 45-59 years old (N= 10,619,135; 39%), White (N= 21,381,927; 79%) and Non-Hispanic (N= 24,023,989; 88%). 7,945,471 patients (29%) had a primary diagnosis lupus-related recorded for their medical visit

Chronic conditions and comorbidities

The most common chronic condition observed among lupus patients was arthritis (N= 23,815,893; 88%). Most patients had at least one chronic condition reported (N= 13,043,442; 48%)
Frequent comorbidities observed were diseases of the skin and subcutaneous tissue (N= 14,538,032), diseases of the musculoskeletal system and connective tissue (N= 5,405,844) and disease of the circulatory system (N= 4,539,925)

CONCLUSIONS

Medication trends are reflective of the comorbidities associated with lupus. By assessing the trends in visits, medications and comorbidities most frequently associated with lupus, we hope to showcase the complexity of this chronic autoimmune disease

REFERENCES

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