EULAR abstracts

DEADLINE for submission: 31 Jan 2014

Submit for GSK review:

Topics:

Topic 17	SLE, Sjögren's and APS - clinical aspects (other than treatment)

Topic 32	Epidemiology, health services and outcome research

Both under topic 32?

Abstract information:

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Abstract info:

- For standardisation, the acceptable length of the abstract is not more than **3600 characters and 50 lines**, author's details and headers included. This also includes non-visible characters such as spaces and punctuation.
- The abstract should be structured into the following sections:
  a. A title which clearly indicates the nature of the investigation
  b. Background
  c. Objectives
  d. Methods
  e. Results
  f. Conclusions
  g. References
- One graph/image can be included with the following criteria:
  Image width: min. 50 pixels - max. 750 pixels
  Image height: min. 50 pixels - max. 750 pixels
  Image quality: min. 96 dpi - max. 300 dpi
  Image file size: min. 35 KB - max. 1000 KB
  Allowed file type: gif, jpg
  Please note that insertion of graphs and images may significantly reduce the number of remaining allowed characters.

EULAR 2014 ABSTRACT 1 DRAFT FINAL

Characters with spaces (limit is 3,600)

WORD COUNT 3562 ; 45 lines.

Title: The Incidence and Presentation of Systemic Lupus Erythematosus (SLE) in UK Primary Care using the UK Clinical Practice Research Datalink (CPRD)

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Background: The onset of SLE is often described as varied and insidious yet few studies have described the pattern of the onset of symptoms using primary care data. We used the CPRD to investigate the way in which SLE presents in UK primary care.

Objectives: To calculate the incidence of SLE in the CPRD population between 1/1/00 and 31/12/12; to describe the presentation of symptoms of SLE and to determine the time from the accumulation of up to five SLE symptoms to SLE diagnosis.

Methods: We identified incident cases of SLE using a previously described identification algorithm[1]. Kaplan-Meier failure curves were constructed looking back from SLE diagnosis to the recording of symptoms related to SLE (i.e. using the presence of symptoms as the failure). The equality of the failure curves were compared for age group (< 30, 30-49 and ≥ 50 yrs) at diagnosis using the Log Rank test.

Results: There were 1426 incident cases (170 males, 1256 females) giving age-standardised incidence rates of 0.7/100,000/yr in males (CI_{95}0.7,0.8) and 5.4/100,000/yr (CI_{95}5.3,5.5) in females. Peak incidence rates were in women aged 30-59 years. The failure curves indicated a gradual onset of symptoms and the median time from first symptom to diagnosis was 5.9yrs (IQR 3.0,9.9). In those aged <30, 30-49 and 50+ at diagnosis the median times from first symptom to diagnosis were 3.3yrs (IQR 2.7,3.9), 4.6yrs (IQR 4.2,5.1) and 6.4yrs (IQR 5.8,6.8); from second symptom to diagnosis1.9yrs (IQR 1.3,2.4), 3.3yrs(2.9,3.6) and 4.2yrs(IQR 3.7,4.7) respectively and from third symptom to diagnosis 1.2yrs (IQR 0.6,1.7), 2.2yrs (IQR 1.9,2.5) and 2.8yrs (IQR 2.4,3.2) respectively. Younger patients were more likely to have constitutional ($p<0.001$), neurological

($p<0.001$) and musculoskeletal ($p = 0.02$) symptoms whereas older patients had more cardiorespiratory symptoms and vasculitis ($p< 0.001$) prior to diagnosis. There was a significant difference between the failure curves for the time from the accumulation of one, two and three symptoms of SLE to diagnosis by age group ($p<0.001$). Musculoskeletal symptoms were the most frequent first symptom in patients aged <30 and 50+ at diagnosis whereas neurological symptoms were most the most common first symptom in those aged 30-49.

Conclusions: The presentation of symptoms of SLE is varied and insidious with a long delay from first symptom to SLE diagnosis. Those diagnosed after the age of 50 had a significantly longer time from the presentation of their symptoms to diagnosis (6.4yrs) than those aged <30 (3.3yrs). The longer delay to diagnosis in older patients may be due to a combination of low diagnostic suspicion and a more insidious pattern of onset.

Sponsor: GlaxoSmithKline; WEUKBRE6479

Reference:

1. Nightingale AL, Farmer RD, de Vries CS. Incidence of clinically diagnosed systemic lupus erythematosus 1992-1998 using the UK General Practice Research Database. *Pharmacoepidemiol Drug Saf.* Sep 2006;15(9):656-661.