**Objectives:** to evaluate the myocardial functionality by STE in recent onset RA and PsA patients and its associations with clinical features.
**Methods:** STE was used to assess the myocardial functionality in patients with very early RA (n=41) (2010 EULAR/ACR criteria) and PsA (n=35) (CASPAR criteria) without traditional CV risk factors, and 58 matched healthy controls (HC). Global longitudinal and circumferential strain (GLS and GCS) were estimated.
**Results:** RA patients exhibited impaired GLS (-18.13±1.36%) and GCS (-20.15 ±1.34%) compared to HC (-23.25±1.80%, p<0.001 and -24.50±0.70%, p<0.001; respectively), GLS being also altered in PsA (-21.57±2.59%, p=0.020 vs HC). No differences in LV mass index, posterior wall thickness, LV DD, E/A index or EF were found among groups (all p>0.050). DAS28 was correlated to GLS (r=0.908, p<0.001) and GCS (r=0.868, p<0.001) in RA. These findings were further confirmed by multivariate regression analyses adjusted for age, gender, BMI, CRP, ESR, SBP, DBP and duration of the symptoms, DAS28 being the only independent predictor of GLS (p<0.001) and GCS (p=0.002). Principal Component Analyses retrieved equivalent results. Although GCS was not significantly different in PsA compared to HC, a positive correlation with DAS28 (r=0.438, p=0.008) was observed. Consequently, GLS and GCS were impaired in PsA patients with high disease activity (DAS28>2.9) compared to HC (GLS: p=0.066 and GCS: p=0.007).
**Conclusions:** a subclinical myocardial dysfunction can be observed in IJD patients with preserved LV function and without traditional CV risk factors. The subclinical impairment of the myocardial function was found to be a very early event in IJD. Disease activity was the main predictor of myocardial strain impairment. Strain imaging by STE may detect early myocardial dysfunction in IJD.
**Disclosure of Interest**: None declared
**DOI:** 10.1136/annrheumdis-2018-eular.2430

## SAT0140 RISK OF VENOUS THROMBOEMBOLISM IN RHEUMATOID ARTHRITIS PATIENTS TREATED WITH BIOLOGIC AND NON-BIOLOGIC DMARDS

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**Background:** Individuals with rheumatoid arthritis (RA) have an increased risk of venous thromboembolism (VTE), including pulmonary embolism (PE) and deep vein thrombosis (DVT), compared with non-RA populations based on several recent studies[1,2]. However, information is sparse on the risk of VTE among patients receiving treatment with specific disease-modifying antirheumatic drugs (DMARDs) or categories of therapies.
**Objectives:** To estimate the incidence of VTE among patients receiving routine clinical care for RA, specifically during treatment with conventional (c) and biologic (b) DMARDs.
**Methods:** Incidence rates were estimated in a retrospective cohort study of patients with RA (defined as at least two International Classification of Disease, Ninth Revision, Clinical Modification [ICD-9-CM] Diagnostic codes) enrolled in US health insurance plans between October 1, 2010 to September 30, 2015 and participating in the Innovation in Medical Evidence Development and Surveillance (IMEDS) program. These data are formatted into the U.S. Food and Drug Administration's Sentinel Common Data Model and Sentinel's publicly available standardized analysis tools were used to estimate the incidence rates of VTE following initiation of cDMARDs or bDMARDs. Patients were required to be new users of the study drug class, with no evidence of use in the 365 days preceding initiation and were not allowed to re-enter the cohort. Patients were required to demonstrate continuous use of the study drug class to be considered at risk for VTE. VTE was defined based on ICD-9-CM codes, but patients diagnosed in outpatient settings were also required to have evidence of oral anticoagulant dispensing within 31 days of the event. PE and DVT ICD-9-CM codes were also disaggregated to produce separate incidence rates.
**Results:** During treatment with cDMARDs (i.e., methotrexate or leflunomide) or bDMARDs (i.e., abatacept, adalimumab, certolizumab pegol, etanercept, golimumab, infliximab, rituximab, and tocilizumab), patients experienced VTE at a crude incidence rate of 1.49 (95% CI 1.30, 1.71) per 100 person-years (PY) and 0.98 (95% CI 0.83, 1.14) per 100 PY, respectively. For each study drug class, age was an important risk factor for VTE, with increasing age associated with higher rates of VTE; for example, during treatment with bDMARDs incidence rate $(IR)_{18–49\ years}$=0.69, $IR_{50–59\ years}$=0.65, $IR_{60–64\ years}$=0.94, and $IR_{65+\ years}$=2.11 per 100 PY (figure 1). Men also had higher incidence rates of VTE than women. In the analyses of PE and DVT, DVT incidence rates were higher than PE incidence rates, and similar incidence rate trends overall and across age strata for cDMARD and bDMARD cohorts were noted.

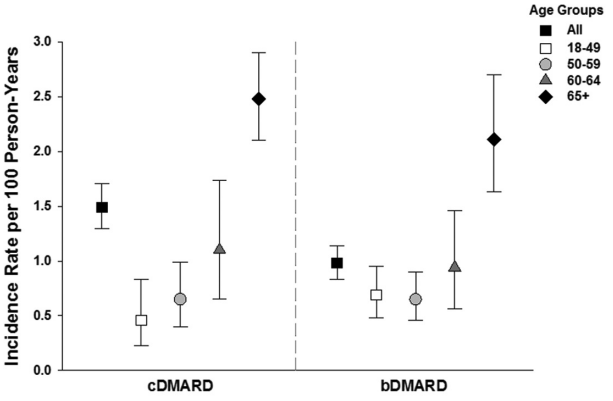


Figure 1 Incidence of VTE among patients with RA treated with cDMARDs and bDMARDs, overall and by age. (Data displayed as incidence rates with 95% confidence intervals.)

**Conclusions:** Venous thromboembolism is an important clinical concern among patients with RA and incidence rates vary by age and sex during routine clinical treatment with DMARDs.

**REFERENCES:**
[1] Kim SC, et al. Arthritis Care Res 2013;65(10):1600.
[2] Lee JJ, et al. Arthritis Res Ther 2014;16(5):435.

**Disclosure of Interest**: J. Maro Grant/research support from: U.S. Food and Drug Administration, T. Menzin: None declared, K. Hornbuckle Shareholder of: Eli Lilly and Company, Employee of: Eli Lilly and Company, J. Giles Grant/research support from: Pfizer, Consultant for: Eli Lilly and Company, Genentech, Horizon, A. Kavanaugh Consultant for: Eli Lilly and Company, T. Dörner Grant/research support from: Roche/Chugai, Janssen, Sanofi, Consultant for: AbbVie, Celgene, Eli Lilly and Company, Roche, UCB, MSD, Pfizer/Hospira, Novartis, Speakers bureau: Amgen, Celgene, Biogen, D. Martin: None declared, T. Huang: None declared, C. Salinas Shareholder of: Eli Lilly and Company, Employee of: Eli Lilly and Company
**DOI:** 10.1136/annrheumdis-2018-eular.1842

## SAT0141 TRENDS IN THE INCIDENCE OF LYMPHOMAS AND LEUKEMIAS IN PATIENTS WITH RHEUMATOID ARTHRITIS IN SPAIN: AN OBSERVATIONAL COHORT STUDY OF HOSPITAL DISCHARGES FROM 1999 TO 2015 (TREND-AR STUDY)

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**Background:** Oncohematological diseases have an increased incidence in Rheumatoid Arthritis (RA) patients. However, their trend in RA in Spain is unknown
**Objectives:** To analyze the incidence and trend of hospital admissions for lymphomas and leukemias in RA patients in Spain from 1999–2015
**Methods:** We performed an observational retrospective population study analyzing the spanish administrative database that includes a Minimun Basic Data Set (MBDS) of hospital admissions of RA patients from 1999–2015. We selected MBDSs for lymphomas and leukemias. Cases were identified by the presence in primary/secondary diagnosis of ICD9 codes. The population at risk was estimated with a prevalence of RA of 0,5% (0,8% women and 0,2% men). Crude and adjusted rates were calculated, and the trend was analyzed using the Generalized Linear Model with the year as the analysis variable. SPSS version 20 (Chicago, IL) was used
**Results:** 338.343 RA hospital admissions were detected, being 3561(1,1%) lymphomas (61,5% women, 38,5% men) and 1664(0,5%) leukemias (52,3% women,