Table 1. Baseline characteristics

	Originator etanercept (n=119)	Biosimilar Etanercept (n=38)	Univariable Analysis ^a OR(95%CI)
Use of previous biologic, n(%):	95 (79.8)	16 (42.1)	5.4 (2.5-11.9)
Use of steroids, n(%):	45 (37.8)	22 (57.8)	0.4 (0.2-0.9)
Use of DMARD, n(%):	94 (78.9)	35 (92.1)	0.3 (0.1-1.1)
Adverse events ^b , n(%):	4 (3.4)	6 (15.8)	0.2 (0.04-0.7)
Infections ^b , n(%):	1 (0.8)	2 (5.3)	0.15 (0.1-1.7)
Allergic reactions ^b , n(%):	3 (2.5)	1 (2.6)	0.9 (0.1-9.5)
Severe ^b , n(%):	0 (0)	2 (5.3)	p=0.012 ^c

^aUnivariable logistic regression analysis. ^bCumulative at time of analyses. ^cChi-square test.

Conclusion: This preliminary study showed that AE with BEt were more frequent as well as more severe compared to AE presented with OEt in patients with rheumatic diseases using BIOBADAMEX data. Our study suggests that use of BEt and comorbidities are associated with the development of AE. Follow up and inclusion of more participants is going on and will allow us to perform further analyses.

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AB1230 PERIPHERAL ARTERY DISEASE AND JOINT PAIN IN TYPE 2 DIABETES PATIENTS, FROM ASSOCIATION TO CAUSATION

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Background: Type 2 diabetes mellitus (T2DM) and arthritis are considered two separate conditions. However, inflammation and metabolic changes play a major role in diabetes co-morbidity (1). The pathogenesis of the joint pain and stiffness in diabetes patients is not fully understood. Diabetic osteoarthropathy (neuropathic arthropathy) considers a quite rare condition (0.1–0.4% of diabetic patients), involving destructive, lytic joint changes (2). Interestingly, over 52% of diabetic patients have joint diseases, compare to only 27% without diabetes; and people with arthritis have over 60% higher risk of diabetes development (3).

Objectives: The purpose of the study was to determine the association between the lesions of low extremity arteries (LEA) and the prevalence of arthritis (joint pain and stiffness) among patients with type 2 diabetes.

Methods: This is the pilot analysis of the musculoskeletal data obtained from the prospective cohort study of patients with diabetes complications 2013-2016 (179 consecutive T2DM pts undergoing transfemoral amputation (TFA) due to gangrene of lower limb (4,5), and 199 patients experienced balloon angioplasty (BA) of the LEA (without gangrenes). The computer tomography angiography was performed, along with clinical, laboratory and instrumental examination. Functional class of joint lesions (hip, knee or foot) was obtained based on self-service and (un)professional activity.

Results: All observed patients had diabetic neuropathy. The affected extremity in all the patients undergoing TFA had critical arterial ischemia along with foot gangrene, knee/hip pain, stiffness and rigidity. The second extremity also had stenoses of popliteal, anterior or posterior tibial arteries and the severity of stenoses was positively correlated with the severity of muscle and joints pain ($r=0.771$, $p<0.001$).

Among 199 patients without gangrene of lower limb, BA was done on superficial femoral artery 46 (23.1%) patients, popliteal in 44 (22.1%), posterior tibial 54 (27.1%), arterial tibial 41 (20.6), and peroneal artery 14 (7%). At least 1 large and 1 small joint was affected per person. The correlation between the prevalence of joint pain/stiffness and peripheral artery stenosis of the same lower extremity in patients without gangrene was significant $r=0.632$, indicating a large positive relationship (approximately 39.9% of the total variance). A linear regression analysis was conducted to evaluate the association between the severity of artery lesions and the severity of joint functional class, $F(1, 198) = 57.82$, $p<0.001$, $t = 7.91$, $p < 0.001$. The 95% confidence interval for the slope was 0.71 to 1.29, which did not include the value of zero.

Conclusion: The results show that the more severe the peripheral artery stenosis was the more prevalent joint lesions are and worsen the function class. However, more studies are needed.

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AB1231 2019 LUPUS CLASSIFICATION CRITERIA SCORE PREDICTS FUTURE LUPUS HOSPITAL ADMISSION

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Background: There are several validated tools to quantitate lupus disease activity, end-organ damage and overall fragility. An algorithm to predict the hospitalization risk in lupus patients was proposed by Li et al¹. That algorithm was able to effectively screen patients at increased risk of hospitalization using EHR information only. Recently, the new 2019 Lupus classification criteria score has been noted to accurately predict 10 year mortality².

Objectives: To test the above 2 algorithms with potential to predict lupus related hospital admissions.

First, we attempted to validate the existing algorithm from the index study of Li et al to predict lupus hospitalization.

Second, we tested the 2019 lupus clinical classification score for its ability to predict hospitalizations.

Methods: A retrospective chart review was performed using EHR data collected from 2013 to 2018 at University of Kentucky (UK) Medical Center. Inclusion criteria were 18 years or older at first outpatient rheumatology appointment at UK, at least 3 outpatient rheumatology visits at UK, and ICD 9/10 code for Lupus. A total of 217 patients met inclusion criteria. Variables similar to the index study were extracted from patients' first outpatient rheumatology visit at UK. Additionally, 2019 Lupus Classification Criteria score was calculated. Patients who were subsequently hospitalized, manual chart review was done to determine if the hospitalization was attributable to lupus or not.

Results: Table 1 shows differences between the variables predicting hospitalization in patients in this study (UK) and the Ohio State University (OSU) cohort from whom the admission predicting algorithm was derived¹. All the risk factors that were found to predict lupus hospitalization in the index study, failed to achieve a statistical significance in our validation study.

Table 1. Differences in the variables predicting hospitalization between Index and Validation Cohort

Variables predicting Lupus Hospitalization	Index Study (Ohio State), % of patients (n=226)	Validation Study (University of Kentucky) % of patients; (n=217)
African American	33%	18%
Creatinine > 1.2	17%	7%
Hemoglobin < 11g/dl	79%	18%
Platelets < 180 / uL	75%	22%
High Risk immunosuppression	35%	9.2%
Missed appointment	27%	25%

There was more success predicting lupus hospitalization using the 2019 lupus classification criteria score (CCS) (Figure 1). A CCS ≥ 19 predicted higher risk of lupus related hospitalization vs CCS < 19 over the ensuing 2 years ($p=0.05$).