etiology of a variety of diseases, including DM and RA [1]. Additionally, cardiovascular and musculoskeletal complications from DM may influence the outcomes of RA patients.

**Objectives:** To investigate the impact of DM on outcomes of RA patients.

**Methods:** This is a cross-sectional study including 583 RA patients with 5 years’ history after diagnosis in Tan Tock Seng Hospital RA registry, Singapore from 2001 to 2013. Information related to demographics, serologies, clinical features, comorbidities, and outcomes was collected. Independent t-test or Mann-Whitney U test was used to compare continuous quantitative data, while Pearson Chi-square or Fisher Exact test for categorical data. With adjustment for age, gender, ethnicity, smoking and comorbidities, multivariate regressions were performed to analyze the impact of DM on outcomes of RA patients.

**Results:** DM is more prevalent in Malay and Indian patients than Chinese patients with RA (26%, 24% and 11% respectively, p = 0.005). There is no difference of disease activity between DM and non DM patients. There is a tendency that non diabetic RA patients use more methotrexate (p = 0.052) and leflunomide (p = 0.058). Diabetic RA patients are in higher risk of poor American College of Rheumatology (ACR) functional status (p = 0.009), knee arthroplasty (p < 0.001) and admissions (p = 0.006). Adjusted for age, gender, ethnicity, smoking and comorbidities, multivariate regression analyses showed a trend of poor function status for diabetic RA patients, i.e. ACR functional status (adjusted odds ratio [aOR]: 1.802, 95% confidence interval [CI]: 0.968 – 3.353, p = 0.063) and median Health Assessment Questionnaire (HAQ) (6 coefficient value: 0.129, 95% CI: -0.010 – 0.267, p = 0.068), and higher risk for knee arthroplasty for diabetic RA patients (aOR: 3.480, 95% CI: 1.016 – 11.920, p = 0.047).

**Conclusion:** This is the first report on the impact of DM on RA outcomes in a long term follow-up RA registry in a multiethnic Asian society.

**References:**