Results: Data for 7,590 adults with type 2 diabetes adults were initially identified. Of these 3,418 (45%) first started metformin therapy during their care at QP and 2,972 (39%) had an associated baseline serum creatinine recorded. South East Asian (1,933, 65%) populations represent almost two-thirds of the evaluated cohort, while Qatari nationals make up 11% (n = 335) and 12% (n = 361), respectively.
Conclusion: The distribution of nationalities in our studied cohort is consistent with national demographic patterns. Our findings will help further quantify the effects of glucose lowering therapies compared with metformin treatment in previously understudied populations.

PE-42
The correlation between fibrinogen level and arterial stiffness in type 2 DM patients
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Background: Cardiovascular disease (CVD) is increased in type 2 Diabetes Mellitus (T2DM) patients due to a complex combination of various traditional and non-traditional risk factors that have important roles in the evolution of atherosclerosis. Fibrinogen level has been described as independent risk factor for CVD. Many studies have indicated that arterial stiffness also plays a critical role in the pathogenesis of atherosclerosis and CVD. Brachial-ankle pulse wave velocity (baPWV) is a method to measure arterial stiffness. It reflects the stiffness of both the aorta and peripheral arteries in an arm and a leg.
Objective: The aim of this study is to analyze the correlation between fibrinogen level and baPWV in T2DM patients.
Material and Methods: This cross sectional study was conducted at diabetes outpatient clinic Dr. Soetomo teaching hospital Surabaya Indonesia. Inclusion citerias were patiens with T2DM aged over 45 years old and signed informed consent. Patients with severe infection, renal and liver dysfunction, pregnancy, fibrate treatment were excluded in this study. We interviewed and measured body weight and height, BMI, blood pressure and baPWV. Plasma glucose (FPG) and post prandial glucose (PPG), HbA1c, lipid profiles, and fibrinogen level were measured as well. Data was statistically analyzed using Pearson correlation test.
Results: We analyzed 40 patients who have been diagnosed with T2DM consisting of 17 males and 23 females. The overall mean of BMI was 25.66 + 2.91 kg/m^2, HbA1c was 8.01 + 1.39%, FPG was 150.2 + 61.97 mg/dL, PPG was 214 + 74.49 mg/dL and fibrinogen 456.75 + 142.60 mg/dL. One-sample Kolmogorov-smirnov test indicated that the data distribution was normal. There was significant correlation between fibrinogen level and baPWV (r 0.336; $p < 0.05$).
Conclusion: There was significant correlation between fibrinogen level and arterial stiffness in T2DM patients.

PE-43
Cilostazol attenuates the severity of peripheral arterial disease in type 2 diabetes: the plasma soluble receptor for advanced glycation end-products
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Recent studies have demonstrated that the plasma soluble receptor for advanced glycation end-products (sRAGE) play a major role in developing macrovascular complications of type 2 diabetes, including peripheral arterial occlusion disease (PAOD). Cilostazol is an antiplatelet, antithrombotic agent, which has been used for the treatment of PAOD. We hypothesized that cilostazol attenuates the severity of PAOD in patients with type 2 diabetes through the augmentation of plasma sRAGE. Ninety type 2 diabetic patients with PAOD defined as intermittent claudication with ankle-brachial index (ABI) ≦0.9 were recruited for an open-labeled, placebo-controlled study for 52 weeks with oral cilostazol 100 mg twice daily (n = 45) or placebo (n = 45). Fasting plasma sRAGE, endothelial variables of E-selectin, soluble vascular cell adhesion molecule-1 (sVCAM-1), and inflammatory markers of high-sensitivity C-reactive protein (hsCRP) and tumor necrosis factor-α (TNF-α) were determined. After completely the 52-week treatment program, the ABI values were elevated in cilostazol group ($P < 0.001$). The plasma sRAGE was significantly increased ($P = 0.007$), and hsCRP, sVCAM, and E-selectin concentrations were significantly decreased ($P = 0.028$, <0.001 and <0.001, respectively) with cilostazol treatment. In a partial correlation analysis with adjustments for sex and age, the net change of sRAGE significantly correlated with the change of ABI in the cilostazol group ($P = 0.043$). In a stepwise multiple regression model, only the change with regards to sRAGE was significantly associated with the change of ABI ($P = 0.046$). Our results suggest that cilostazol may effectively attenuate the severity of PAOD in patients with type 2 diabetes. Plasma sRAGE plays a role as an independent predictor for improving the index of PAOD.

PE-44
Nonalbumin proteinuria as a simple and practical predictor of the progression of early-stage type 2 diabetic nephropathy
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Recent studies have shown multi-biomarker approaches for risk prediction in diabetic nephropathy. The aim of this study was to pursue the simple and practical predictor among nonalbumin proteinuria (NAP) and six urinary biomarkers contributing to the progression of diabetic nephropathy.
In this observational study, the urine levels of albumin-to-creatinine ratio (ACR), nonalbumin protein-to-creatinine ratio (NAPCR) and six biomarkers [kidney injury molecule (KIM)-1, neutrophil gelatinase-assoicated Lipocalin (NGAL), liver-type fatty acid-binding protein (L-FABP), angiotensinogen, interleukin-18 (IL-18) and YKL-40] were measured in 73 patients with type 2 diabetes and estimated glomerular filtration rate (eGFR) ≥ 60 mL/min/1.73 m^2. We found optimal cutpoints for ACR, NAPCR and six biomarkers and used Harrell's concordance index (C-index) to validate Cox model. The renal outcomes were annual eGFR decline and the development of chronic kidney disease (CKD) stage 3 or greater.
The average rate of eGFR decline over the median of 50 months of follow up was −2.48 mL/min/1.73 m^2/year. NAPCR and six urinary biomarkers were negatively correlated with annual eGFR decline. After adjusting for several clinical factors, only NAPCR showed a significant association with annual eGFR decline (Adjusted R2 = 0.141, P = 0.035). NAPCR showed a higher predicted probability of having the CKD stage 3 or greater occur than six urinary biomarkers (C-index 82.7). NAPCR also showed a higher predictive value than six urinary biomarkers applying the concept of "Panel score".
The results of this study suggest that NAPCR may be a better predictor of the development and progression of CKD than the other urinary biomarkers in patients with the early-stage type 2 diabetic nephropathy.