Conclusions: We found evidence for a non-linear relationship between LDL and all-cause mortality, which remained significant after adjustment for all covariates. We showed marginally significant association between LDL-C and incident CHD and lack of such association for incident stroke. LDL-C levels lower than 70 mg/dl did not show further benefits in reduction of cardiovascular and mortality risk. As these data are at odds with the results from RCTs further investigation is necessary to explain these discrepancies.

P629 | BEDSIDE

Under treatment of female patients in lipid-lowering for secondary prevention in Europe, Canada, South Africa, Middle East and China: results of the Dyslipidemia International Study (DYSIS)

A.K. Gitt¹, D. Lauschn², M. Horack³, P.H. Brus³, K.K. Poh⁴, G. De Ferraris⁵, J. Ferrieres⁶ on behalf of DYSIS-Study Group.

1Herzzentrum Ludwigshafen, Cardiology and Stiftung Institut f. Herzinfarktforschung Ludwigshafen, Ludwigshafen, Germany; 2MSD, Vienna, Austria; 3Institut f. Herzinfarktforschung Ludwigshafen, Ludwigshafen am Rhein, Germany; 4Merck & Co. Inc., Kenilworth, United States of America; 5National University of Singapore, Singapore, Singapore; 6University of Pavia, Pavia, Italy; 7Toulouse Rangueil University Hospital (CHU), Toulouse, France

Background: Recent guidelines of EAS/ESC as well as AHA/ACC recommend LDL-C < 70 mg/dl in very high risk patients. Despite chronic statin treatment, only a minority of patients achieve this target.

Methods: Between 2008 and 2012, consecutive statin-treated outpatients were enrolled in 26 countries including Europe, Canada, South Africa, Middle East and China, (DYSIS = Dyslipidemia International Study) to assess LDL-C goal attainment for secondary prevention. Data were collected under real life conditions in the outpatient setting. We examined the impact of female gender on LDL-target achievement.

Results: A total of 46,310 patients of DYSIS were at very high risk, of whom 18,653 (40.3%) were females. Female patients were older, more often had risk factors such as hypertension and diabetes, but less often suffered from already manifest ischemic heart disease as compared to the male population. Females more often were treated with less potent statins as well as with lower doses of statins independent on the statin used. Even after correcting for differences in baseline characteristics female gender was an independent predictor of not achieving LDL-C-targets in clinical practice (OR 0.68; 95% CI 0.47–0.97).

Conclusions: Female patients were treated with less potent statins as well as with lower doses of statins in clinical practice. They had a 32% lower chance to reach the LDL-C-targets currently recommended by guidelines.

P630 | BEDSIDE

Comparison of plaque microstructures between two high-intensity statin therapies: rosuvastatin versus atorvastatin

S. Honda¹, Y. Katoaka², D. Shishikura³, K. Takata³, J. Andrew¹, J. Butters¹, P.J. Psaltis¹, S.J. Nicholls¹.

1South Australian Health and Medical Research Institute, Heart health, Adelaide, Australia; 2National Cerebral and Cardiovascular Center (NCCV), Suita, Osaka, Japan

Background: Statin therapy has been reported to stabilize coronary plaque, and