Psychosocial factors derived from concepts in health psychology and psychopathology are subject of extensive research to assess their power to predict a future coronary artery disease event in apparently healthy subjects. However, bio-behavioural factors have not been implemented in current guidelines of scoring schemes for calculating the risk of coronary events. The presented data were derived from the population-based MONICA Augsburg studies (S1-S3) conducted between 1984 and 1995. The psychosocial data set was available in approximately 13,000 subjects. The KORA follow-up study assessed the vital status for all participants (except for 56 persons) in 1998. Until then, 772 participants (531 men, 241 women) had died. The depressive symptomatology was derived from the von Zerrssen affective symptom check list combining 24 single symptom items with scores ranging from 0 to 3. Risks of total mortality and myocardial infarction were estimated from Cox proportional hazard ratio (HR) models adjusted for age and survey and multiple risk factors. Male participants with high scores in depression exhibited a significantly increased risk in total mortality (adjusted HR: 1.55; 95 % CI: 1.28 - 1.83, p< 0.0001) and for fatal and non-fatal coronary events (adjusted HR: 1.36; 95 % CI: 1.02 - 1.81, p< 0.035). Female participants reported higher values in depression.
scores; however, depression was not predictive for subsequent total mortality and fatal and non-fatal events in females. Depression in men yielded a significant interaction with obesity and increased levels of C-reactive protein (CRP). The inclusion of psychosocial factors, as demonstrated for depression, is likely to improve prediction of future adverse cardiovascular and total mortality. These factors may also play a crucial role in genotype-phenotype interaction.