Supplementary Material to Hertle et al. “Distinct associations of complement C3a and its precursor C3 with atherosclerosis and cardiovascular disease. The CODAM study” (Thromb Haemost 2014; 111.6)

Suppl. Figure 1: Mediation of the association of C3 with CVD in heavy smokers (n=193) by C3a in a simple mediation model. The c-path represents the total effect of C3 on CVD, adjusted for covariates (see also table 3b, model 4). The a-path represents the association between C3 and C3a, adjusted for covariates. The b-path represents the association between C3a and CVD, adjusted for C3 and covariates (see also table 3a, model 5). The c'-path represents the direct effect of C3 on CVD and the a*b-path represents the indirect effect of C3 on CVD via C3a (see also table 3b, model 5). Due to different estimation procedures (ordinary least squares for the a-path and maximum likelihood for the b-path), the sum of (a*b + c') does not add to the c-path.
Suppl. Figure 2a

Suppl. Figure 2b
Suppl. Figure 2c

Suppl. Figure 2d
Suppl. Figure 2: Mediation of the associations of C3a and C3 by low-grade inflammation (calculated as the mean of the Z-scores of CRP, IL-6, TNFa, IL-8, sICAM-1, SAA, ceruloplasmin and haptoglobin) in simple mediation models.

a) Mediation of the association of C3a with cIMT by low-grade inflammation (N=504)
b) Mediation of the association of C3a with AAIx by low-grade inflammation (N=541)
c) Mediation of the association of C3a with CVD in heavy smokers by low-grade inflammation (N=193)
d) Mediation of the association of C3 with CVD in heavy smokers by low-grade inflammation (N=193)

The c-path represents the total effect of C3a or C3 on the outcome (cIMT, AAIx, CVD), adjusted for covariates (see also table 3b, model 4). The a-path represents the association between C3a or C3 and low-grade inflammation, adjusted for covariates. The b-path represents the association between low-grade inflammation and the outcome (cIMT, AAIx, CVD), adjusted for C3a or C3 and covariates. The c’-path represents the direct effect of C3a or C3 on the outcome (cIMT, AAIx, CVD), and the a*b-path represents the indirect effects of C3a or C3 on the outcome via low-grade inflammation. In the mediation models with CVD as outcome the sum of (a*b + c’) does not add to the c-path due to different estimation procedures (ordinary least squares for the a-path and maximum likelihood for the b-path).