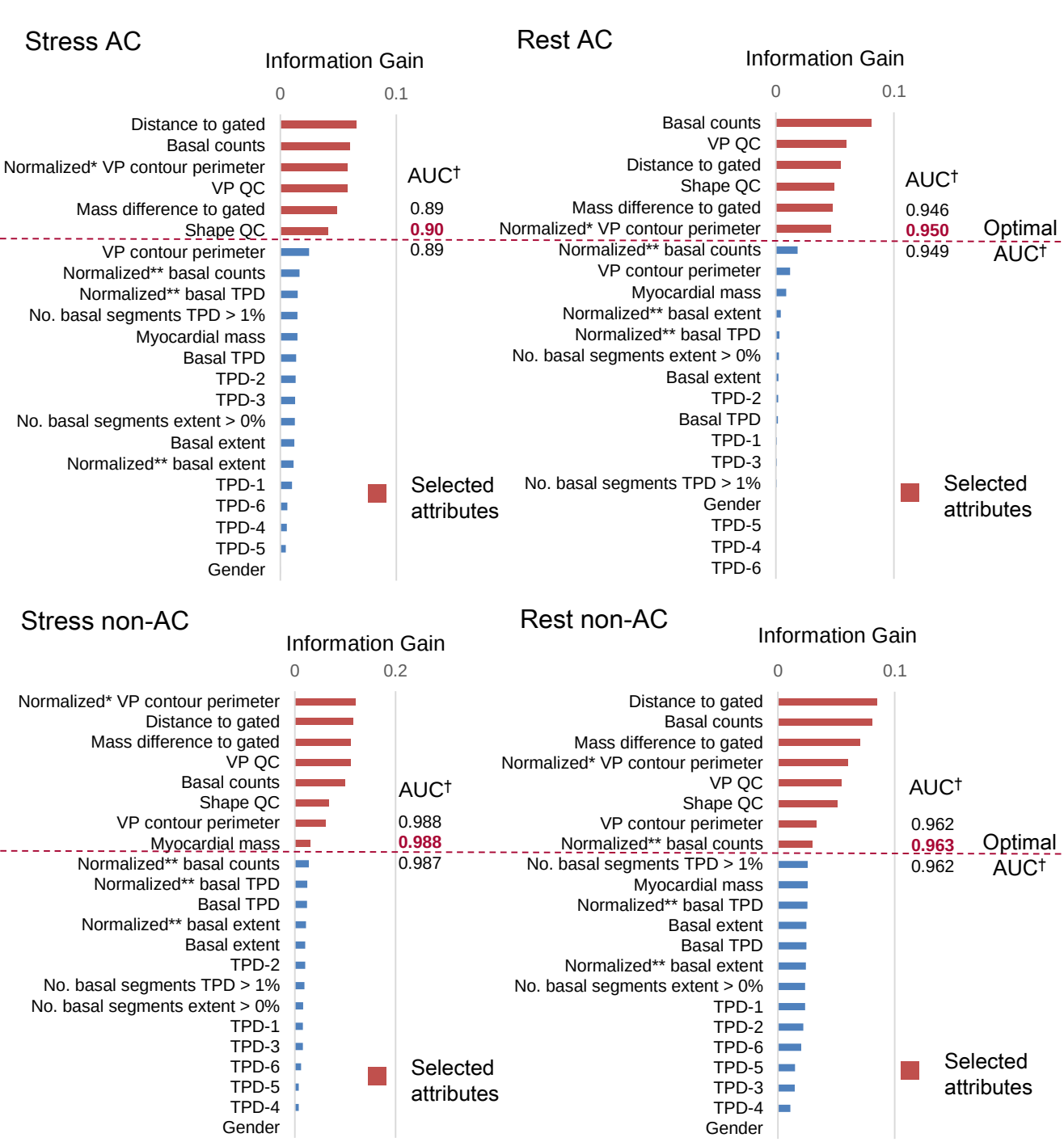
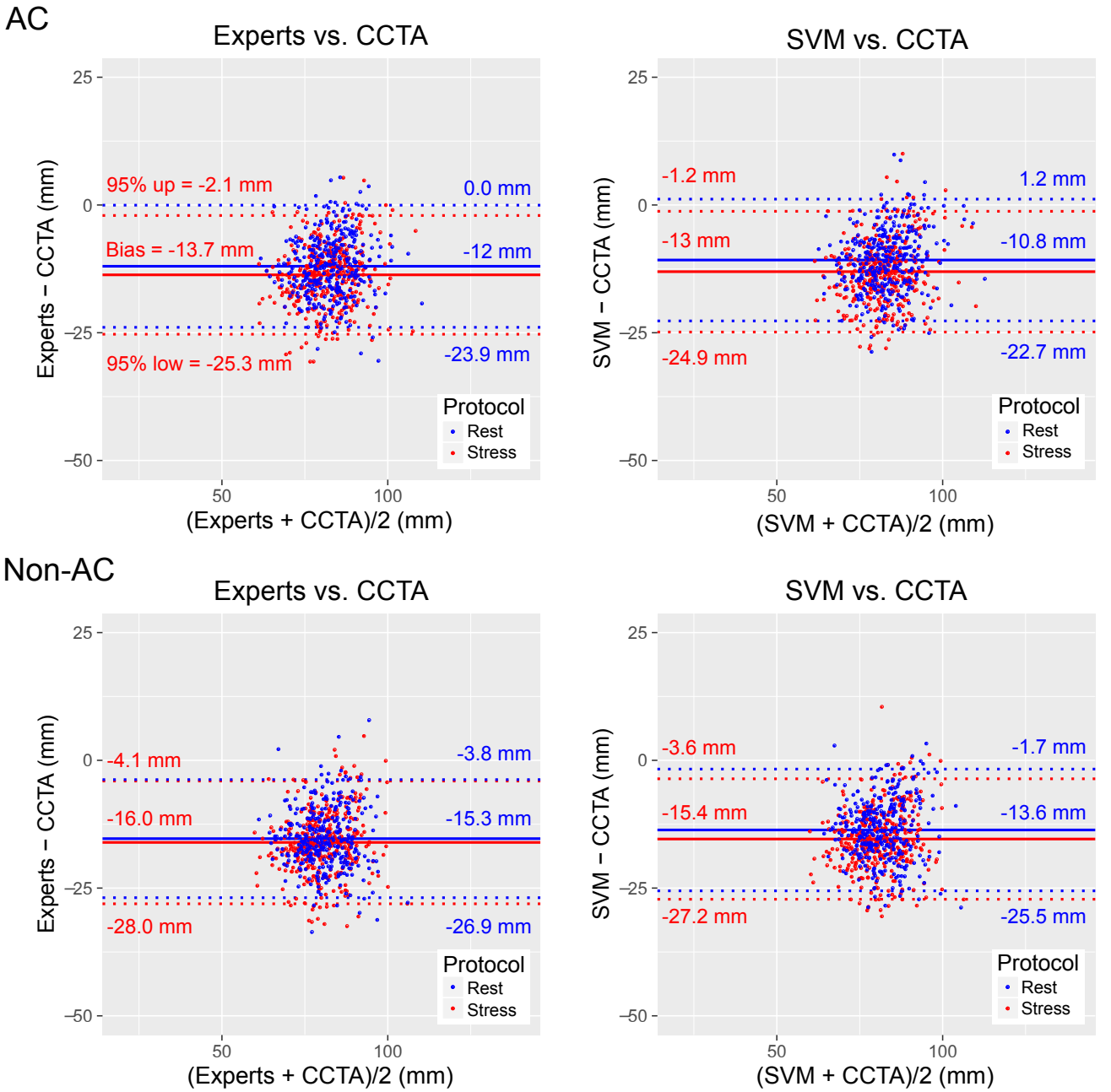
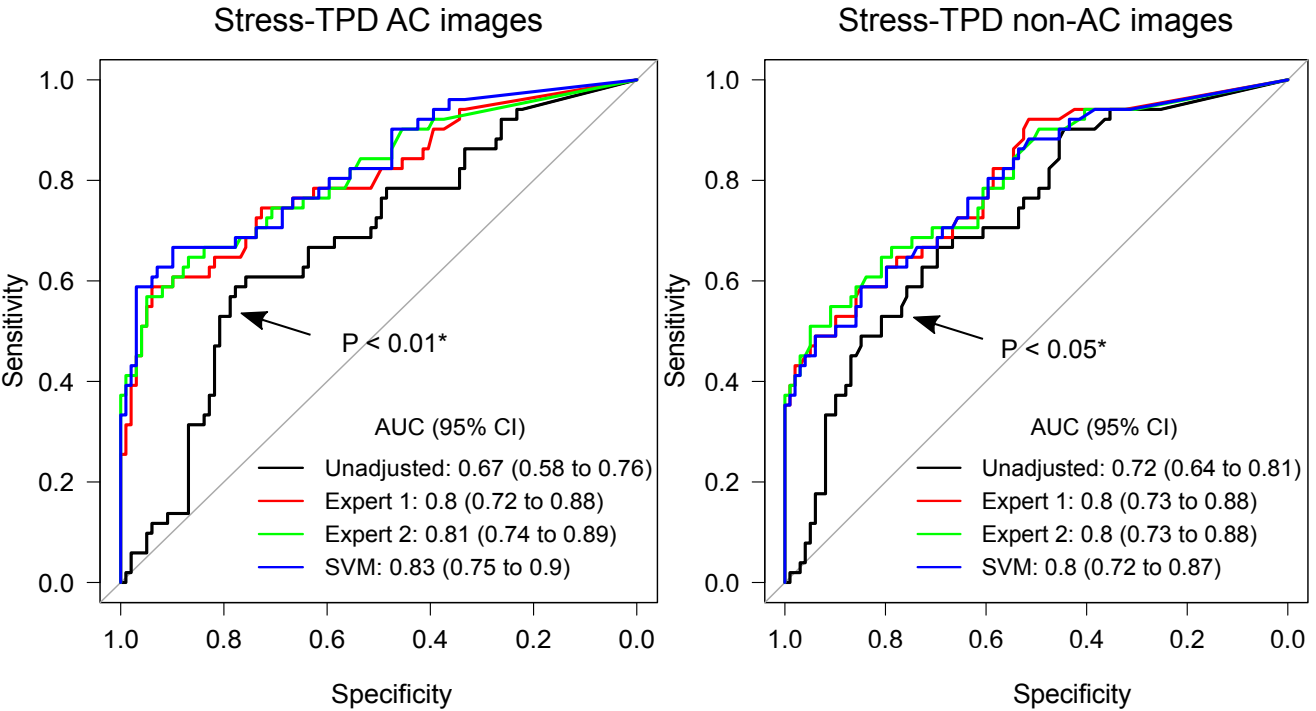


SUPPLEMENTAL FIGURE 1. Feature selection for AC/non-AC stress/rest images. Selected attributes are shown in red. AC: attenuation corrected, TPD: total perfusion deficit, VP: valve plane, VP QC: valve plane quality control indicator, Shape QC: left ventricular contour quality control flag. (†) Area under the receiver operating characteristic curve for the prediction of "correct VP". (*) Normalized to the radius of the left ventricular contour. (**) Normalized to corresponding measure for background.



SUPPLEMENTAL FIGURE 2. Valve plane (VP) localization agreement. Bland-Altman difference plots showing the distance from the apex to the VP center in stress (red) and rest (blue) using the average VP positions from the two experts (Experts = (Expert 1 + Expert 2)/2), the automatic VP localization procedure (SVM) and CCTA positions of the mitral valve. Agreement of Experts and SVM with the mitral valve from CCTA had similar stress and rest 95% CI for AC and non-AC images (p = NS). AC: attenuation corrected, CCTA: coronary computed tomography angiography, CI: confidence interval, SVM: support vector machines.



SUPPLEMENTAL FIGURE 3. Diagnostic outcome agreement. Prediction of per-vessel obstructive stenosis from ICA by stress-TPD computed from non-adjusted valve plane (VP) positions (Unadjusted), VP positions from two experts and the automatic VP localization procedure (SVM). ICA: invasive coronary angiography, AC: attenuation corrected, AUC: area under receiver operating characteristic curve, SVM: support vector machines, TPD: total perfusion deficit. (*) AUC lower than for Expert 1, Expert 2 or SVM. All other comparison not significant (p=NS).