50 cells per individual X to W (10%) X to W (20%) X to W (30%) score in PR curve 1.0 -1.0 -1.0 method 0.8 0.8 -0.8 optimal 0.6 CoCoA 0.6 0.6 marginal 0.4 0.4 0.4 -20 30 40 20 30 20 30 40 10 10 40 % variance explained by phenotype (W) 10 cells per individual X to W (10%) X to W (20%) X to W (30%) 1.00 -1.00 1.0 method 0.8 -0.75 -0.75 optimal

