



Supplementary Figure 1: P-values for treatment effect for an increasing number of principal components included in LiMM-PCA for simulated data when the effect is generated in the raw data. The figure shows results using a different random seed than in Figure 3. The figures show results for incremental effects size from a) 0, b) 0.04, c) 0.08, d) 0.12, e) 0.16, and to f) 0.20. Validation methods shown are the Global log-likelihood ratio test (GLLR), permutation testing using the squared Frobenius norm as the inferential statistic (perm) and permutation testing using the F-ratio as the inferential statistic (perm f). Grey dashed line shows the significance level (0.05).