

**Table S6: Correlation obtained in the Cape Town study group for comparison to the Galanter et al. study.** Correlation between ancestry proportions estimated using 88, 194 and 314 AIMs and proportions estimated using genome-wide data, for a 5-way and 3-way admixture model. Correlations for AIM sets of sizes 500 and 2000 is also given for the 5-way admixture model.

| Model               | Nr AIMs | Correlation |                 |          |             |            |
|---------------------|---------|-------------|-----------------|----------|-------------|------------|
|                     |         | African San | African non-San | European | South Asian | East Asian |
| SAC 5-way admixture | 2000    | 0.977       | 0.979           | 0.975    | 0.884       | 0.893      |
|                     | 500     | 0.938       | 0.939           | 0.922    | 0.717       | 0.730      |
|                     | 314     | 0.902       | 0.909           | 0.892    | 0.637       | 0.675      |
|                     | 194     | 0.845       | 0.866           | 0.852    | 0.563       | 0.631      |
|                     | 88      | 0.751       | 0.779           | 0.785    | 0.467       | 0.563      |
| SAC 3-way admixture | 314     | 0.937       | 0.944           | 0.975    | -           | -          |
|                     | 194     | 0.916       | 0.921           | 0.961    | -           | -          |
|                     | 88      | 0.858       | 0.863           | 0.930    | -           | -          |