

**qPCR Quality Control and  
normalisation (Figures S1 S2)**



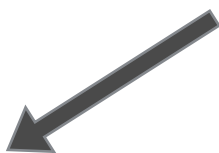
**CN clustering with GMM in qPCR  
(Figure 1)**



**probabilistic weights of different  
CN membership used to simulate  
10 plausible datasets**



Multiple imputation of 10 datasets



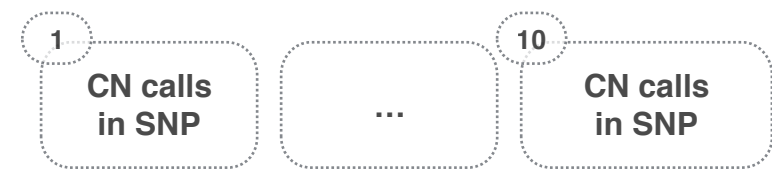
**Association test  
with disease in all  
samples (Table 1)  
and subset by HLA  
type (Table 2)**



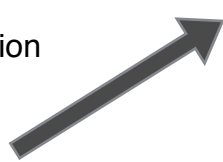
**CN prediction using KNN on theta/LogR of  
rs592645: minimum LOOCV error achieved with  
k=8 in cases/controls called together (Figure 3)**



**CN prediction using KNN on theta/LogR of  
rs592645 with k=8 in cases/controls called  
together (Figure 2)**



Imputation



**Case-only  
interaction test  
between CN and  
HLA  
(Table 3)**

