

Supplementary Figures

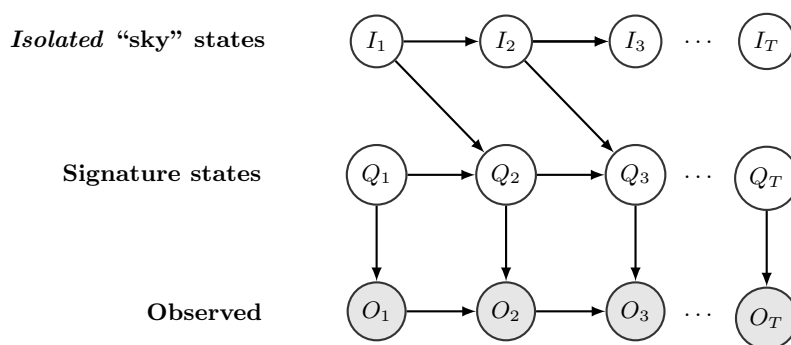


Fig. S1. The dynamic Bayesian network component of the SIGMA model for mutation sequences.

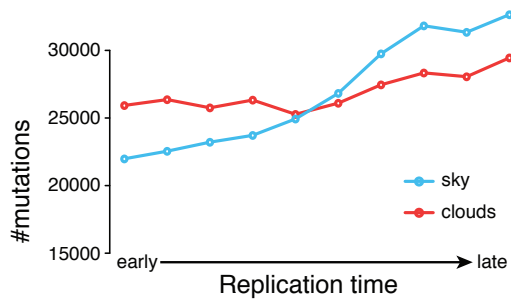


Fig. S2. Comparison of the frequency distribution of mutations in sky and clouds over replication time. The counts of mutations in sky were scaled (multiplied by 0.085) to match the number of cloud mutations.

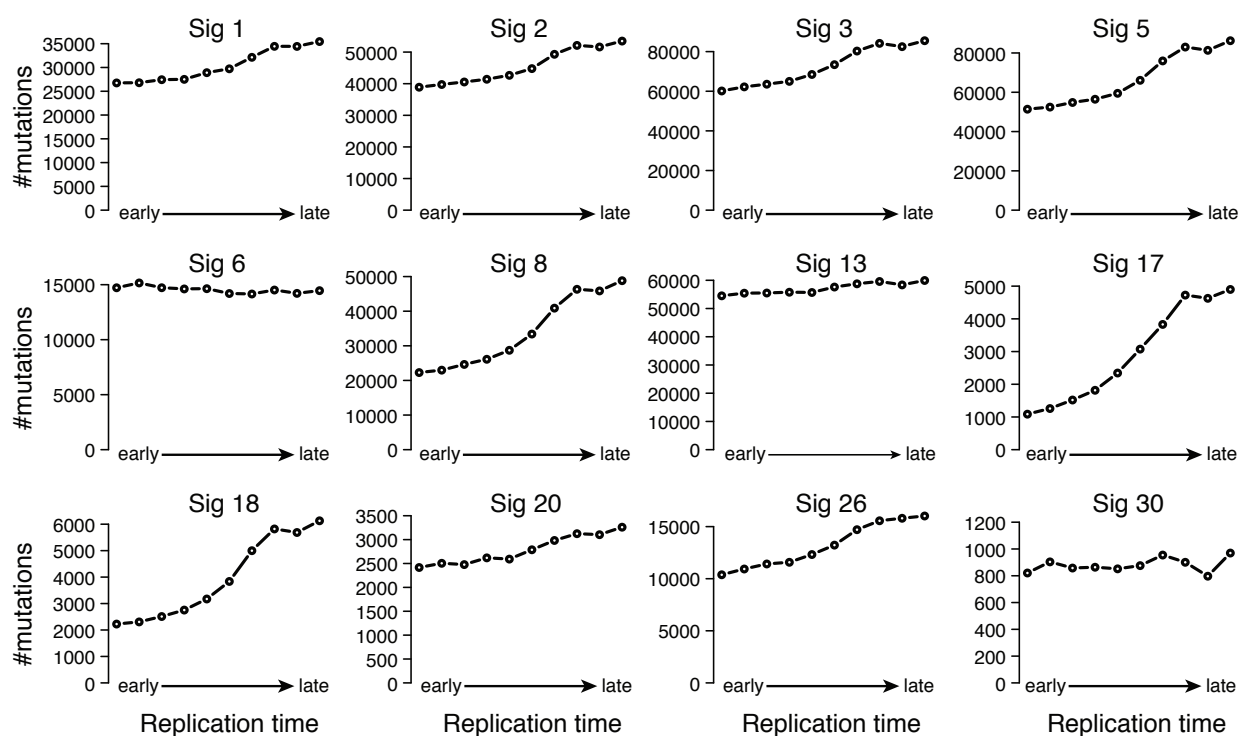


Fig. S3. Frequency distribution of the 12 mutation signatures, as assigned by NMF, over replication time. The NMF signature assignments and the replication time estimates comes from Morganello et al. [31]. Mutations from both sky and clouds were analyzed together.

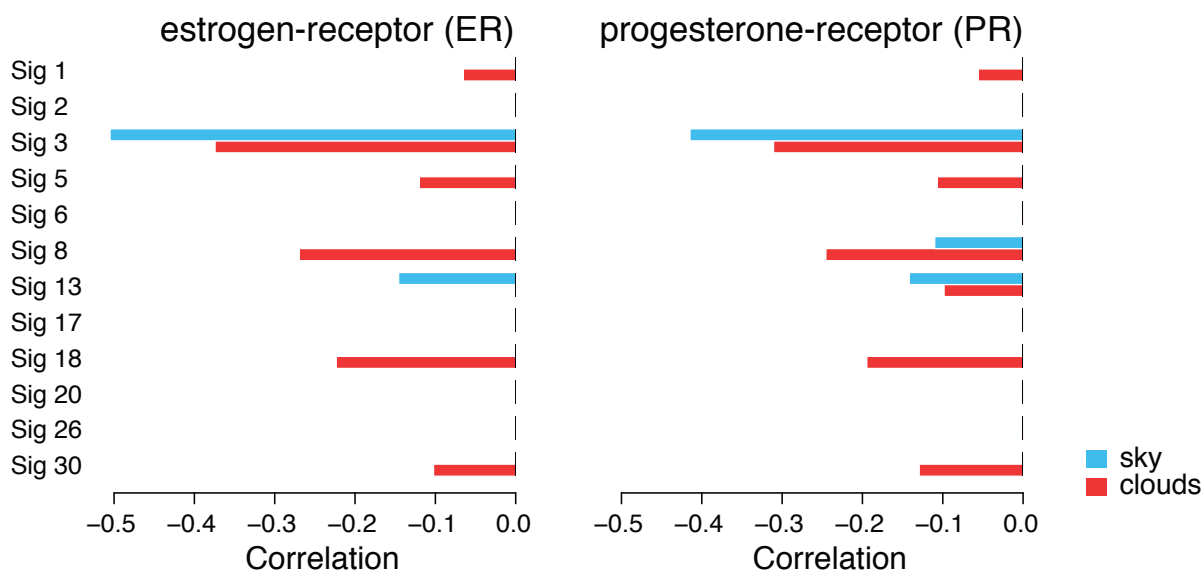


Fig. S4. Pearson correlations between clinical features and signature exposures in sky and cloud regions. Only significant correlations with an FDR p -value cut-off of 0.05 are shown.