

Figure S1

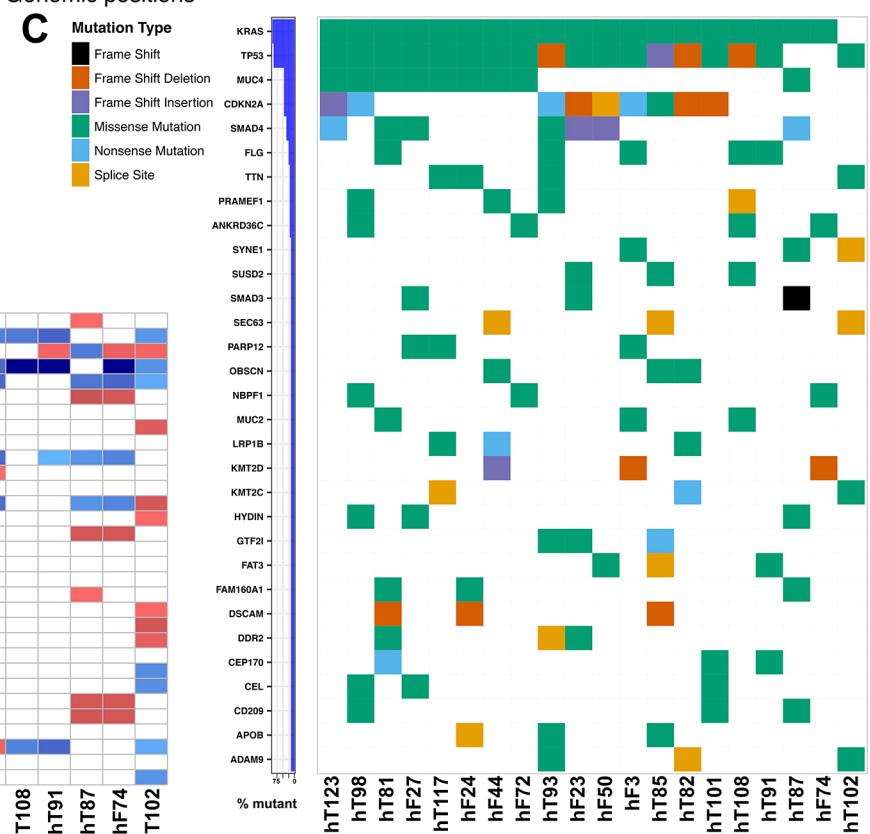
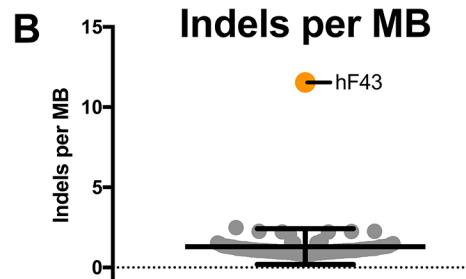
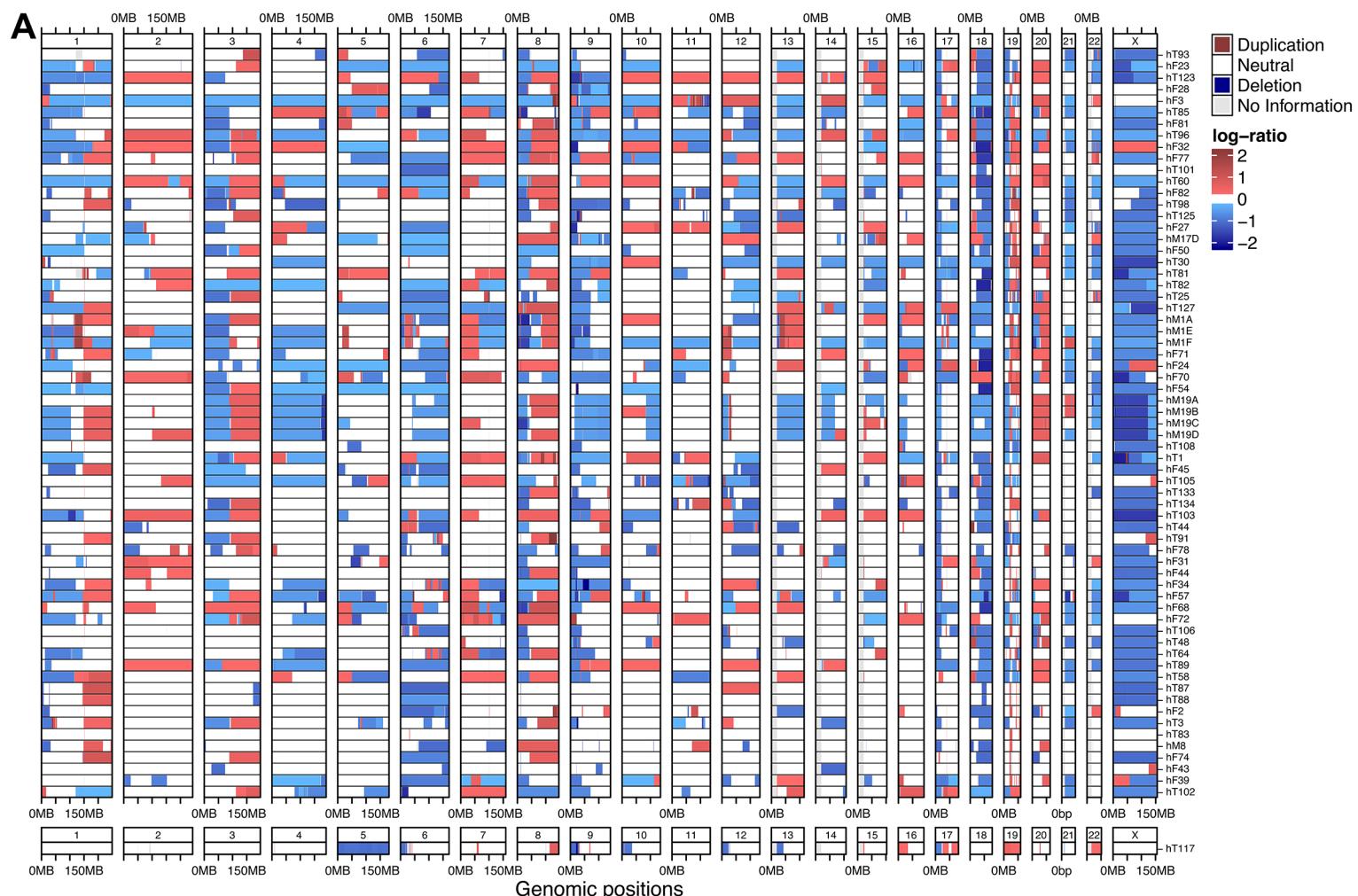
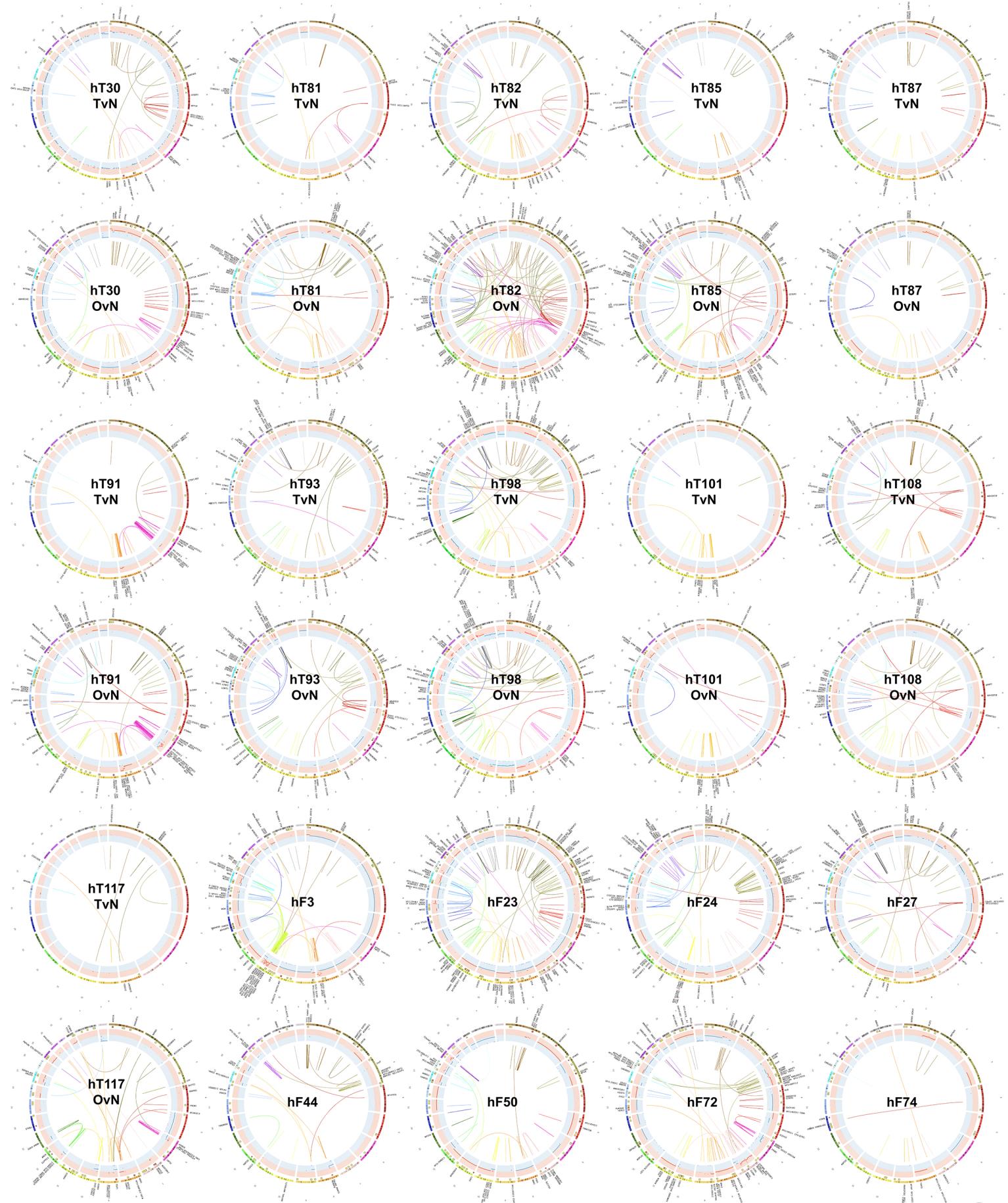
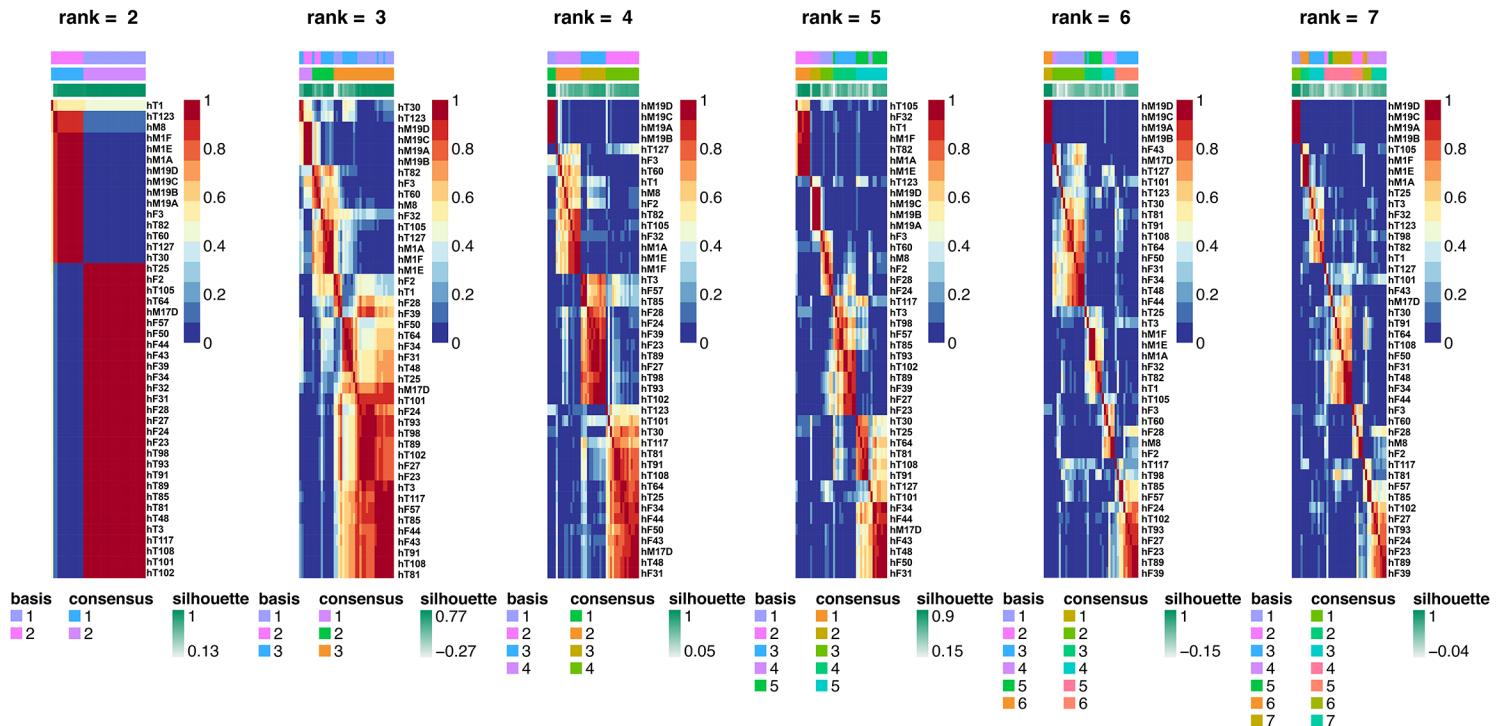


Figure S2

Figure S3

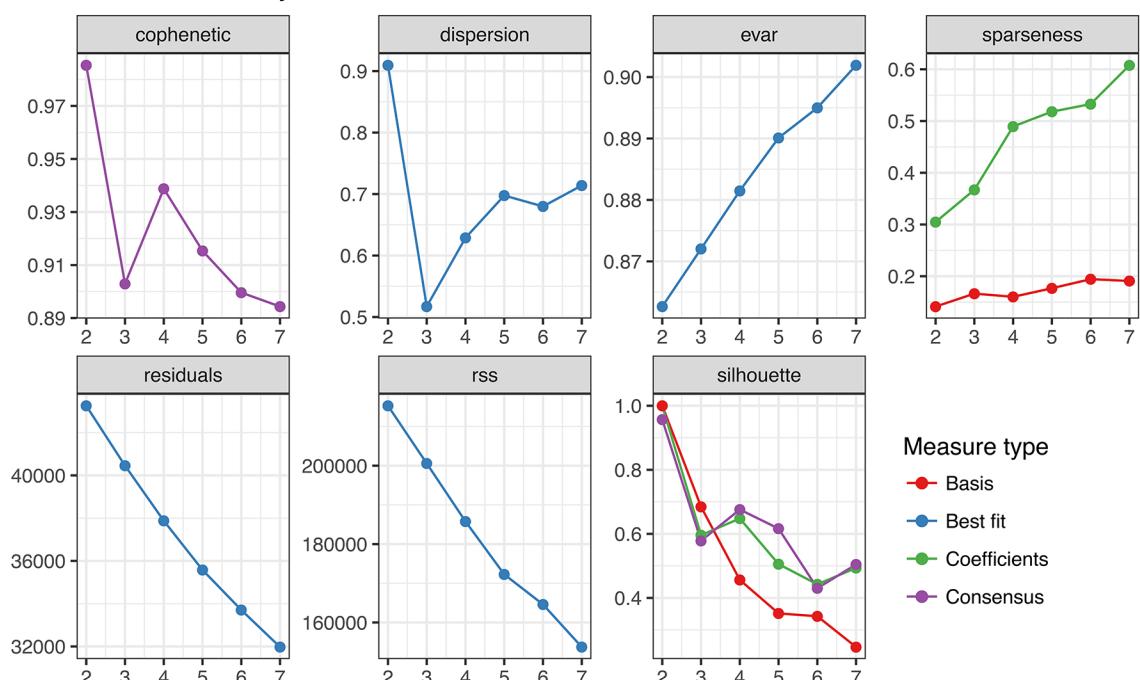


A



B

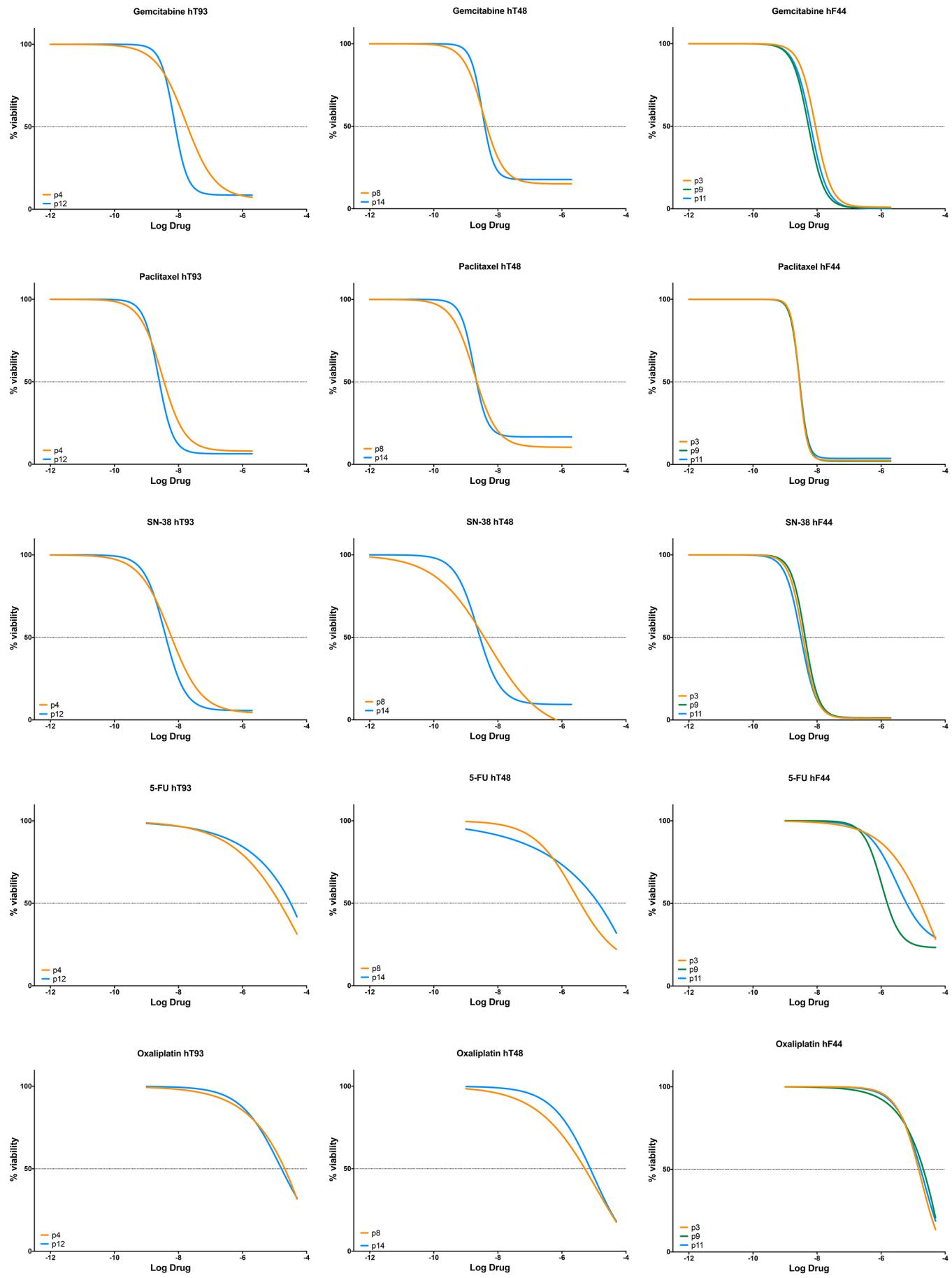
NMF rank survey



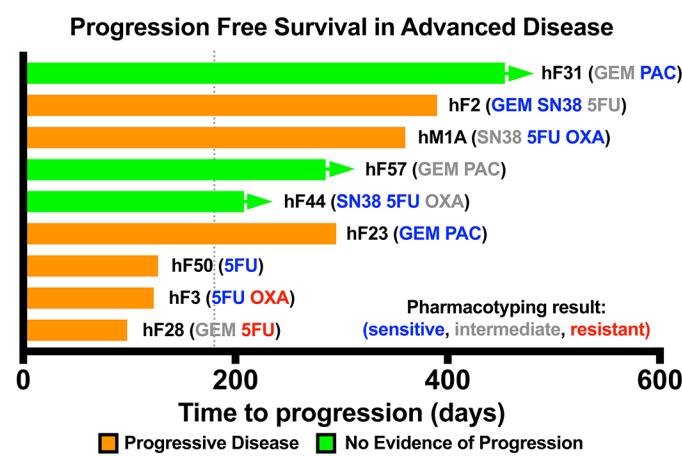
Measure type

- Basis
- Best fit
- Coefficients
- Consensus

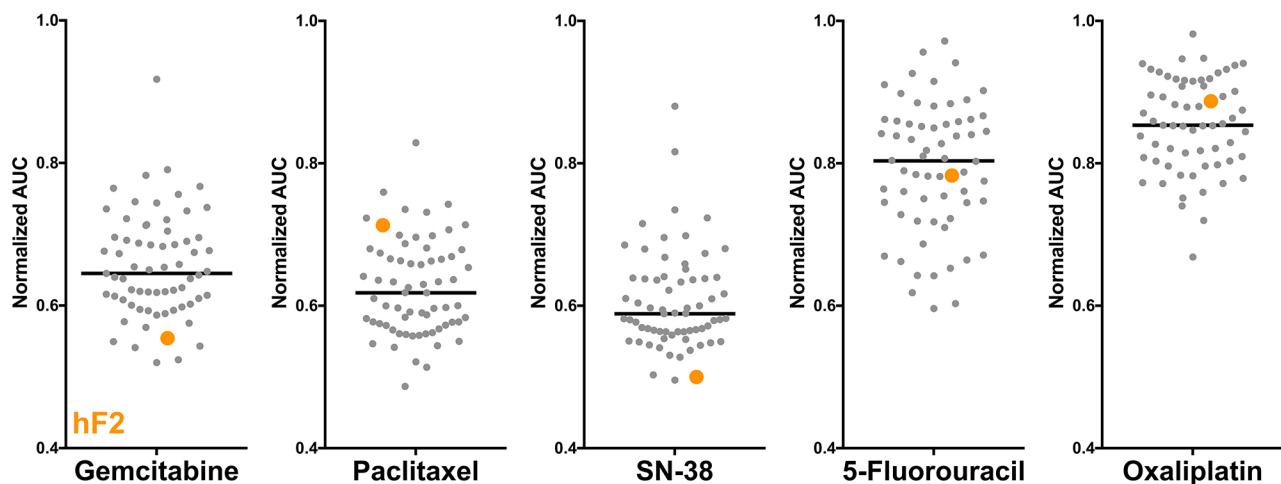
Figure S4

Figure S5

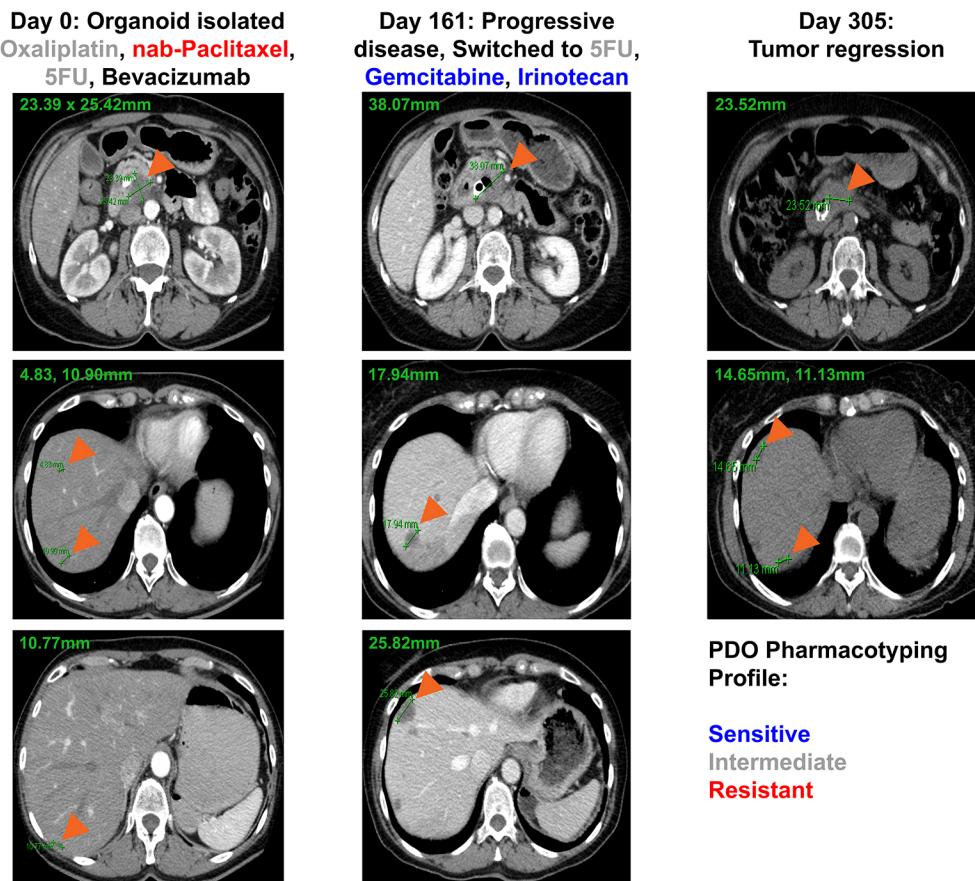
A



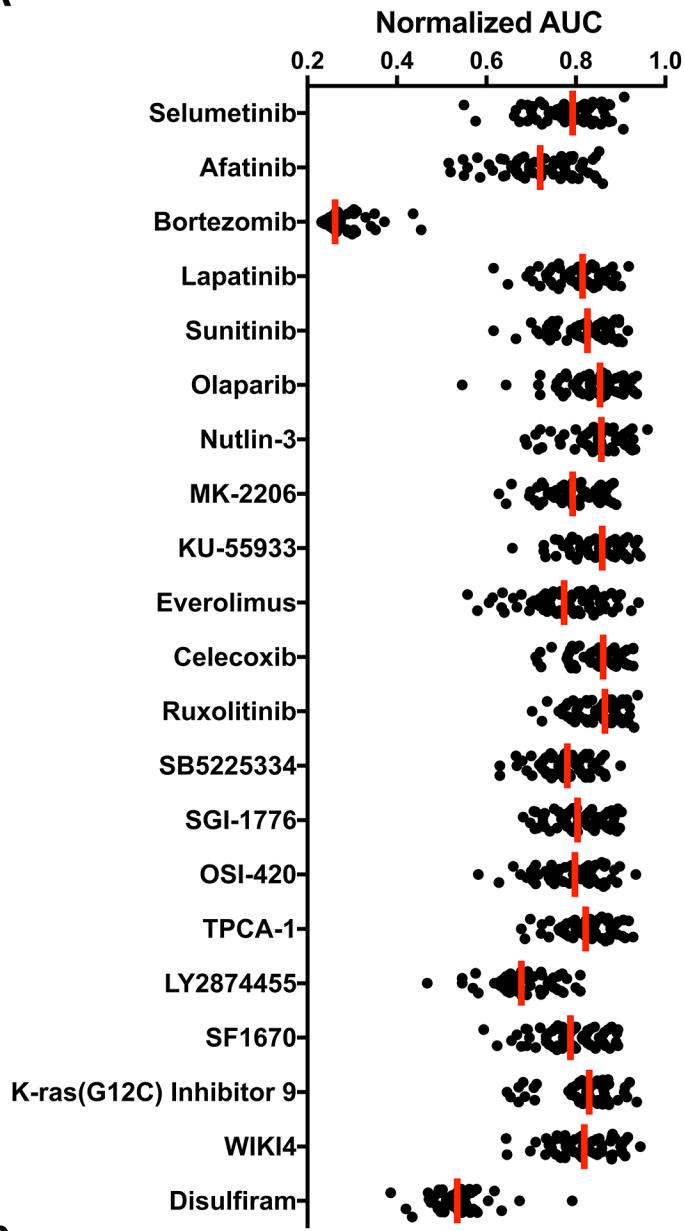
B



C

**Figure S6**

A



B



Figure S7

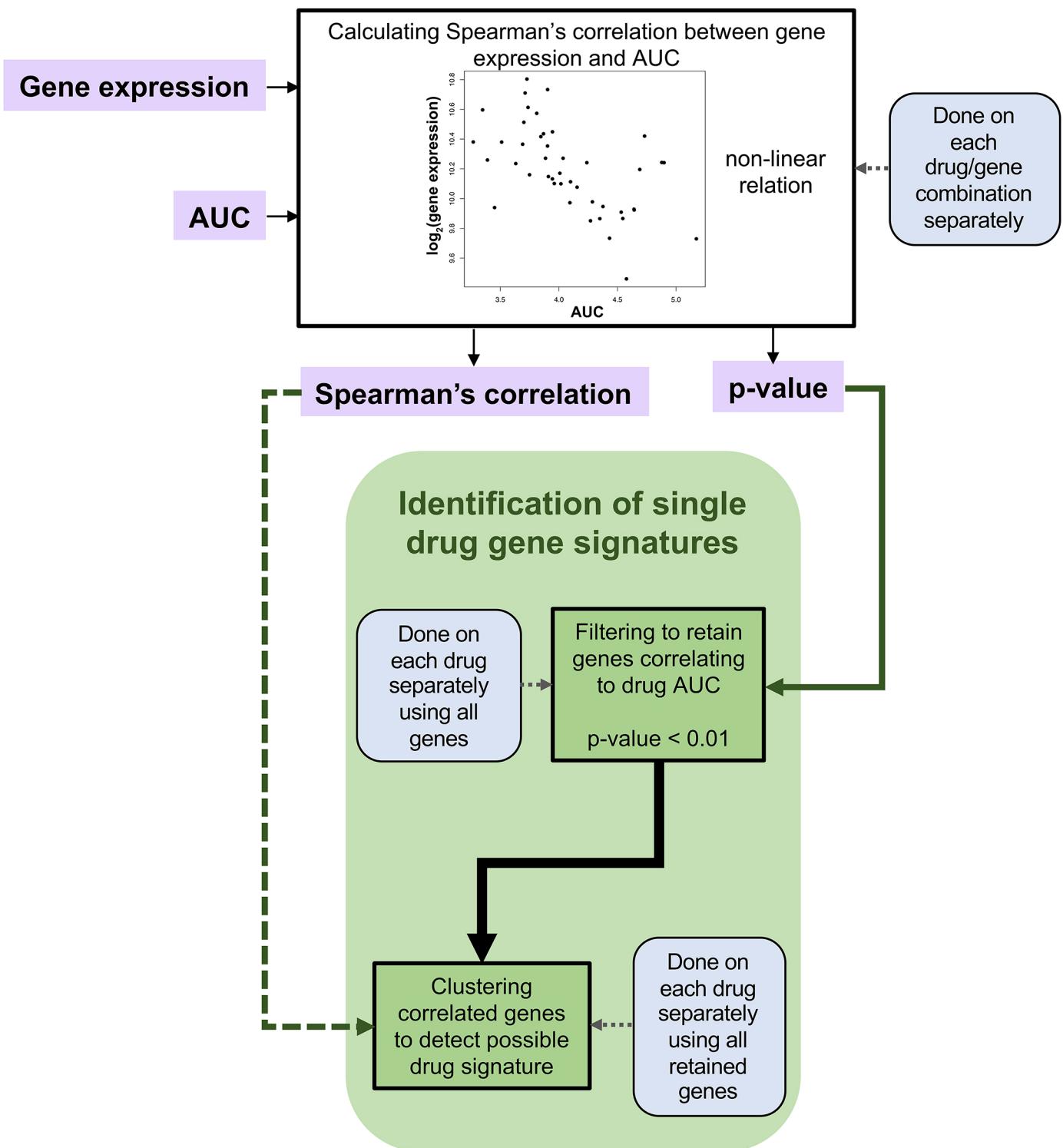


Figure S8

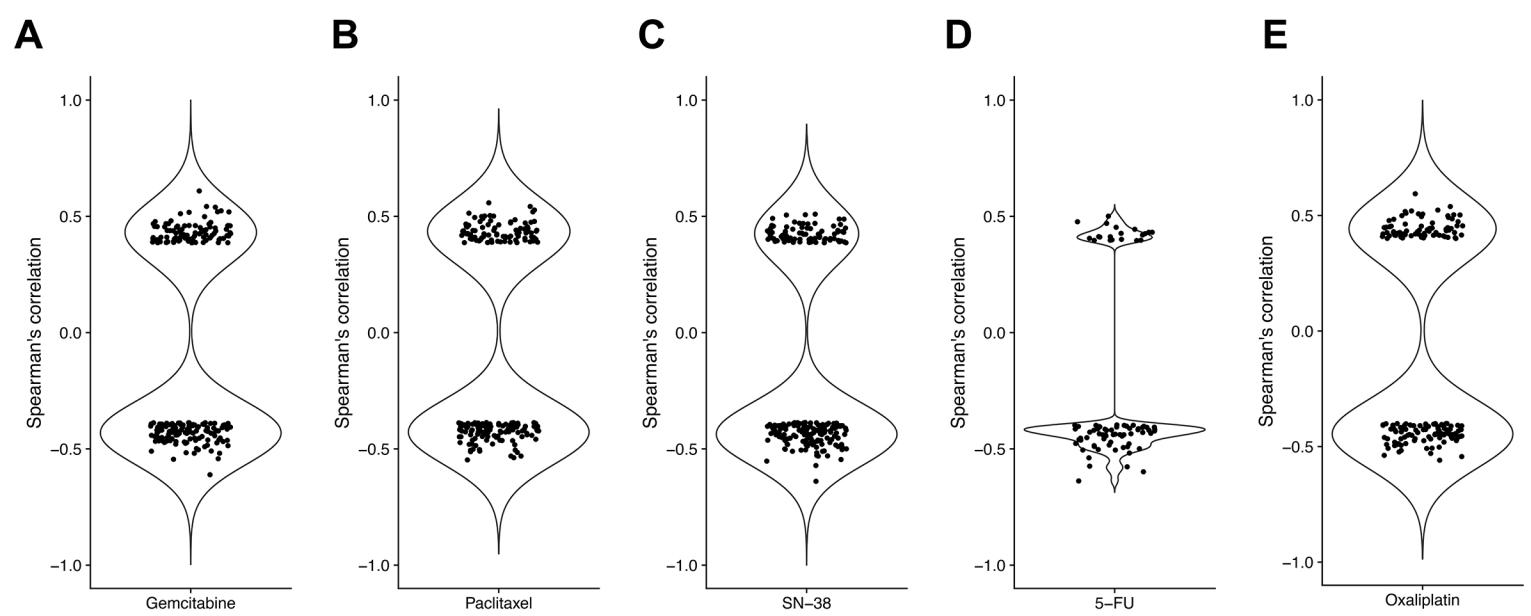


Figure S9

A

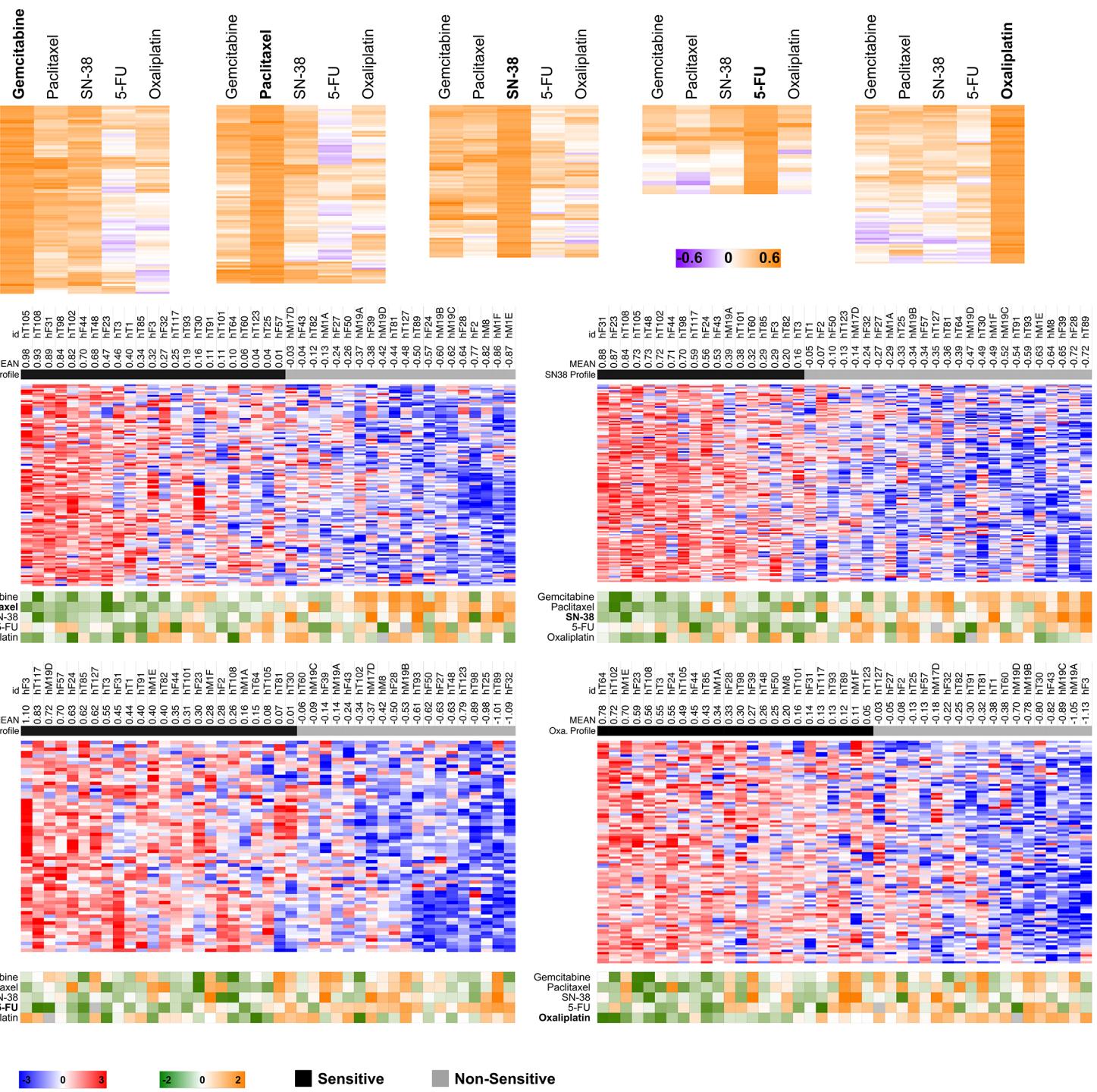
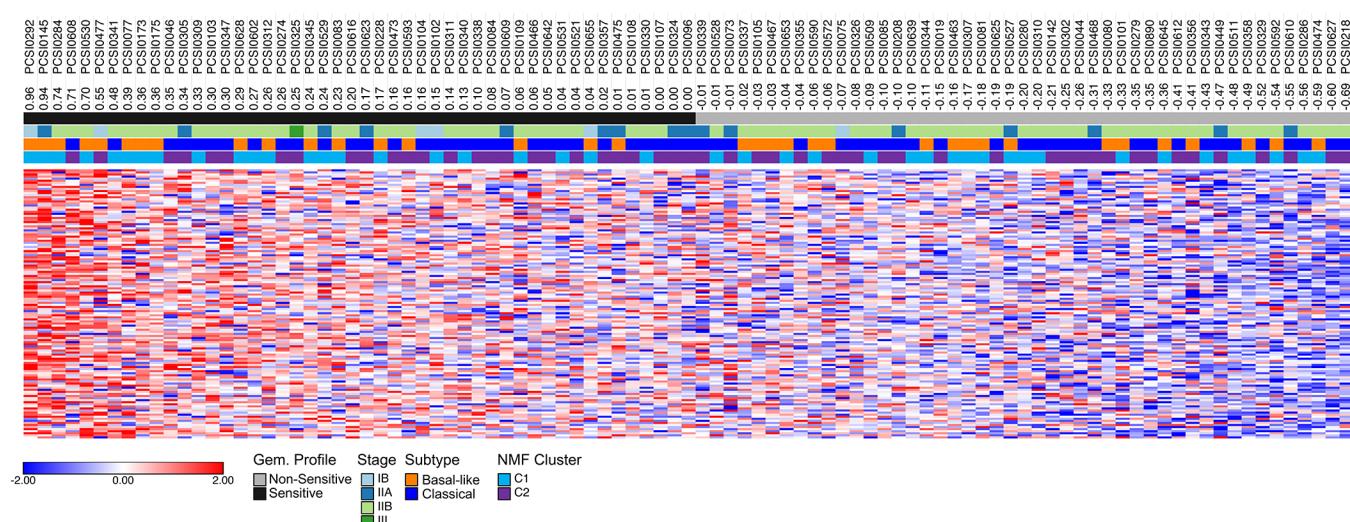
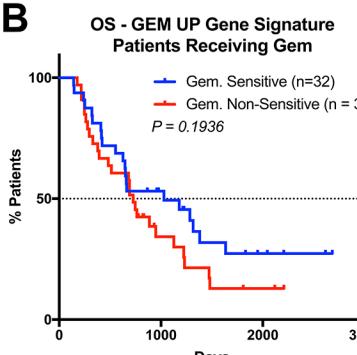
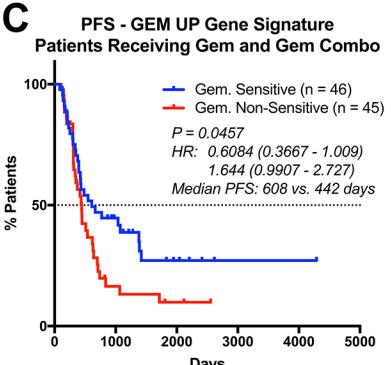
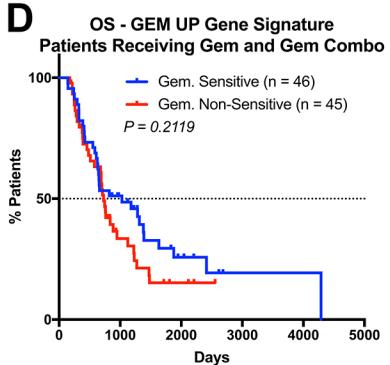
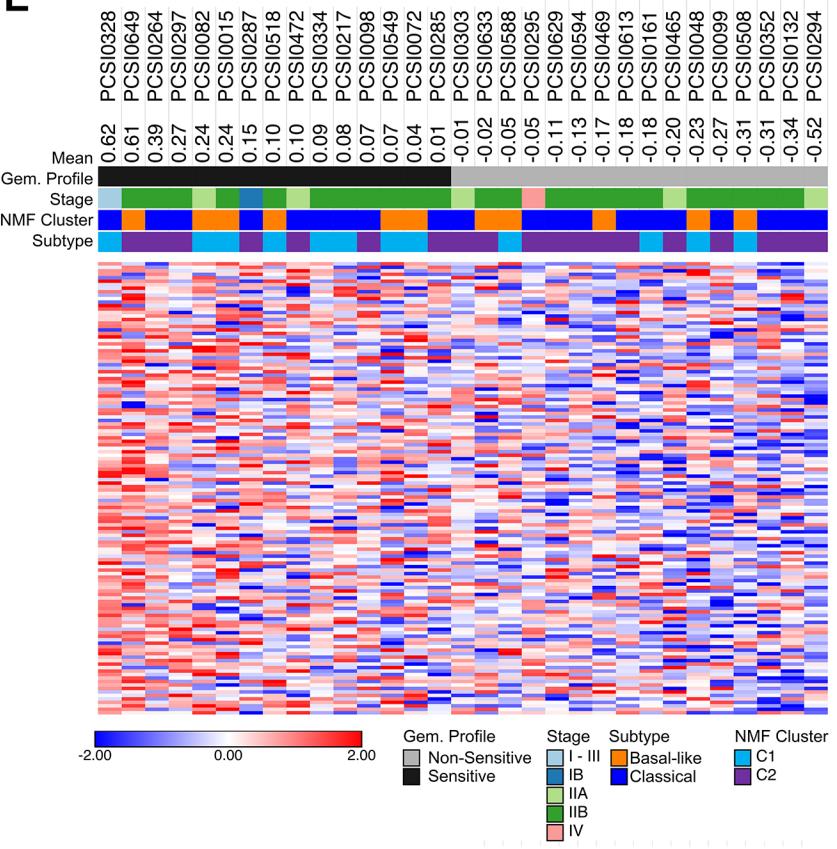
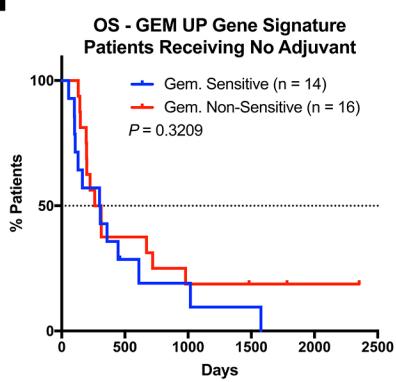


Figure S10

A**B****C****D****E****F****Figure S11**

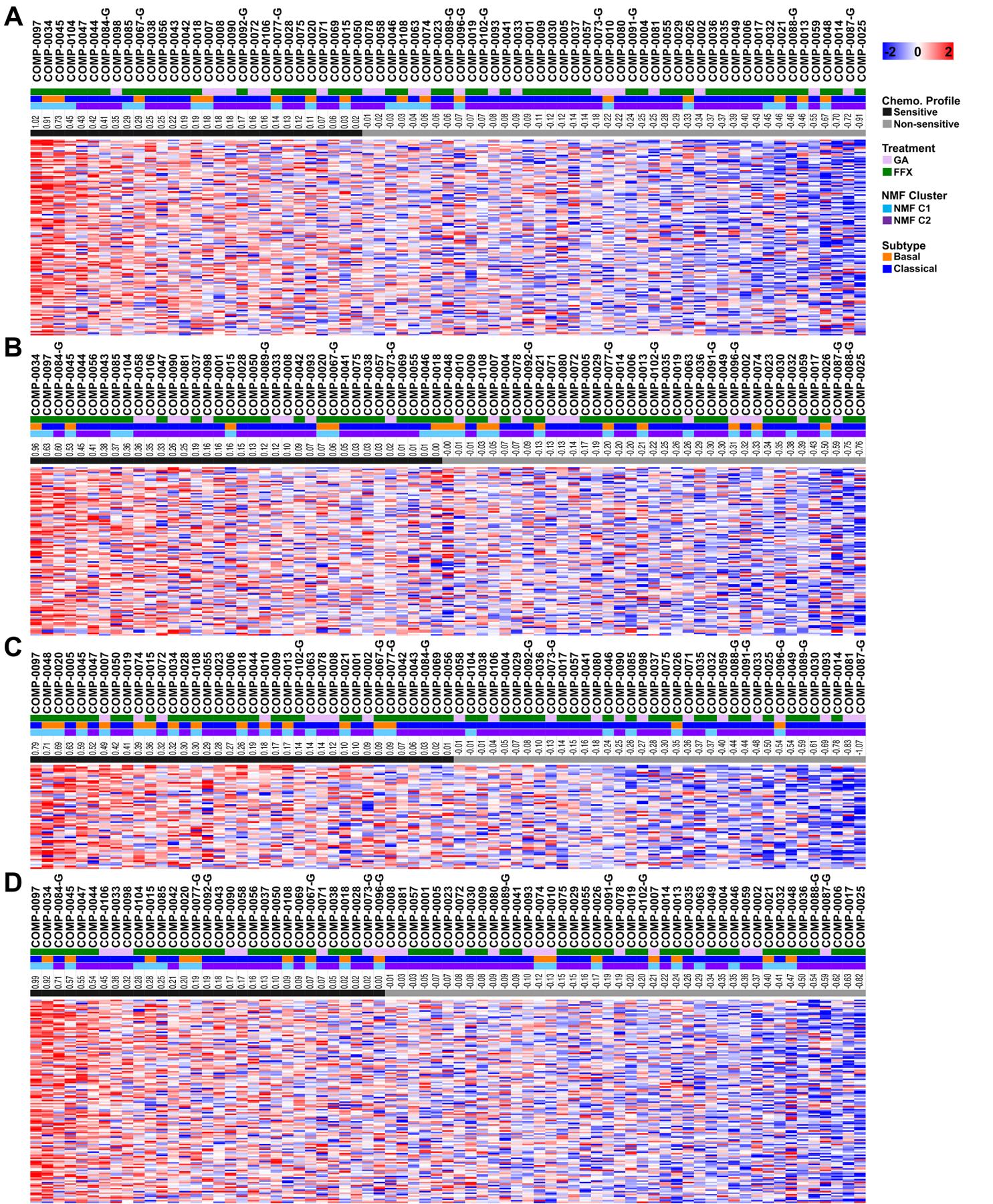


Figure S12

GA COMPASS Cohort

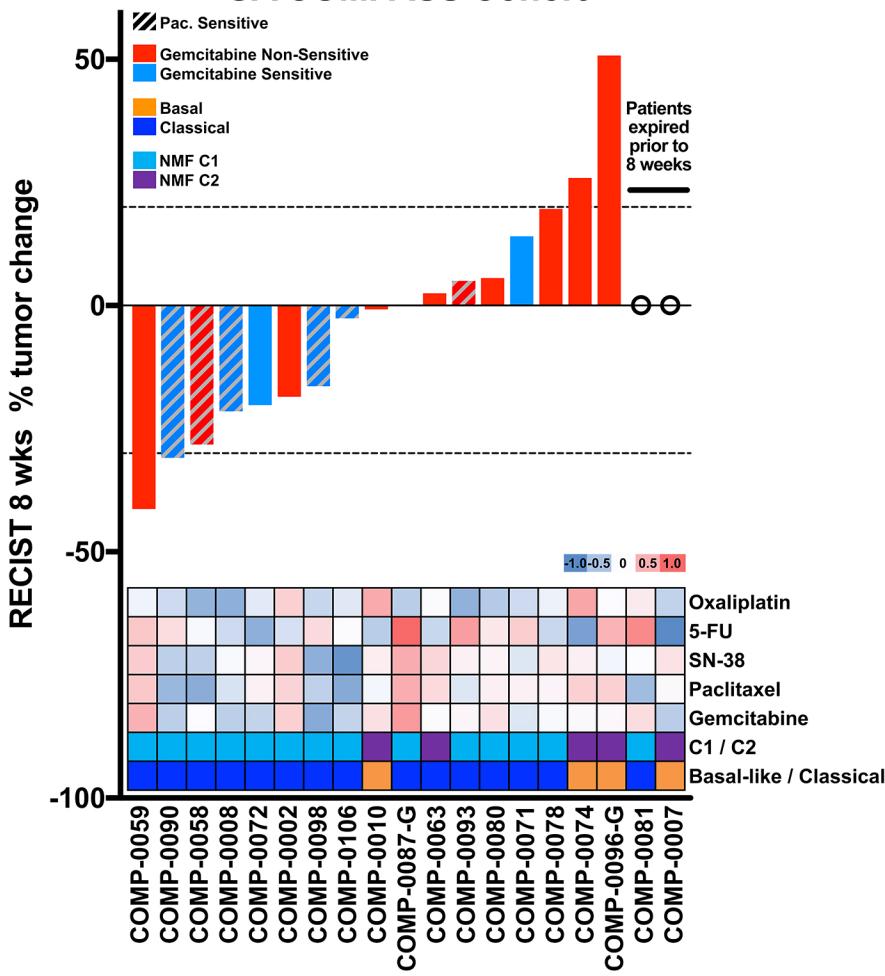


Figure S13