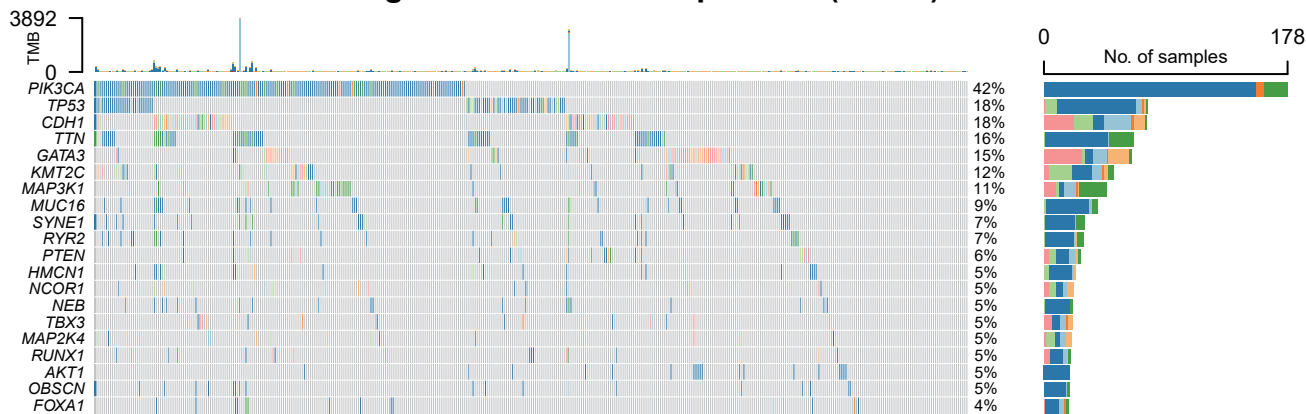


**A**

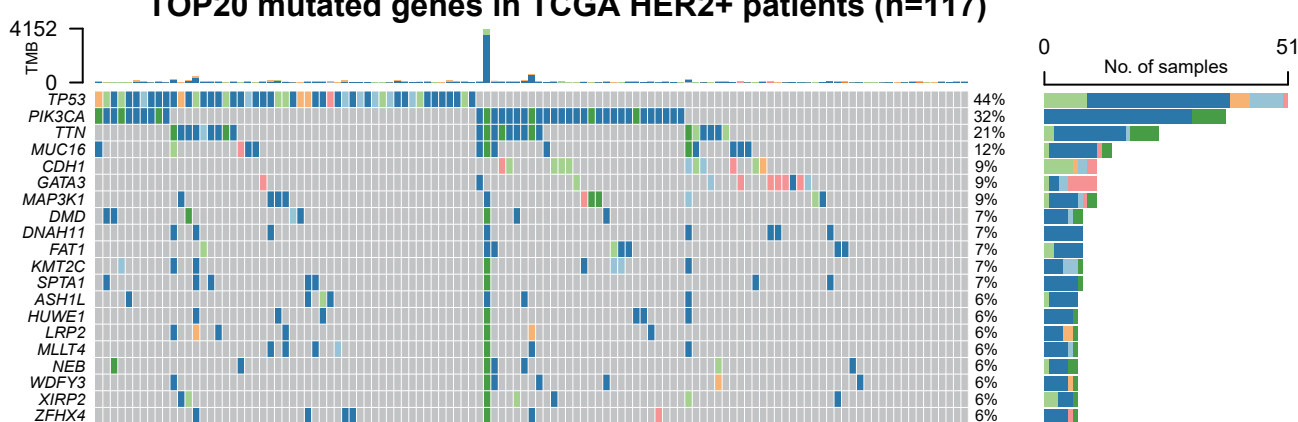
**TOP20 mutated genes in TCGA HR+ patients (n=419)**



- Frame\_Shift\_Ins
- In\_Frame\_Del
- Nonsense\_Mutation
- Splice\_Site

**B**

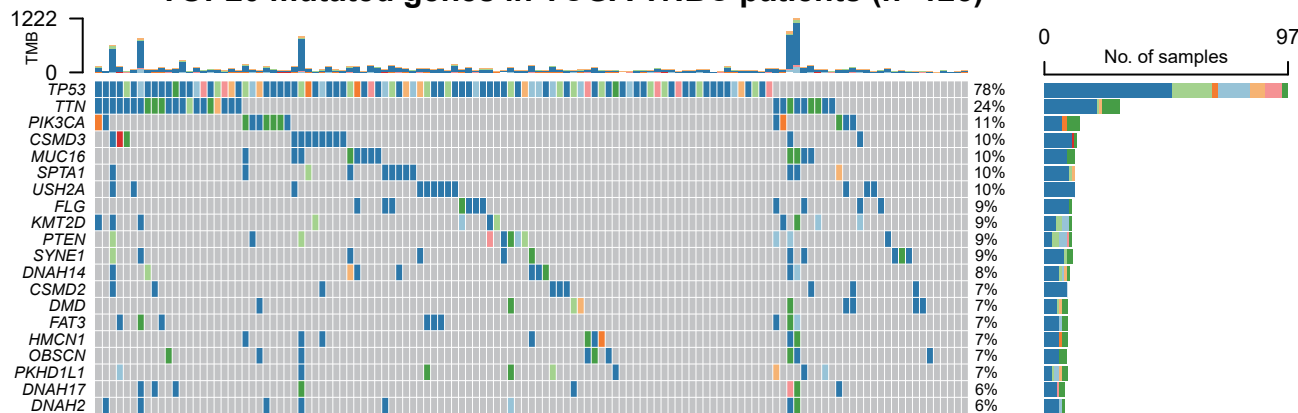
**TOP20 mutated genes in TCGA HER2+ patients (n=117)**



- Nonsense\_Mutation
- Missense\_Mutation
- Frame\_Shift\_Ins
- In\_Frame\_Del

**C**

**TOP20 mutated genes in TCGA TNBC patients (n=125)**



- Missense\_Mutation
- Nonsense\_Mutation
- Splice\_Site
- Frame\_Shift\_Ins