Supplemental Figures & Table



Supp. Figure 1. Distribution of somatic *TP53* **mutations identified in MyBrCa.** The lollipop plots compare the positions of somatic *TP53* mutations across PAM50 subtypes, with prominent positions indicated.



Supp. Figure 2. Cancer Cell Fraction (CCF) of *TP53* across somatic **mutations.** The proportion of cancer cells carrying somatic mutations in *TP53* across PAM50 subtypes in the MyBrCa cohort

| cDNA_Change | Protein_Change | Prevalence (%) | | | | Ctatistical |
|-------------|----------------|-----------------|----------------|----------------|----------------|--------------|
| | | Basal (n=65) | Her2 (n=72) | LumA (n=26) | LumB (n=28) | Significance |
| c.524G>A | p.R175H | 6.20 | 2.80 | 3.85 | 3.57 | 0.797 |
| c.586C>T | p.R196* | 1.50 | 1.39 | 0.00 | 7.69 | 0.230 |
| c.614A>G | p.Y205C | 1.50 | 1.39 | 3.85 | 0.00 | 0.721 |
| c.637C>T | p.R213* | 4.62 | 1.39 | 0.00 | 3.57 | 0.524 |
| c.659A>G | p.Y220C | 3.07 | 4.17 | 3.85 | 0.00 | 0.753 |
| c.743G>A | p.R248Q | 6.15 | 2.78 | 0.00 | 7.14 | 0.435 |
| c.817C>T | p.R273C | 4.62 | 6.95 | 7.69 | 3.57 | 0.857 |
| c.818G>A | p.R273H | 9.23 | 2.78 | 3.85 | 0.00 | 0.173 |

Supp. Table 1. Common TP53 somatic mutations in the MyBrCa cohort. The table indicates the top ten most common somatic mutations in *TP53* across PAM50 subtypes. The 273C and R175H mutations are common hotspot mutations that can be observed across all subtypes



Supp.Figure 3: Comparison of TP53 mutations carriers with a high TP53 CCF to samples with low TP53 CCF of Tumour Mutational Burden and HRD scores.