

**Supplementary Table III. Mutational pattern within receptor-based subtypes**

| Gene          | ER+ and or PR+ and HER2-negn=46 (100%) | Triple Negative Breast Cancer TNBC n=24 (100%) | ER+ and/or PR+ and HER2-posn=13 (100%) | ER- and /or PR- and HER2-posn=8 (100%) | HER2 Equivocal n=6 (100%) | Total N=97(100%) |
|---------------|--|--|--|--|---------------------------|------------------|
| <i>TP53</i>   | 5 (10.87%)                             | 19 (79.17%)                                    | 13 (100%)                              | 7 (87.5%)                              | 2 (33.33%)                | 46 (47.42%)      |
| <i>PIK3CA</i> | 10 (21.74%)                            | 5 (20.83%)                                     | 5 (38.46%)                             | 3 (37.5%)                              | 1 (16.67%)                | 33 (34.02%)      |
| <i>NBN</i>    | 10 (21.74%)                            | 5 (20.83%)                                     | 3 (23.08%)                             | 1 (12.5%)                              | 2 (33.33%)                | 21 (21.65%)      |
| <i>AKAP9</i>  | 6 (13.04%)                             | 1 (4.17%)                                      | 0 (0%)                                 | 0 (0%)                                 | 1 (16.67%)                | 8 (8.25%)        |
| <i>APC</i>    | 4 (8.7%)                               | 2 (8.33%)                                      | 1 (7.69%)                              | 0 (0%)                                 | 0 (0%)                    | 7 (7.22%)        |
| <i>AKT1</i>   | 3 (6.52%)                              | 0 (0%)   | 0 (0%)                                 | 1 (12.5%)                              | 0 (0%)                    | 4 (4.12%)        |
| <i>ATM</i>    | 3 (6.52%)                              | 0 (0%)   | 0 (0%)                                 | 0 (0%)                                 | 1 (16.67%)                | 4 (4.12%)        |
| <i>ERCC2</i>  | 1 (2.17%)                              | 3 (12.5%)                                      | 0 (0%)                                 | 0 (0%)                                 | 0 (0%)                    | 4 (4.12%)        |
| <i>TSC2</i>   | 1 (2.17%)                              | 3 (12.5%)                                      | 0 (0%)                                 | 0 (0%)                                 | 0 (0%)                    | 4 (4.12%)        |
| <i>USP8</i>   | 1 (2.17%)                              | 1 (4.17%)                                      | 2 (15.38%)                             | 0 (0%)                                 | 0 (0%)                    | 4 (4.12%)        |
| <i>CSF3R</i>  | 1 (2.17%)                              | 0 (0%)   | 2 (15.38%)                             | 0 (0%)                                 | 0 (0%)                    | 3 (3.09%)        |
| <i>KRAS</i>   | 0 (0%)                                 | 2 (8.33%)                                      | 1 (7.69%)                              | 0 (0%)                                 | 0 (0%)                    | 3 (3.09%)        |
| <i>MSH6</i>   | 1 (2.17%)                              | 0 (0%)   | 1 (7.69%)                              | 1 (12.5%)                              | 0 (0%)                    | 3 (3.09%)        |
| <i>POLE</i>   | 2 (4.35%)                              | 1 (4.17%)                                      | 0 (0%)                                 | 0 (0%)                                 | 0 (0%)                    | 3 (3.09%)        |
| <i>PRF1</i>   | 2 (4.35%)                              | 1 (4.17%)                                      | 0 (0%)                                 | 0 (0%)                                 | 0 (0%)                    | 3 (3.09%)        |
| <i>PTEN</i>   | 2 (4.35%)                              | 0 (0%)   | 0 (0%)                                 | 1 (12.5%)                              | 0 (0%)                    | 3 (3.09%)        |
| <i>TGFBR2</i> | 0 (0%)                                 | 0 (0%)   | 1 (7.69%)                              | 1 (12.5%)                              | 1 (16.67%)                | 3 (3.09%)        |