

## Supplemental Table 1

| Variable                       | Kmplot        |       |         | GEO           |       |         | CIT           |       |         | Total         |       |         |
|--------------------------------|---------------|-------|---------|---------------|-------|---------|---------------|-------|---------|---------------|-------|---------|
|                                | N° of samples | %     | % valid | N° of samples | %     | % valid | N° of samples | %     | % valid | N° of samples | %     | % valid |
| <b>Age</b>                     |               |       |         |               |       |         |               |       |         |               |       |         |
| <=50                           | 254           | 14,04 | 33,38   | 115           | 24,63 | 32,86   | 181           | 33,71 | 34,61   | 550           | 19,55 | 33,66   |
| >50                            | 507           | 28,03 | 66,62   | 235           | 50,32 | 67,14   | 342           | 63,69 | 65,39   | 1084          | 38,54 | 66,34   |
| Missing                        | 1048          | 57,93 |         | 117           | 25,05 |         | 14            | 2,61  |         | 1179          | 41,91 |         |
| <b>Tumor grade</b>             |               |       |         |               |       |         |               |       |         |               |       |         |
| 1                              | 198           | 10,95 | 18,97   | 41            | 8,78  | 11,52   | 47            | 8,75  | 9,11    | 286           | 10,17 | 14,93   |
| 2                              | 534           | 29,52 | 51,15   | 188           | 40,26 | 52,81   | 271           | 50,47 | 52,52   | 993           | 35,30 | 51,83   |
| 3                              | 312           | 17,25 | 29,89   | 127           | 27,19 | 35,67   | 198           | 36,87 | 38,37   | 637           | 22,64 | 33,25   |
| Missing                        | 765           | 42,29 |         | 111           | 23,77 |         | 21            | 3,91  |         | 897           | 31,89 |         |
| <b>T-stage</b>                 |               |       |         |               |       |         |               |       |         |               |       |         |
| T0                             | 6             | 0,33  | 0,66    | 0             | 0,00  | 0,00    | 4             | 0,74  | 0,92    | 10            | 0,36  | 0,63    |
| T1                             | 464           | 25,65 | 51,21   | 78            | 16,70 | 32,10   | 136           | 25,33 | 31,34   | 678           | 24,10 | 42,83   |
| T2                             | 419           | 23,16 | 46,25   | 153           | 32,76 | 62,96   | 254           | 47,30 | 58,53   | 826           | 29,36 | 52,18   |
| T3                             | 17            | 0,94  | 1,88    | 12            | 2,57  | 4,94    | 40            | 7,45  | 9,22    | 69            | 2,45  | 4,36    |
| Missing                        | 903           | 49,92 |         | 224           | 47,97 |         | 103           | 19,18 |         | 1230          | 43,73 |         |
| <b>Lymph Node</b>              |               |       |         |               |       |         |               |       |         |               |       |         |
| 0                              | 1179          | 65,17 | 86,12   | 111           | 23,77 | 50,45   | 139           | 25,88 | 31,81   | 1429          | 50,80 | 70,53   |
| 1                              | 190           | 10,50 | 13,88   | 109           | 23,34 | 49,55   | 298           | 55,49 | 68,19   | 597           | 21,22 | 29,47   |
| Missing                        | 440           | 24,32 |         | 247           | 53,10 |         | 100           | 18,62 |         | 787           | 27,98 |         |
| <b>ER status</b>               |               |       |         |               |       |         |               |       |         |               |       |         |
| 0                              | 263           | 14,54 | 21,36   | 200           | 42,83 | 43,29   | 108           | 20,11 | 20,97   | 571           | 20,30 | 25,86   |
| 1                              | 968           | 53,51 | 78,64   | 262           | 56,10 | 56,71   | 407           | 75,79 | 79,03   | 1637          | 58,19 | 74,14   |
| Missing                        | 578           | 31,95 |         | 5             | 1,07  |         | 22            | 4,10  |         | 605           | 21,51 |         |
| <b>HER2 status</b>             |               |       |         |               |       |         |               |       |         |               |       |         |
| 0                              | 42            | 2,32  | 93,33   | 284           | 60,81 | 80,45   | 340           | 63,31 | 86,96   | 666           | 23,68 | 84,41   |
| 1                              | 3             | 0,17  | 6,67    | 69            | 14,78 | 19,55   | 51            | 9,50  | 13,04   | 123           | 4,37  | 15,59   |
| Missing                        | 1764          | 97,51 |         | 114           | 24,41 |         | 146           | 27,19 |         | 2024          | 71,95 |         |
| <b>Adjuvant chemo</b>          |               |       |         |               |       |         |               |       |         |               |       |         |
| 0                              | 1035          | 57,21 | 98,01   | 55            | 11,78 | 41,98   |               |       |         |               |       |         |
| 1                              | 21            | 1,16  | 1,99    | 76            | 16,27 | 58,02   |               |       |         |               |       |         |
| Missing                        | 753           | 41,63 |         | 336           | 71,95 |         |               |       |         |               |       |         |
| <b>Adjuvant hormonotherapy</b> |               |       |         |               |       |         |               |       |         |               |       |         |
| 0                              | 746           | 41,24 | 70,78   | 54            | 11,56 | 41,22   |               |       |         |               |       |         |
| 1                              | 308           | 17,03 | 29,22   | 77            | 16,49 | 58,78   |               |       |         |               |       |         |
| Missing                        | 755           | 41,74 |         | 336           | 71,95 |         |               |       |         |               |       |         |