**Supplementary Table S1:** Core level agreement between automated and manual scoring of central tissue microarrays

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ER** | | | | | |
|  |  | **Manual** | | | |
|  |  | **Negative** | **Borderline** | **Positive** | **Total** |
| **Automated** | **Negative** | 281 | 27 | 18 | **326** |
| **Borderline** | 32 | 10 | 35 | **77** |
| **Positive** | 3 | 6 | 788 | **797** |
| **Total** | **316** | **43** | **841** | **1,200** |
| **Including borderlines** | Agreement | 89% | | | |
| Kappa (95% CI) | 0.78 (0.75-0.79) | | | |
| **Excluding borderlines** | Agreement | 89% | | | |
| Kappa (95% CI) | 0.80 (0.73-0.86) | | | |
| **PR** | | | | | |
|  |  | **Manual** | | | |
|  |  | **Negative** | **Borderline** | **Positive** | **Total** |
| **Automated** | **Negative** | 336 | 32 | 13 | **381** |
| **Borderline** | 68 | 35 | 41 | **144** |
| **Positive** | 20 | 39 | 601 | **660** |
| **Total** | **424** | **106** | **655** | **1,200** |
| **Including borderlines** | Agreement | 82% | | | |
| Kappa (95% CI) | 0.68 (0.65-0.71) | | | |
| **Excluding borderlines** | Agreement | 91% | | | |
| Kappa (95% CI) | 0.83 (0.78-0.89) | | | |
| **HER2** | | | | | |
|  |  | **Manual** | | | |
|  |  | **Negative** | **Equivocal** | **Positive** | **Total** |
| **Automated** | **Negative** | 933 | 14 | 29 | **976** |
| **Equivocal** | 36 | 2 | 7 | **45** |
| **Positive** | 45 | 4 | 115 | **164** |
| **Total** | **1,014** | **20** | **151** | **1,185** |
| **Including equivocal** | Agreement | 89% | | | |
| Kappa (95% CI) | 0.59 (0.57-0.62) | | | |
| **Excluding equivocal** | Agreement | 93% | | | |
| Kappa (95% CI) | 0.79 (0.71-0.87) | | | |