**Supplementary Table S1:** Study-specific tissue classification cell-detection parameters for the assessment of tumor-associated stromal cellular density on digitized breast cancer hematoxylin and eosin-stained images from three independent study populations

|  |  |
| --- | --- |
|  | **Script parameters** |
| **Script features**  | **CHCAMS** | **PBCS** | **PLCO** |
| Analysis Magnification  | 1.000 | 1.000 | 1.000 |
|   |   |   |   |
| Stain (H&E) |   |   |   |
| R | 0.763 | 0.763 | 0.763 |
| G | 1.045 | 1.045 | 1.045 |
| B | 0.472 | 0.472 | 0.472 |
|   |   |   |   |
| Stain NDW | 0.350 | 0.132 | 0.132 |
|   |   |   |   |
| Nuclear Contrast threshold | 0.520 | 0.520 | 0.520 |
|   |   |   |   |
| Nuclear size (μm) |   |   |   |
| Minimum | 5.000 | 5.000 | 5.000 |
| Maximum | 15.000 | 15.000 | 15.000 |
|   |   |   |   |
| Minimum Nuclear roundness | 0.450 | 0.450 | 0.450 |
|   |   |   |   |
| Nuclear segmentation aggressiveness  | 1.000 | 1.000 | 1.000 |
|   |   |   |   |
| Fill Nuclear Holes  | True  | True  | True  |
|   |   |   |   |
| Minimum Tissue OD | 0.037 | 0.037 | 0.037 |
|   |   |   |   |
| Classifier | Tissue | Tissue | Tissue |
|   |   |   |   |
| Class | Stroma  | Stroma  | Stroma  |

CHCAMS: Cancer Hospital Chinese Academy of Medical Sciences; PBCS: Polish Breast Cancer Study; PLCO: Prostate, Lung, Colorectal, and Ovarian Cancer screening trial.