

Table S1 New models distribution

| Models | Total (n=318) | Benign (n=224) | Malignant (n=94) | P |
|--------------------------|---------------|----------------|------------------|--------|
| Complex-PI-RADS, n [%] | | | | <0.001 |
| 2 | 36 [11] | 36 [16] | 0 [0] | |
| 3 | 157 [49] | 141 [63] | 16 [17] | |
| 4 | 78 [25] | 46 [21] | 32 [34] | |
| 5 | 47 [15] | 1 [0] | 46 [49] | |
| Upgrade-PI-RADS, n [%] | | | | <0.001 |
| 2 | 36 [11] | 36 [16] | 0 [0] | |
| 3 | 88 [28] | 84 [38] | 4 [4] | |
| 4 | 141 [44] | 101 [45] | 40 [43] | |
| 5 | 53 [17] | 3 [1] | 50 [53] | |
| Downgrade-PI-RADS, n [%] | | | | <0.001 |
| 2 | 38 [12] | 37 [17] | 1 [1] | |
| 3 | 192 [60] | 170 [76] | 22 [23] | |
| 4 | 42 [13] | 16 [7] | 26 [28] | |
| 5 | 46 [14] | 1 [0] | 45 [48] | |

EQS, elastographic Q-analysis score; PSA, prostate-specific antigen; fPSA, free PSA; PSAD, PSA density; PI-RADS, prostate imaging-reporting and data system.