**Supplementary Table 1: Sensitivity and specificity of cut-off scores applied to GetCheckedOnline populations**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Score cut-off** | **GetCheckedOnline**  **Multiple Imputation, n=7549** | | | | **GetCheckedOnline**  **CPR without ethnicity, n=5478** | | | |
| **Sensitivity** | **Specificity** | **Screened** | **PPV** | **Sensitivity** | **Specificity** | **Screened** | **PPV** |
| ≥-2 | 100.0 | 0.0 | 100.0 | 2.3 | 100.0 | 0.0 | 100.0 | 2.4 |
| ≥-1 | 100.0 | 1.9 | 98.2 | 2.4 | 100.0 | 1.3 | 98.7 | 2.4 |
| ≥0 | 100.0 | 1.9 | 98.2 | 2.4 | 100.0 | 1.3 | 98.7 | 2.4 |
| ≥1 | 99.4 | 3.1 | 96.9 | 2.4 | 100.0 | 2.2 | 97.8 | 2.5 |
| ≥2 | 98.9 | 4.3 | 95.8 | 2.4 | 100.0 | 3.1 | 97.0 | 2.5 |
| ≥3 | 98.9 | 4.3 | 95.8 | 2.4 | 100.0 | 3.1 | 97.0 | 2.5 |
| ≥4 | 94.4 | 17.2 | 83.1 | 2.7 | 93.9 | 19.6 | 80.7 | 2.8 |
| ≥5 | 85.3 | 26.5 | 73.8 | 2.7 | 79.5 | 33.4 | 67.0 | 2.9 |
| ≥6 | 81.4 | 35.7 | 64.7 | 2.9 | 74.2 | 44.5 | 55.9 | 3.2 |
| ≥7 | 72.3 | 51.2 | 49.3 | 3.4 | 61.4 | 65.4 | 35.2 | 4.2 |
| ≥8 | 64.4 | 56.8 | 43.7 | 3.5 | 53.0 | 74.0 | 26.7 | 4.8 |
| ≥9 | 53.1 | 69.0 | 31.6 | 3.9 | 40.2 | 84.1 | 16.4 | 5.9 |
| ≥10 | 35.6 | 76.7 | 23.6 | 3.5 | 20.5 | 90.5 | 9.8 | 5.0 |
| ≥11 | 33.9 | 79.9 | 20.4 | 3.9 | 17.4 | 91.1 | 9.1 | 4.6 |
| ≥12 | 29.4 | 85.8 | 14.6 | 4.7 | 14.4 | 92.3 | 7.9 | 4.4 |
| ≥13 | 27.7 | 88.6 | 11.8 | 5.5 | 14.4 | 92.7 | 7.5 | 4.6 |
| ≥14 | 17.5 | 93.1 | 7.2 | 5.7 | 9.1 | 95.7 | 4.4 | 5.0 |
| ≥15 | 9.0 | 96.1 | 4.0 | 5.3 | 3.8 | 97.6 | 2.4 | 3.8 |
| ≥16 | 8.5 | 97.1 | 3.1 | 6.5 | 3.8 | 98.7 | 1.4 | 6.6 |
| ≥17 | 5.1 | 98.4 | 1.7 | 6.9 | 0.0 | 99.8 | 0.2 | 0.0 |
| ≥18 | 5.1 | 98.5 | 1.6 | 7.3 | 0.0 | 99.8 | 0.2 | 0.0 |
| ≥19 | 4.0 | 99.1 | 0.9 | 9.9 | 0.0 | 99.8 | 0.2 | 0.0 |
| ≥20 | 1.7 | 99.3 | 0.7 | 5.8 | 0.0 | 99.8 | 0.2 | 0.0 |
| ≥21 | 1.1 | 99.7 | 0.4 | 7.4 | 0.0 | 99.9 | 0.1 | 0.0 |
| ≥22 | 0.0 | 99.9 | 0.1 | 0.0 | N/A | N/A | N/A | N/A |
| ≥23 | 0.0 | 99.9 | 0.1 | 0.0 |  |  |  |  |
| ≥24 | 0.0 | 99.9 | 0.1 | 0.0 |  |  |  |  |
| ≥25 | 0.0 | 99.9 | 0.1 | 0.0 |  |  |  |  |
| ≥26 | 0.0 | 100.0 | 0.0 | 0.0 |  |  |  |  |
| ≥27 | N/A | N/A | N/A | N/A |  |  |  |  |

**Supplementary Figure 1: CT/NG prevalence within STI clinic (derivation)(10) and GetCheckedOnline (validation) populations at increasing risk score categories**

**Supplementary Figure 2: Receiver Operating Characteristic (ROC) Curve**

