S3 Table: Sensitivity and specificity of HbA1c cutoffs for detection of diabetes using oral glucose tolerance test (OGTT) and fasting plasma glucose (FPG) as the reference in participants with no history of previous diabetes diagnosis (n=1077)

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| --- | --- | --- | --- | --- | --- |
| **HbA1c cut-off value (%)** | **Sensitivity**  **% (95% CI)** | **Specificity**  **% (95% CI)** | **Positive predictive value % (95% CI)** | **Negative predictive value % (95% CI)** | **Youden Index** |
| **OGTT reference**\* |  |  |  |  |  |
| 5.8 | 91.9 (82.7-100.0) | 83.1 (80.6-85.6) | 16.1 (3.8-28.6) | 99.7 (99.3-100.0) | 0.750 |
| 5.9 | 89.2 (78.6-99.8) | 88.3 (86.2-90.4) | 21.3 (7.3-35.3) | 99.6 (99.1-100.0) | 0.775 |
| 6.0† | 89.2 (78.6-99.8) | 92.0 (90.3-93.7) | 28.5 (13.1-43.8) | 99.6 (99.1-100.0) | 0.812 |
| 6.1 | 83.8 (70.8-96.8) | 95.8 (94.5-97.0) | 41.3 (24.0-58.7) | 99.4 (98.9-99.9) | 0.807 |
| 6.3 | 75.7 (59.7-91.6) | 96.9 (95.9-98.0) | 46.7 (28.2-65.1) | 99.1 (98.5-99.6) | 0.726 |
| 6.5‡ | 70.3 (52.7-87.8) | 98.7 (97.9-99.4) | 65.0 (46.7-83.3) | 98.9 (98.3-99.6) | 0.689 |
| 6.7 | 67.6 (49.2-85.9) | 99.4 (99.0-99.9) | 80.7 (65.2-96.1) | 98.9 (98.2-99.5) | 0.668 |
| 7.0 | 54.1 (32.2-75.9) | 99.7 (99.4-100.0) | 87.0 (72.2-100.0) | 98.4 (97.6-99.2) | 0.538 |
| **FPG reference**§ |  |  |  |  |  |
| 5.8 | 96.3 (89.0-100.0) | 82.5 (79.9-85.0) | 12.3 (0.0-25.0) | 99.9 (99.7-100.0) | 0.788 |
| 5.9 | 96.3 (89.0-100.0) | 87.7 (85.5-89. 8) | 16.7 (2.3-31.0) | 99.9 (99.7-100.0) | 0.840 |
| 6.0† | 96.3 (89.0-100.0) | 91.4 (89.7-93.2) | 22.4 (6.4-38.4) | 99.9 (99.7-100.0) | 0.877 |
| 6.1 | 88.9 (76.3-100.0) | 95.0 (93.7-96.4) | 32.0 (13.3-50.7) | 99.7 (99.4-100.0) | 0.862 |
| 6.3 | 81.5 (65.3-97.7) | 96.4 (95.2-97.5) | 36.7 (16.5-56.8) | 99.5 (99.1-99.9) | 0.779 |
| 6.5‡ | 74.1 (54.9-93.3) | 98.1 (97.3-98.9) | 50.0 (28.1-71.9) | 99.3 (98.8-99.8) | 0.721 |
| 6.7 | 74.1 (54.9-93.3) | 99.0 (98.3-99.6) | 62.5 (41.3-83.7) | 99.3 (98.8-99.8) | 0.728 |
| 7.0 | 63.0 (40.0-85.9) | 99.4 (99.0-99.9) | 73.9 (53.0-94.8) | 99.1 (98.5-99.6) | 0.624 |

95% CI=95% Confidence Interval. OGTT=oral glucose tolerance test. FPG=fasting plasma glucose. †≥6.5%= World Health Organizartion 2011 HbA1c diabetes definition cutoff. ‡≥6.0%= Youden Index derived optimum HbA1c cutoff in this population. \*area under the reciever operating characteristic curve (AUC) 0.94 (95%CI 0.88-0.99) § AUC 0.95 (95%CI 0.88-1.00)