**ONLINE DEPOSITORY**

**Online Depository Table A.**
**Long-term repeatability of BH-nNO, OE-R-nNO and TB-nNO.**

| | Median (range) number of months between occasions | Mean difference (ppb) | SD | Upper limit of agreement (ppb) | Lower limit of agreement (ppb) |
|---|---|---|---|---|---|
| BH-nNO (N=50) | 3.0 (0.3 to 48.0) | - 5.1 | 285.5 | 280.4 | -290.6 |
| OE-R-nNO (N=12) | 12.6 (0.6 to 24.3) | -20.3 | 200.5 | 180.3 | -220.8 |
| TB-nNO (N=36) | 12.4 (0.5 to 27.6) | 0.4 | 332.9 | 332.5 | -331.8 |

**Online Depository Table B.**
**Cut-off values, sensitivity, specificity and AUC calculated from ROC curves for BH-nNO, OE-R-nNO and TB-nNO.**

| | Cut-off, ppb | Sensitivity, % | Specificity, % | AUC | SE | 95% CI |
|---|---|---|---|---|---|---|
| **BH-nNO** (PCD: N=49, HC: N=45) | 175 | 91.1 | 100 | 0.95 | 0.022 | 0.888 to 0.986 |
| **OE-R-nNO** (PCD: N=35, HC: N=30) | 242 | 94.3 | 100 | 0.97 | 0.023 | 0.895 to 0.996 |
| **TB-nNO** (PCD: N=54, HC: N=52) | 158 | 94.4 | 100 | 0.97 | 0.019 | 0.910 to 0.991 |

**Online Depository Table C.**
**Consecutive referrals. Comparison of median (95% CI for the median)) levels of BH-nNO, OE-R-nNO and TB-nNO in discrimination between PCD and non-PCD among 117 patients consecutively referred for PCD work. Numbers are unequal because of different demands to cooperation.**

| | Referrals without PCD | Referrals with PCD | P-value, two-tailed (Wilcoxon rank test) |
|---|---|---|---|
| **BH-nNO** | 681 (115 to 1287) ppb, n=46 | 53 (10 to 540) ppb, n=12 | P<0.0001 |
| **OE-R-nNO** | 502 (416 to 626) ppb, n=30 | 21 (4 to 168) ppb, n=6 | P<0.001 |
| **TB-nNO** | 269 (17 to 1282) ppb, n=83 | 41 (6 to 355) ppb, n= 14 | P<0.0001 |

**Online Depository Table D.**

**Consecutive referrals. Sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) when applying cut-off values derived from sub-study 2, in the 117 patients referred for PCD work up. Numbers are unequal because of different demands to cooperation.**

| | Cut off (ppb) | False positive rate | False negative rate | Sensitivity | Specificity | PPV | NPV |
|---|---|---|---|---|---|---|---|
| **BH-nNO** (N=58) | 175 | 2/58 (3.4%) | 1/58 (1.7%) | 0.92 | 0.96 | 0.85 | 0.98 |
| **OE-R-nNO** (N=37) | 242 | 2/37 (8.9%) | 0/37 (0%) | 1.0 | 0.94 | 0.75 | 1.0 |
| **TB-nNO** (N=97) | 158 | 17/97 (17.5%) | 1/97 (1.0%) | 0.93 | 0.80 | 0.43 | 0.99 |