Preliminary analysis of estimated glomerular filtration rate using the PROMISE cohort at baseline

WINDY WANG

May 12, 2016

## Subject Characterization

TABLE 1. Subject characteristics according to estimated GFR concentration categories.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Normal (n=574) | Mild (n=112) | Moderate (n=2) | Hyperfiltration (n=51) |
| Age (years) \*\*\* | | 49.5 (9.1)abcd | 56.3 (10.3)abd | 66.5 (12.0)acd | 38.7 (7.8)abcd |
| Ethnicity (%) \*\* | European | 376 (65.5%) | 82 (73.2%) | 2 (100%) | 21 (41.2%) |
| Latino/a | 88 (15.3%) | 16 (14.3%) | - | 9 (17.6%) |
| Other | 65 (11.3%) | 7 (6.2%) | - | 16 (31.4%) |
| South Asian | 45 (7.8%) | 7 (6.2%) | - | 5 (9.8%) |
| Sex (%) \*\*\* | Female | 421 (73.3%) | 31 (27.7%) | 1 (50%) | 50 (98%) |
| Male | 153 (26.7%) | 81 (72.3%) | 1 (50%) | 1 (2%) |
| BMI (kg/m2) | | 31.2 (6.3) | 30.3 (5.5) | 29.4 (3.0) | 31.6 (7.2) |
| Waist circumference(cm) | | 98.6 (15.5) | 102.3 (13.6) | 105.3 (24.4) | 96.5 (17.3) |
| Urinary VDBP (ng/mL) \*\*\* | | 80.4 (92.7)a | 75.5 (75)b | 1106.5 (1437.5)abc | 108.9 (105.8)c |
| Microalbumin:Creatinine \*\*\* | | 1.2 (3.6)a | 1.0 (2.8)b | 50.5 (69.9)abc | 1.7 (3.6)c |
| Urinary creatinine (mmol/L) \*\*\* | | 11.4 (6.2)a | 14.2 (6.5)ab | 10.3 (1.3) | 10.4 (6.6)b |
| Urinary albumin (mg/L) \*\*\* | | 10.2 (17.9)a | 10.0 (10.8)b | 870.0 (1216.2)abc | 11.0 (12.7)c |
| Serum creatinine (μmol/L) \*\*\* | | 67.8 (9.5)a | 90.3 (7.5)a | 112.5 (10.6)a | 51.1 (8.5)a |
| Serum 25(OH)D (nmol/L) \*\*\* | | 54.7 (23.1)a | 63.6 (19.4)ab | 41.8 (45.0) | 46.6 (24.1)b |
| Diastolic blood pressure (mmHg) \* | | 80.2 (10.2) | 80.9 (9.6) | 66.5 (4.2) | 77.1 (12.5) |
| Mean arterial pressure (mmHg) \*\* | | 95.5 (11.3)a | 97.4 (10.4)b | 88.2 (0.4) | 91.0 (13.6)ab |
| Systolic blood pressure (mmHg) \*\*\* | | 125.9 (15.9)ab | 130.4 (14.2)ac | 131.8 (9.5) | 118.6 (17.4)bc |
| Parathyroid Hormone (pmol/L) \*\* | | 4.6 (1.7)a | 4.6 (1.5)b | 8.7 (4.6)abc | 4.6 (1.8)c |
| Serum ALT (U/L) \*\* | | 31.3 (16.6)a | 37.3 (20.5)ab | 33.0 (17.0) | 27.3 (15.5)b |
| Blood glucose (mmol/L) | Fasting \* | 5.1 (0.9)a | 5.3 (1.1)a | 4.7 (1.6) | 5.0 (0.8) |
| 2h OGTT | 6.6 (2.9) | 6.6 (3.1) | 5.5 (1.4) | 6.4 (2.7) |
| Diabetic Status | Diabetes | 69 (12%) | 16 (14.3%) | - | 5 (9.8%) |
| Normal | 479 (83.4%) | 86 (76.8%) | 2 (100%) | 44 (86.3%) |
| Prediabetes | 26 (4.5%) | 10 (8.9%) | - | 2 (3.9%) |

Continuous values are reported as mean (standard deviation) and discrete variables are reported as n (proportion). Significance for continuous variables were tested using analysis of variance (ANOVA) with Tukey’s HSD for pairwise comparisons. Significance for discrete variables were examined using chi-squared test of independence. Hemolysed samples were removed from analysis (n=2). \**p* < 0.05, \*\**p* < 0.01, \*\**p* < 0.001.

**Comments regarding Table 1:** some of the significance observed may be due to the extreme values in the Moderate eGFR impairment category, as seen from the pairwise comparisons (UDBP, MCR, urinary albumin, and PTH).