**Table S1. Clinical characteristics of participants in the discovery and validation cohort.**

|  |  |  |
| --- | --- | --- |
| **Parameters** | **Discovery (n = 168)** | **Validation (n = 86)** |
| **IgAN****(n=84)** | **HC****(n=84)** | ***P* value** | **IgAN****(n=43)** | **HC****(n=43)** | ***P* value** |
| Age, years  | 35.6±10.3  | 34.3±11.4 | 0.475 | 35.4±10.4 | 38.6±10.2 | 0.916 |
| Male, n (%)  | 49(58.3) | 43(46.0)  | 0.352 | 27(62.8) | 25(58.1) | 0.659 |
| BMI, kg/m 2 | 24.5±4.0 | 23.4±2.1 | 0.027 | 23.9±4.0 | 23.8±1.8 | 0.935 |
| WBC,10 9 /L | 6.8±1.8 | 6.0±1.4 | 0.002 | 6.7±2.0 | 6.1±1.4 | 0.177 |
| Platelets,10 9 /L | 239.9±81.4 | 230.8±51.3 | 0.839 | 239.4±63.4 | 228.1±48.2 | 0.354 |
| Anemia, n (%) | 12(14.3) | 2(2.4) | 0.010 | 4(9.3) | 0(0.0) | 0.116 |
| Albumin, g/L | 40.5±5.4 | 47.7±3.03 | 0.000 | 40.0±5.2 | 48.4±4.0 | 0.000 |
| SCr, μmol/L | 103.5±39.1 | 73.5±16.1 | 0.000 | 105.1±41.5 | 69.3±13.0 | 0.000 |
| eGFR,mL/min/per 1.73m2 | 76.4±28.3 | 103.3±18.8 | 0.000 | 77.5±33.3 | 112.5±10.8 | 0.000 |
| eGFR < 60, n (%) | 27(32.1) | 0(0.0) | 0.000 | 11(25.6) | 0(0.0) | 0.000 |
| Hypertension, n (%) | 27(32.1%) | 0(0.0%) | 0.000 | 7(16.3%) | 0(0.0%) | 0.012 |
| Proteinuria, mg/day  | 1049.0 (470.0,1686.0) | NA |  | 1098.0 (636.5,1776.5) | NA |  |
| Proteinuria >1.0g/d, n (%)  | 45(53.6) | NA | - | 23(53.3) | NA |  |
| Cystatin C, mg/L | 1.18(0.93,1.51) | NA |  | 1.06(0.89,1.47) | NA |  |
| Uric Acid, μmol/L | 365.5(280.8,439.5) | NA |  | 360.0(265.0,404.0) | NA |  |
| Serum urea,mmol/L | 5.6 (4.5,7.9) | NA |  | 5.8 (4.9,7.5) | NA |  |
| Histological lesion scoring, n(%) |  |  |  |  |  |
| M1 | 56(66.7) |  |  | 19(44.2) |  |  |
| E1 | 12(14.3) |  |  | 5(11.6) |  |  |
| S1 | 67(79.8) |  |  | 31(72.1) |  |  |
| T lesion scoring |  |  |  |  |  |  |
| T0 | 48(57.1) |  |  | 25(58.1) |  |  |
| T1 | 23(27.4) |  |  | 12(27.9) |  |  |
| T2 | 13(15.05) |  |  | 6(14.0) |  |  |
| C lesion scoring  |  |  |  |  |  |  |
| C0 | 54(64.3) |  |  | 30(69.8) |  |  |
| C1 | 27(32.1) |  |  | 11(25.6) |  |  |
| C2 | 3(3.6) |  |  | 2(4.7) |  |  |

IgAN, IgA nephropathy; HC, Healthy Control; BMI, body mass index; WBC, white blood cell; SCre, Serum creatinine; M1, mesangial hypercellularity; E1, endocapillary hypercellularity; S1, segmental glomerulosclerosis; Tubular atrophy/interstitial fibrosis ≤ 25% (T0), 26%-50% (T1), > 50% (T2) ; C0, no crescents; C1, crescents in less than one fourth of glomeruli; C2, crescents in over one fourth of glomeruli; NA, not available.