**Table 1. Baseline characteristics of patients with biopsy-proven NAFLD.**

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| --- | --- | --- | --- | --- |
|  | **Overall population****N=636** | **Training Set****N=472** | **Validation Set****N=164** | ***P* value** |
| **Demographics** |  |  |  |  |
| Age, years | 44.0 ± 12.3 | 44.1 ± 12.1 | 43.5 ± 12.8 | 0.547 |
| Men, n (%) | 426 (67.0%) | 326 (69.1%) | 100 (61.0%) | 0.058 |
| **Metabolic factors** |  |  |  |  |
| BMI, kg/m2 | 27.6 ± 4.1 | 27.6 ± 4.0 | 27.7 ± 4.6 | 0.907 |
| Waist circumference, cm | 93.2 ± 10.0 | 93.5 ± 10.0 | 92.4 ± 9.9 | 0.249 |
| Central obesity, n (%) | 484 (76.1%) | 360 (76.3%) | 124 (75.6%) | 0.864 |
| Type 2 diabetes, n (%) | 232 (36.5%) | 177 (37.5%) | 55 (33.5%) | 0.364 |
| Hypertension, n (%) | 211 (33.2%) | 152 (32.2%) | 59 (36.0%) | 0.377 |
| Metabolic syndrome, n (%) | 389 (61.2%) | 286 (60.6%) | 103 (62.8%) | 0.565 |
| **Laboratory parameters** |  |  |  |  |
| ALT, IU/L | 57 (36-100) | 57 (37-98) | 59 (36-112) | 0.943 |
| AST, IU/L | 36 (26-56) | 36 (27-55) | 36 (26-60) | 0.812 |
| γ-GT, IU/L | 57 (36-98) | 56 (36-97) | 61 (34-106) | 0.686 |
| Albumin, g/L | 4.5 ± 0.4 | 4.5 ± 0.4 | 4.6 ± 0.4 | 0.288 |
| Bilirubin, μmol/L | 13.9 ± 8.3 | 13.6 ± 6.9 | 14.5 ± 11.4 | 0.258 |
| Fasting glucose, mmol/L | 5.9 ± 1.7 | 5.9 ± 1.8 | 5.7 ± 1.4 | 0.362 |
| Fasting insulin, mIU/L | 16.6 (11.2- 25.6) | 16.3 (11.2-24.6) | 16.9 (11.3-27.6) | 0.372 |
| HbA1c, % | 6.2 ± 1.4 | 6.2 ± 1.4 | 6.1 ± 1.2 | 0.247 |
| HOMA-IR | 4.0 (2.7- 6.7) | 4.0 (2.6-6.6) | 4.0 (2.7-6.8) | 0.656 |
| Prothrombin time, s | 12.1 ± 1.2 | 12.1 ± 1.3 | 12.1 ± 1.2 | 0.813 |
| Platelet count, ×109/L | 255 ± 64 | 253 ± 62 | 261 ± 70 | 0.139 |
| TG, mmol/L | 2.1 ± 1.3 | 2.1 ± 1.3 | 2.1 ± 1.2 | 0.782 |
| TC, mmol/L | 5.1 ± 1.1 | 5.1 ± 1.2 | 5.1 ± 1.0 | 0.989 |
| HDL-C, mmol/L | 1.1 ± 0.3 | 1.1 ± 0.2 | 1.1 ± 0.3 | 0.714 |
| LDL-C, mmol/L | 2.7 ± 5.8 | 2.6 ± 6.7 | 3.0 ± 0.9 | 0.450 |
| CK18-M30, IU/L | 210 (101-432) | 206 (101-407) | 228 (97-471) | 0.850 |
| **Scoring systems** |  |  |  |  |
|  Nomogram | 160 ± 40 | 160 ± 40 | 158 ± 42 | 0.483 |
| MACK-3 | 0.2 (0.1-0.5) | 0.2 (0.1-0.6) | 0.2 (0.1-0.5) | 0.692 |
| NAFLD fibrosis score | -2.6 ± 1.4 | -2.5 ± 1.4 | -2.7 ± 1.5 | 0.329 |
| Fibrosis-4 index | 0.8 (0.6- 1.2) | 0.9 (0.6-1.2) | 0.8 (0.6-1.2) | 0.128 |
| **Liver histology** |  |  |  |  |
| Fibrosis stage, n (%) |  |  |  | 0.646 |
| F0 | 258 (40.6%) | 196 (41.5%) | 62 (37.8%) |  |
| F1 | 254 (39.9%) | 189 (40.0%) | 65 (39.6%) |  |
| F2 | 75 (11.8%) | 55 (11.7%) | 20 (12.2%) |  |
| F3 | 40 (6.3%) | 26 (5.5%) | 14 (8.5%) |  |
| F4 | 9 (1.4%) | 6 (1.3%) | 3 (1.8%) |  |
| Steatosis grade, n (%) |  |  |  | 0.855 |
| S1 | 251 (39.5%) | 184 (39.0%) | 67 (40.9%) |  |
| S2 | 257 (40.4%) | 190 (40.3%) | 67 (40.9%) |  |
| S3 | 128 (20.2%) | 98 (20.8%) | 30 (18.3%) |  |
| Ballooning grade, n (%) |  |  |  | 0.709 |
| B0 | 148 (23.3%) | 106 (22.5%) | 42 (25.6%) |  |
| B1 | 350 (55.0%) | 265 (56.1%) | 85 (51.8%) |  |
| B2 | 138 (21.7%) | 101 (21.4%) | 37 (22.6%) |  |
| Lobular inflammation grade, n (%) |  |  |  | 0.761 |
| L0 | 61 (9.6%) | 46 (9.7%) | 15 (9.1%) |  |
| L1 | 381 (59.9%) | 282 (59.7%) | 99 (60.4%) |  |
| L2 | 184 (28.9%) | 138 (29.3%) | 46 (28.1%) |  |
| L3 | 10 (1.6%) | 6 (1.3%) | 4 (2.4%) |  |
| NAS score | 4 (3- 5) | 4 (3-5) | 4 (3-5) | 0.599 |
| **NASH†** | 445 (70.0%) | 336 (71.2%) | 109 (66.5%) | 0.256 |
| **Active NASH‡** | 356 (56.0%) | 268 (56.8%) | 88 (53.7%) | 0.488 |
| **Fibrotic NASH§** | 103 (16.2%) | 75 (15.9%) | 28 (17.1%) | 0.723 |

Note: ALT, alanine aminotransferase; AST, aspartate transaminase; BMI, body mass index; GGT, γ-glutamyl transpeptidase; HOMA-IR, homeostasis model assessment-insulin resistance; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; NASH, nonalcoholic steatohepatitis; NAS, NAFLD activity score; TG, triglyceride; TC, total cholesterol.

**†**NASH was defined as the presence of steatosis, lobular inflammation and ballooning with or without fibrosis.

**‡**Active NASH was defined as NASH with NAS ≥4.

**§**Fibrotic NASH was defined as presence of active NASH and F≥2 fibrosis.