### Supplementary Table 1. Comparison of demographic, anthropometric, laboratory, and magnetic resonance imaging-measured fat fraction findings between non-obese NAFLD and obese NAFLD

|                          | BMI < 95th percentile (n = 18) | BMI ≥ 95th percentile (n = 45) | P-value |
|--------------------------|--------------------------------|---------------------------------|---------|
| Sex (boys : girls)       | 13 (72.2%) : 5 (27.8%)         | 35 (77.8%) : 10 (22.2%)        | 0.746†  |
| Age, yr                  | 12.3 (9.2–18.2)                | 12.7 (5.6–19.3)                | 0.648   |
| Height (cm)              | 148.9 (138.2–177.5)            | 157.6 (122.4–184.7)            | 0.146   |
| Height z-score           | 0.36 (–1.40–1.68)              | 0.98 (–1.78–2.82)              | 0.033   |
| Weight (kg)              | 49.6 (39.2–82.5)               | 72.8 (36.4–130.9)              | <0.001  |
| Weight z-score           | 1.14 (–2.80–1.96)              | 2.60 (0.99–5.01)               | <0.001  |
| WC (cm)                  | 81.5 (67.0–90.0)               | 94.0 (75.0–120.0)              | <0.001  |
| WHR                      | 0.53 (0.46–0.60)               | 0.61 (0.52–0.69)               | <0.001  |
| BMI                      | 22.6 (18.6–26.2)               | 28.9 (23.8–38.4)               | <0.001  |
| BMI z-score              | 1.39 (–1.10–1.66)              | 2.93 (1.62–5.10)               | <0.001  |
| Fat mass (kg)            | 17.3 (8.2–26.1)                | 26.4 (12.6–54.0)               | <0.001  |
| Fat mass (%)             | 33.0 (22.3–45.1)               | 37.2 (24.1–67.2)               | 0.001   |
| FFM (kg)                 | 31.9 (27.6–59.6)               | 42.9 (23.5–79.7)               | 0.019   |
| FFM (%)                  | 67.1 (54.8–77.7)               | 62.7 (32.8–75.8)               | 0.001   |
| FMI                      | 7.2 (3.9–10.9)                 | 10.7 (6.2–18.8)                | <0.001  |
| FFMI                     | 14.7 (13.2–19.0)               | 18.1 (9.2–23.4)                | 0.001   |
| mSBP (mmHg)              | 113.7 (100–128)                | 120.0 (106–159)                | 0.008   |
| mDBP (mmHg)              | 62.8 (52.74)                   | 63.7 (52.90)                   | 0.115   |
| AST (IU/L)               | 49.0 (21–226)                  | 58.0 (17–216)                  | 0.447   |
| ALT (IU/L)               | 97.5 (20–331)                  | 128.0 (22–366)                 | 0.155   |
| AST/ALT                  | 0.53 (0.37–1.52)               | 0.47 (0.28–1.26)               | 0.086   |
| Total bilirubin (mg/dL)  | 0.6 (0.3–1.1)                  | 0.5 (0.2–1.3)                  | 0.866   |
| GGT (IU/L)               | 35.5 (12–184)                  | 38.0 (12–158)                  | 0.732   |
| Total cholesterol (mg/dL)| 179.5 (120–277)                | 180.0 (105–275)                | 0.377   |
| Triglyceride (mg/dL)     | 105.0 (48–364)                 | 124.0 (54–293)                 | 0.681   |
| HDL-C (mg/dL)            | 43.5 (37–67)                   | 46.0 (28–68)                   | 0.964   |
| LDL-C (mg/dL)            | 101.0 (61–168)                 | 112.0 (55–175)                 | 0.198   |
| FPG (mg/dL)              | 92.5 (76–153)                  | 94.0 (71–270)                  | 0.867   |
| Insulin (mIU/L)          | 18.2 (4.6–46.3)                | 22.4 (6.4–75.6)                | 0.104   |
| HbA1c (%)                | 5.3 (5.0–7.7)                  | 5.4 (5.0–13.5)                 | 0.711   |
| HOMA-IR                  | 4.2 (1.0–14.0)                 | 5.9 (2.0–17.0)                 | 0.121   |
| QUICKI                   | 0.31 (0.27–0.39)               | 0.30 (0.26–0.34)               | 0.121   |
| MIR HFF (%)              | 21.8 (4.7–33.0)                | 25.2 (6.4–49.9)                | 0.077   |
| MIR PFF (%)              | 3.0 (0.4–15.8)                 | 4.3 (1.0–26.9)                 | 0.359   |
| Central obese (n, %)     | 11 (61.1%)                     | 43 (95.6%)                     | 0.001†  |
| Normal BP / EBP + HTN (n, %) | 13 (72.2%) / 5 (27.8%)       | 25 (55.6%) / 20 (44.4%)       | 0.222†  |
| Dyslipidemia (n, %)       | 10 (55.6%)                     | 32 (71.1%)                     | 0.237†  |
| Normal / PreDM + DM (n, %) | 11 (61.1%) / 7 (38.9%)       | 29 (64.4%) / 16 (35.6%)       | 0.804†  |
| MetS (n, %)               | 4 (22.2%)                      | 21 (46.7%)                     | 0.073†  |

*P*-value was calculated by Mann Whitney U test. †*P*-value was calculated by Fisher’s exact test. ‡*P*-value was calculated by Chi-square test. Values are presented as median (range) or numbers (%). WC, waist circumference; WHR, waist circumference-to-height ratio; BMI, body mass index; FFM, fat-free mass; FMI, fat mass index = fat mass(kg)/height(m); FFMI, fat-free mass index = FFM(kg)/ height(m); mSBP, mean systolic blood pressure; mDBP, mean diastolic blood pressure; AST, aspartate aminotransferase; ALT, alanine aminotransferase; GGT, γ-glutamyl transferase; HDL-C, high density lipoprotein cholesterol; LDL-C, low density lipoprotein cholesterol; FPG, fasting plasma glucose; HbA1c, glycated hemoglobin; HOMA-IR, homeostatic model assessment of insulin resistance; QUICKI, Quantitative insulin sensitivity check index; MRI, magnetic resonance imaging; HFF, hepatic fat fraction; PFF, pancreatic fat fraction; BP, blood pressure; EBP, elevated BP; HTN, hypertension; DM, diabetes mellitus; PreDM, prediabetes; MetS, metabolic syndrome
Supplementary Table 2. Comparison of proportion of histologic steatosis, inflammation, ballooning and fibrosis between non-obese NAFLD and obese NAFLD

|                         | Non-obese NAFLD (n = 18) | Obese NAFLD (n = 45) | Total (n = 63) | P-value |
|-------------------------|--------------------------|----------------------|----------------|---------|
| Steatosis grade 1       | 6 (33.3%)                | 7 (15.6%)            | 13 (20.6%)     | 0.016*  |
| Steatosis grade 2       | 8 (44.4%)                | 10 (22.2%)           | 18 (28.6%)     |         |
| Steatosis grade 3       | 4 (22.2%)                | 28 (62.2%)           | 32 (50.8%)     |         |
| Lobular Inflammation grade 1 | 11 (61.1%) | 21 (46.7%)        | 32 (50.8%) | 0.529   |
| Lobular Inflammation grade 2 | 7 (38.9%)     | 22 (48.9%)          | 29 (46.0%)     |         |
| Lobular Inflammation grade 3 | 0             | 2 (4.4%)            | 2 (3.2%)       |         |
| Portal Inflammation grade 0 | 5 (27.8%)     | 19 (42.2%)          | 24 (38.1%)     | 0.564   |
| Portal Inflammation grade 1 | 13 (72.2%) | 25 (55.6%)         | 38 (60.3%)     |         |
| Portal Inflammation grade 2 | 0             | 1 (2.2%)            | 1 (1.6%)       |         |
| Portal Inflammation grade 0 | 5 (27.8%)     | 19 (42.2%)          | 24 (38.1%)     | 0.286*  |
| Portal Inflammation grade 1+2 | 13 (72.2%) | 26 (57.8%)         | 39 (61.9%)     |         |
| Ballooning degeneration grade 1 | 10 (55.6%) | 23 (51.1%)        | 33 (52.4%)     | 0.848   |
| Ballooning degeneration grade 2 | 6 (33.3%)  | 18 (40.0%)         | 24 (38.1%)     |         |
| Ballooning degeneration grade 3 | 2 (11.1%) | 4 (8.9%)            | 6 (9.5%)       |         |
| Fibrosis stage 0        | 2 (11.1%)                | 9 (20.0%)            | 11 (17.5%)     | 0.133   |
| Fibrosis stage 1        | 10 (55.6%)               | 31 (68.9%)           | 41 (65.1%)     |         |
| Fibrosis stage 2        | 6 (33.3%)                | 5 (11.1%)            | 11 (17.5%)     |         |

Non-obese means body mass index < 95th percentile and obese means body mass index ≥ 95th percentile. P-value was calculated by Fisher’s exact test. *P-value was calculated by Chi-square test.