**SUPPLEMENTARY MATERIAL**

Supplementary methods

**Definition of the metabolic syndrome**

Components of the metabolic syndrome (MetS) were defined according to the IDF/AHA/NHLBI consensus definition(1): Visceral obesity was defined as waist circumference (WC) ≥88cm for women and ≥102cm for men. Hypertension was defined as a blood pressure (BP) ≥130/85mmHg on two consecutive days, or current use of antihypertensive medication. Dyslipidemia was defined as high-density lipoprotein cholesterol (HDL-C) <40mg/dl in males or <50mg/dl in females, triglycerides ≥150mg/dl or current use of antilipidemic drugs. The MetS was defined as any three of the following: Visceral obesity, hypertension, fasting blood glucose (FBG)≥100mg/dl or antidiabetic therapy, HDL-C <40mg/dl in males or <50mg/dl in females or antilipidemic drugs, and triglycerides ≥150mg/dl.

**Statistics**

Statistical analyses were performed using IBM SPSS Statistics 26 (SPSS Inc., Armonk, New York, USA) and GraphPad Prism 8 (GraphPad Software, La Jolla, California, USA). Continuous variables were reported as mean ±standard deviation or median (IQR) depending on their distribution, while categorical variables were shown as numbers and proportions of patients. Comparisons of continuous variables were performed using Student’s t-test. Group comparisons were performed applying Chi-squared test. A multivariable model was computed to investigate the influence of NALFD among patients grouped according to their BMI, being compared to lean subjects without NAFLD (reference). Analyses were adjusted for age, gender and WC using logistic regression analysis. Accordingly, linear regression analysis was used to evaluate the influence on HOMA-IR, glucose tolerance (measured by OGTT) and cardiovascular risk (assessed by FRS). For linear regression analyses, patients were grouped according to their BMI and the respective group was individually compared to lean subjects without NAFLD (reference). A two-sided p-value ≤0.05 was considered as statistically significant.

**Ethics**

Informed consent was obtained from every participant, and the study was approved by the local ethics committee (Ethikkommission des Landes Salzburg, approval no. 415-E/1262/2-2010).

**References**

1. Alberti KG, Eckel RH, Grundy SM, Zimmet PZ, Cleeman JI, Donato KA, et al. Harmonizing the metabolic syndrome: a joint interim statement of the International Diabetes Federation Task Force on Epidemiology and Prevention; National Heart, Lung, and Blood Institute; American Heart Association; World Heart Federation; International Atherosclerosis Society; and International Association for the Study of Obesity. Circulation. 2009;120(16):1640-5.