**Supplementary Methods**

**Supplementary Data S1:**

**Clinical evaluation:** Information on the presence of classical CV risk factors (smoking, hypertension, diabetes and dyslipidaemia), as well as the history of CV events and drug consumption, was collected. Clinical measures such as body weight, height, body mass index (BMI), waist circumference (WC), systolic blood pressure (SBP) and diastolic blood pressure (DBP) were assessed. RF positivity (RF+) was defined as RF values>20, and anti-CCP positivity (anti-CCP+) was defined as anti-CCP values > 3. Dyslipidaemia was defined as having HDLc (High density lipoprotein cholesterol) < 50 mg/dL for women or < 40 mg/dL for men or TG (triglycerides) > 150 mg/dL or LDLc (Low density lipoprotein cholesterol) > 100 mg/dL or treatment with hypocholesterolaemic drugs.

**Supplementary Data S2:**

**miRNA extraction:** 200µl of frozen plasma were used to extract the RNA containing the fraction of small RNAs by means of the miRCURY RNA Isolation Kit (Exiqon) following the manufacturer’s instructions. 1µl of a mixture of synthetic RNAs (UniSp2, UniSp4, and UniSp5) was spiked into the plasma to control for the efficiency of the RNA extraction. Additionally, 1.25 µL of MS2 RNA carrier (Roche) was added to improve RNA extraction. MiRNA candidates were measured by qPCR using miRCURY LNA Universal RT microRNA PCR, ExiLENT SYBR Green master mix Kit (Exiqon, Denmark) and primers for each miRNA (hsa-miR LNA™ PCR primer set, UniRT). Melting curve analysis was performed to control the specificity of the qPCR. The cycle threshold (Ct) for each sample and miRNA was obtained with SDS v2.3 software (Applied Biosystems).