Supplementary Table S1. Study variables collected.

Demographic variables	age, years Gender, male/female
Measures	blood pressures (mm/Hg) BMI, kg/m^2
CV risk factors present	hypercholesterolaemia hypertension diabetes mellitus smoking habit
History of CV disease	(signs of) coronary heart disease (including angina pectoris, myocardial infarction, coronary artery stenosis, ischaemic heart failure) peripheral artery disease stroke (including ischaemic stroke cerebrovascular accidents, transient ischaemic attack and carotid endarterectomy)
Use of medication, n. patients (%)	diuretics treatment for hypertension hypolipidaemic treatment antidiabetic treatment
Lab tests	estimated glomerular filtration rate <60 ml/min and <50ml/min total serum cholesterol, mmol/l serum triglycerides, mmol/l serum HDLc, mmol/l serum LDLc, mmol/l serum uric acid, mmol/l serum glucose, mmol/l
Gout related variables	symptom duration (time of first arthritis attack according to the patient) Index joint at presentation

BMI: body mass index, calculated as weight:(height)^2; CV: cardiovascular; GFR: glomerular filtration rate; HDLc: high-density lipoprotein cholesterol; LDLc: low-density lipoprotein cholesterol; SUA: serum uric acid; TCh: total cholesterol; TG: triglycerides.

DECT-protocol

Scans were performed using a dual source dual energy CT scanner (SOMATOM Definition Flash Dual Source CT scanner; Siemens Healthcare). Parameters were 140 kV and 55 mA for one tube and 80 kV and 243 mA for the other. Collimation of 0.6 mm was reconstructed to 0.75-mm slices. A 2 material decomposition algorithm was performed on a multi-technique CT workspace (SW-version VA20 Siemens Healthcare) using Syngo dual-energy Siemens Healthcare software. The same protocol was used for feet, knees and wrists. A dual-energy phase scan was acquired operating the "A" tube at 140 kV and a reference mAs value of 96 and the "B" tube at 80 kV and 404 mAs reference. The material-specific difference in attenuation of urate between the two energy levels at 80- and 140-kV energy levels allows accurate detection of MSU, which is then colour coded as green and fused with the standard grey-scale CT images. These can be reviewed as both cross-sectional and 3D images.