Supplemental File 1. Organic acids in urine.

To 1 ml urine, 100 µl internal standard (3-phenyl butyric acid (1mg/ml)) was added followed by 100 µl of O-ethylhydroxylamine-HCl solution (4 g/100 ml). After acidification to pH 1 by addition of 4M HCl, the samples were vortexed and heated to 60^0C for 30 minutes. After cooling the samples, a small amount of NaCl was added and samples were extracted twice with 2 ml of ethylacetate. After centrifuging for 1 minute at 4000 rpm, the upper layers of ethyl acetate was transferred into a new tube. The ethyl acetate was dried with sodium sulphate after which it was evaporated to dryness by the use of a vacuum rotation evaporator with water of 35^0C. Samples were derivatized with 100 µl BSTFA/pyridine (5:1) by heating for 30 min. at 60ºC. From this final sample 1 µl was injected into the gas chromatographic (GC) column (GC: Agilent Technologies 7890A; mass spectrometer: Agilent Technologies; column: CPsil 19CB, Varian). Detection and identification was performed by flame ionization detection and mass spectrometry. Quantification was performed relative to the internal standard, making use of experimentally determined response factors. Concentrations were expressed to creatinine.