## Supplementary data

Supplementary figures:



Separation of contrast agents as a function of mobile phase composition

## Figure S1. Separation of contrast agents as a function of mobile phase composition

Column: Sequant ZIC-HILIC-Column (150 mm x 2,1 mm i.d.), Mobile phase: 20 mM ammonium acetate in 40-80% ACN/H<sub>2</sub>O, flow rate: 0.1 mL/min, detection: as Gd<sup>158</sup> with ICP-MS, Sample: contrast agent mixture with Gd 10  $\mu$ g/L, sample injected: 5 $\mu$ L.



## Figure S2. Separation of contrast agents as a function of buffer variation

Column: Sequant ZIC-HILIC-Column (150 mm x 2,1 mm i.d.), Mobile phase: 5-40 mM ammonium acetate in 60/40 % ACN/H<sub>2</sub>O, flow rate: 0.1 mL/min, detection: as Gd<sup>158</sup> with ICP-MS, Sample: contrast agent mixture with Gd 10  $\mu$ g/L, sample injected: 5 $\mu$ L.