## **Supporting Information**

Hyperbranched polyethylenimine based polyamine-N-oxide-carboxylate chelates of gadolinium for high relaxivity MRI contrast agents

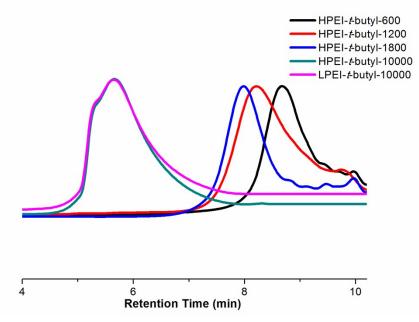
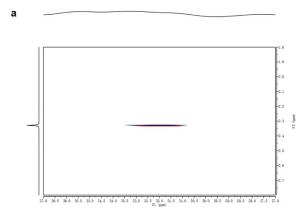


Fig. S1 GPC spectra of PEI-t-butyl molecules.



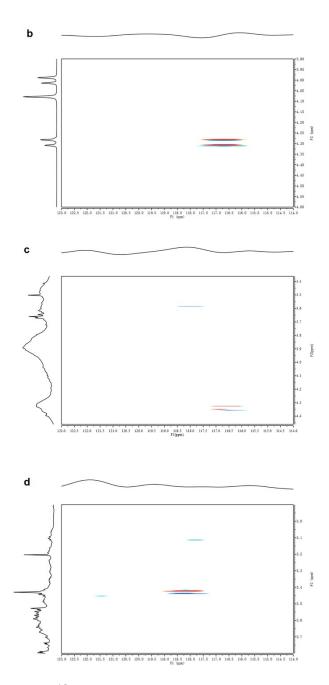
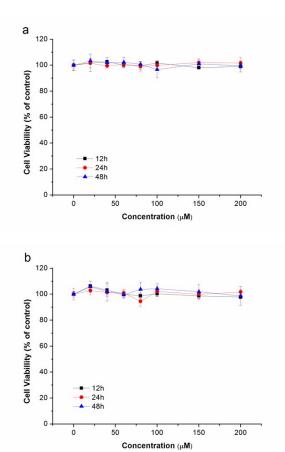
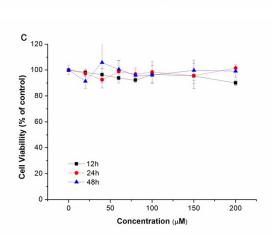


Fig. S2  $^{15}$ N NMR spectra of EDTA (a), EDTA-NO (b), PEI-NO (c) and PEI-NO-Y (III) (d) in D<sub>2</sub>O.





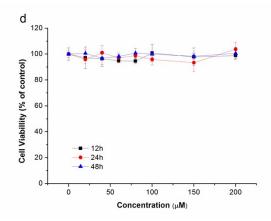


Fig. S3 Relative cell viability [%] of HeLa after treatment with (a) HPEI-NO-Gd-1200, (b) HPEI-NO-Gd-1800, (c) HPEI-NO-Gd-10000 and (d) LPEI-NO-Gd-10000.