

Supporting Information

Determination of radioactivity in urine

After 120 minutes, the urine of three sacrificed animals was pulled out. 50 μl from 200 μl of urine and 50 μl from the supernatant of 200 μl centrifuged urine were measured directly in a gamma-counter. The centrifugation was done at 4000 r.p.m. during 10 minutes. No differences in the amount of radioactivity between both urine samples were observed.

Stability of ^{18}F -CeNPs in plasma

A mixture composed by 0,96 mCi of pure ^{18}F -CeNPs in 4 ml of plasma was continuously stirred at 37 °C. Samples of 400 μl were removed from the mixture at different time. Then, aliquots of 50 μl of centrifugated supernatant and non-centrifugated samples were measured directly in a gamma-counter. The centrifugation was done at 4000 r.p.m. during 10 minutes. This procedure was done at 0, 30, 60, 90 and 120 minutes. The percent of radioactive metabolization of nanoparticle in plasma at each time was considered as the percent of radioactivity in the supernatant vs the radioactivity of the whole sample.

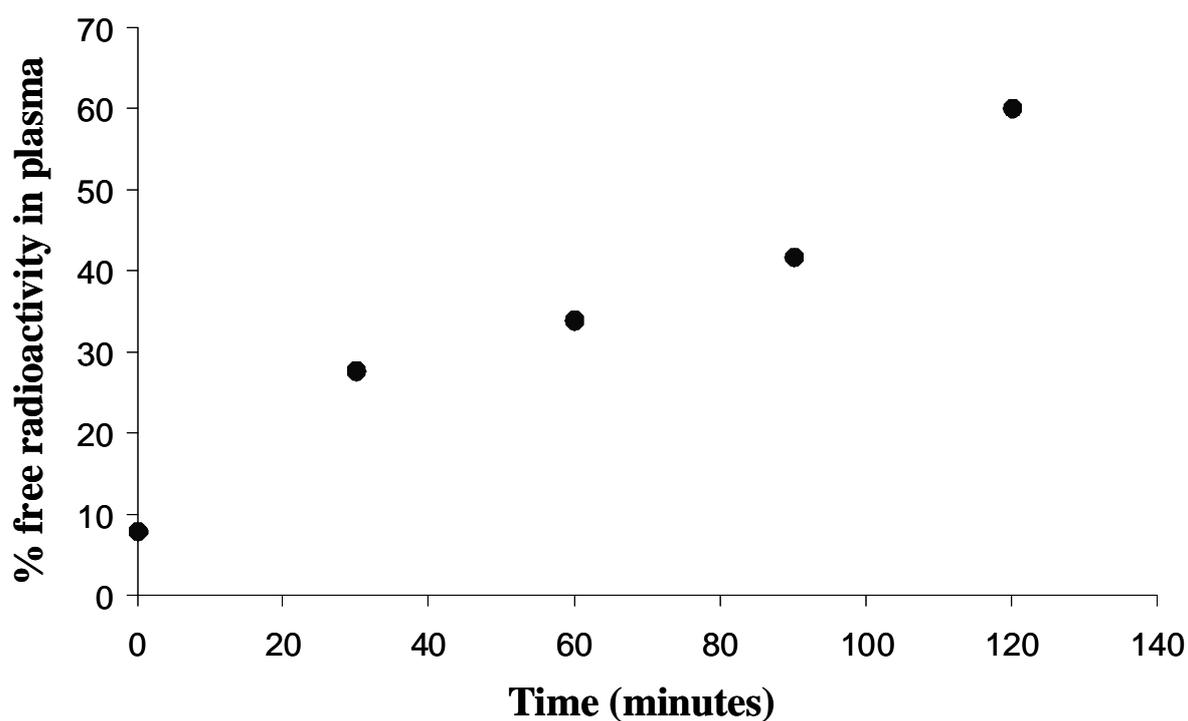


Figure S1. Temporal profile for the metabolization of ^{18}F -CeNPs in plasma. Results shown the percent of free radioactivity, metabolized ^{18}F -CeNPs, in plasma vs time.

	% N	% C	% H
NH₂-CeNPs	0.627	0.221	0.44

Table S1. Combustion elemental analysis of NH₂-CeNPs using a Fisons CHNS analyzer.

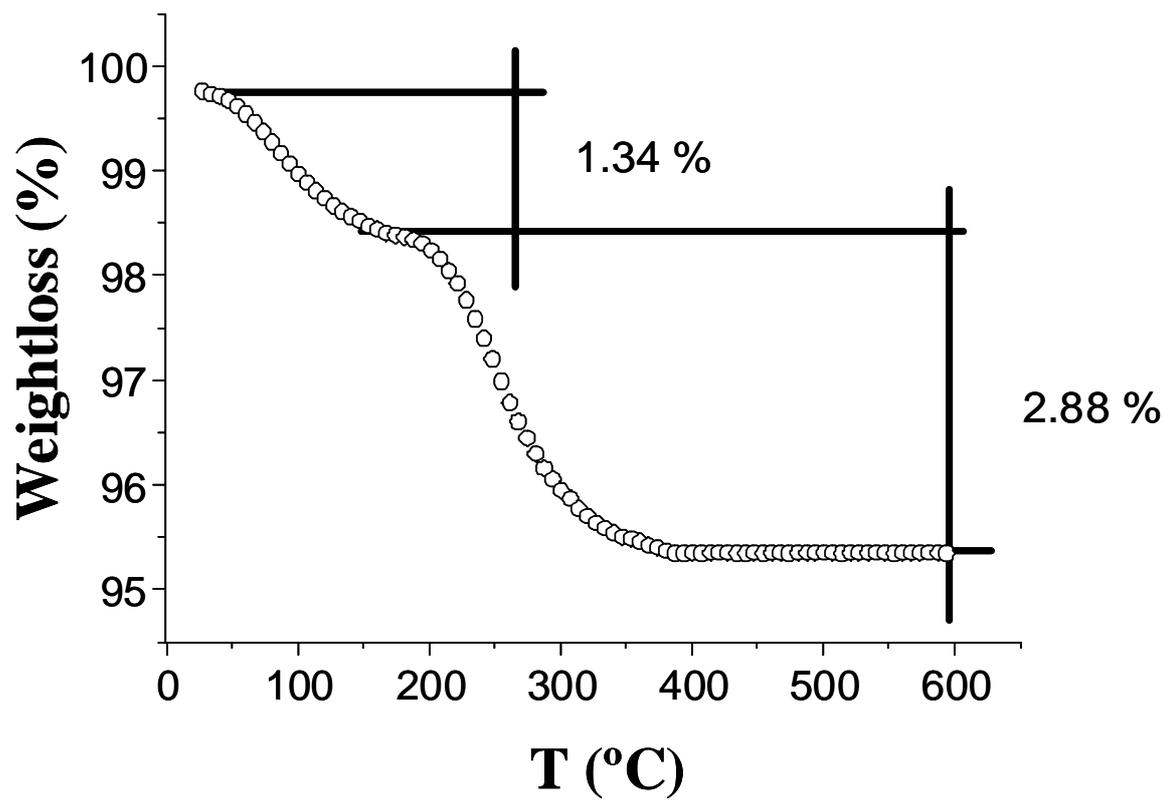


Figure S2. Thermogravimetric profile of the NH₂-CeNPs obtained under air and a heating ramp of 5 °C min⁻¹.