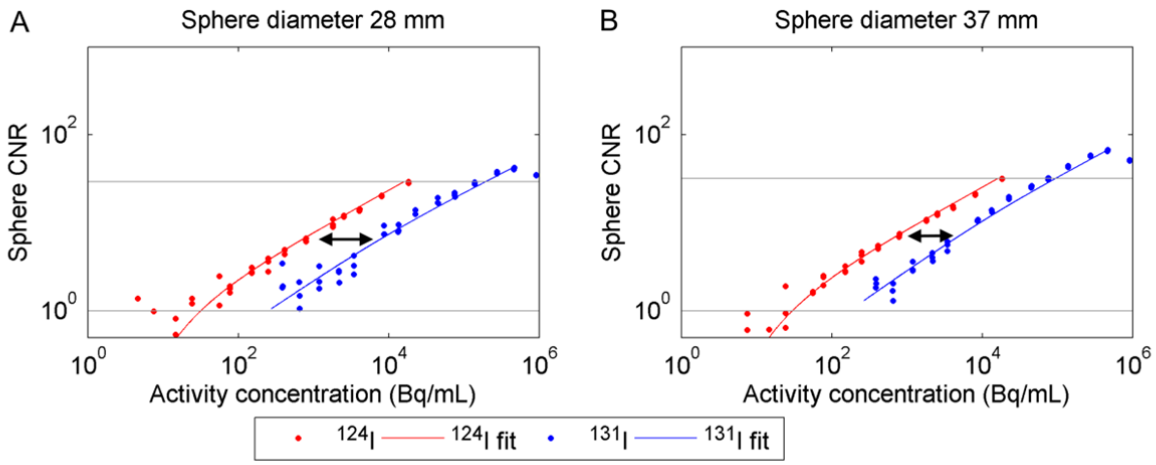
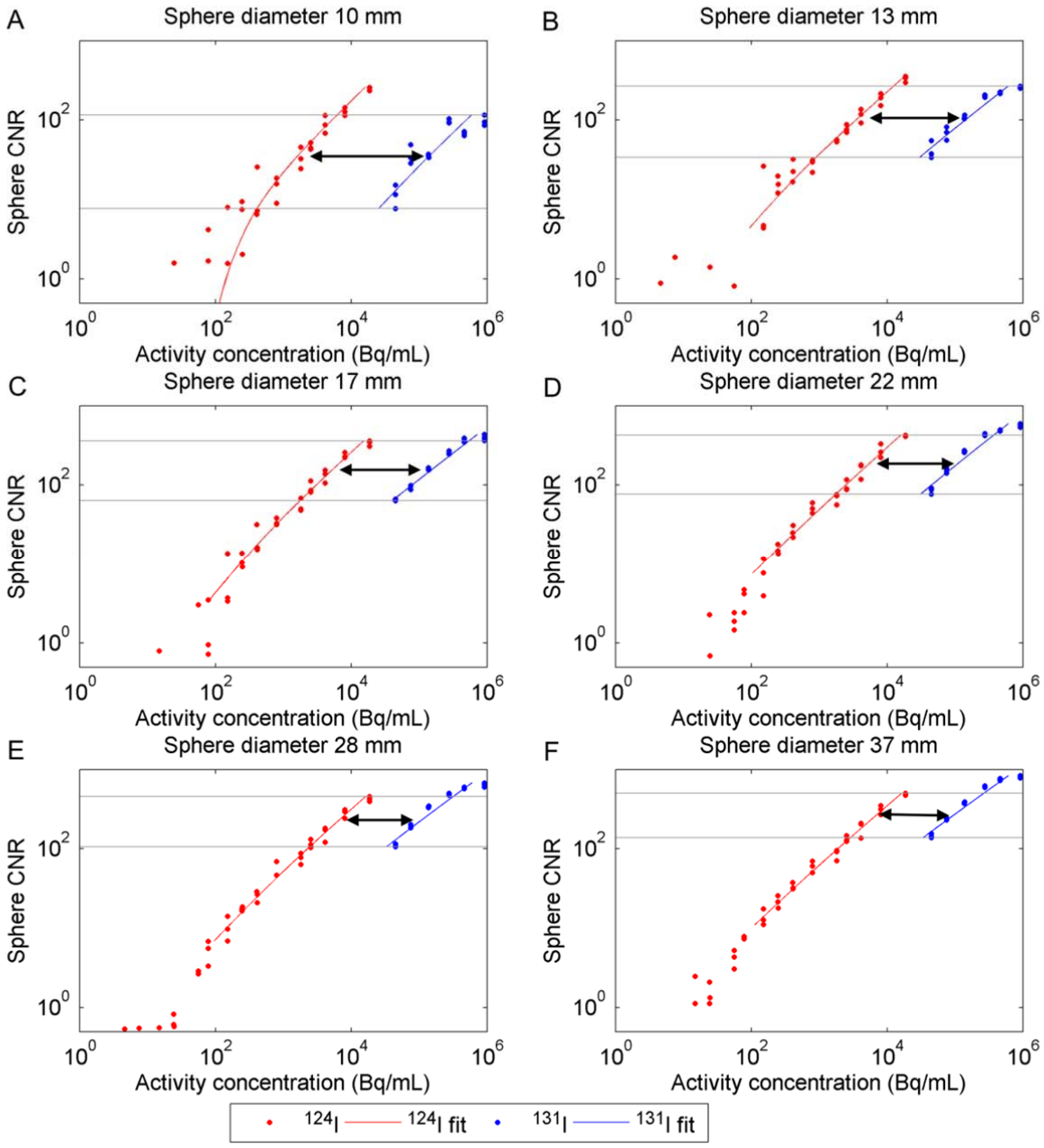


SUPPLEMENTAL FIGURE 1. The sphere CNR as a function of activity concentration for the ^{124}I (red) and ^{131}I (blue) phantom with background for spheres with a diameter of (A) 28 mm and (B) 37 mm. The DEP is determined by calculating the ratio of the curves, which is graphically represented as the horizontal shift of the curves (arrows). The gray lines denote the interval where the average ratio between the curves was determined. PET images were reconstructed using the PSF TOF method and SPECT images using the SC 6i8s method.



SUPPLEMENTAL FIGURE 2. The sphere CNR as a function of activity concentration for the ^{124}I (red) and ^{131}I (blue) phantom without background for spheres with a diameter of (A) 10 mm, (B) 13 mm, (C) 17 mm, (D) 22 mm, (E) 28 mm, and (F) 37 mm. The DEP is determined by calculating the ratio of the curves, which is graphically represented as the horizontal shift of the curves (arrows). The gray lines denote the interval where the average ratio between the curves was determined. PET images were reconstructed using the PSF TOF method and SPECT images using the SC 6i8s method.

SUPPLEMENTAL TABLE 1. Initial Activity Concentrations of the Phantoms at Time of the First Experiment

Isotope	Initial activity concentration spheres (Bq/mL)	Initial activity concentration background (Bq/mL)	Ratio
^{124}I	1.8×10^4	0	—
^{124}I	1.8×10^4	1.8×10^3	10
^{131}I	9.1×10^5	0	—
^{131}I	9.1×10^5	9.0×10^4	10