## Supporting Information

## The biodistribution, excretion and potential toxicology of different-sized Pd nanosheets in mice following oral and intraperitoneal administration

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Figure S1. The hydrodynamic sizes of Pd and Pd-PEG(SH) NSs measured by DLS. Error bars were based on standard deviations of 3 times measurement.



Figure S2. UV-Vis-NIR absorption spectra of different-sized Pd-PEG(SH) dispersed in water, PBS and FBS for 1 day and 7 days, respectively.



Figure S3. Body weight changes of ICR mice treated with different sizes of Pd NSs (5 nm, 30 nm and 80 nm) at the dose of 10 mg kg<sup>-1</sup> at different time points after oral feeding and intraperitoneal injection. Age-matched untreated mice were chosen as the control set. Error bars were based on standard deviations of 5 mice per group.



Figure S4. The anatomical photos of mice treated with 30 nm Pd NSs after oral and intraperitoneal administration for 12 h. The obvious color difference in intestine in oral feeding indicated that the relatively high Pd concentration in the gastrointestinal tract at the orally administrated initial period. Whereas the color change of intestine by intraperitoneal injection was inapparent compared with the untreated control implied the possible distribution of Pd NSs in other organs.