Support information



Fig.S1 Verification of the consistency between fluorescence boundary and tumor boundary in intraoperative frozen section.

Firstly, the *in vitro* tumor tissue samples were imaged with NIF instruments to delineating the tumor border from normal tissues. Then a sharp scalpel was used to separate the tumor tissues and normal tissues along the fluorescence boundary as shown in the figure. At last, the separated tissues were performed with intraoperative frozen section and H&E staining.

From the intraoperative frozen section, we could found the tumor boundary is consistent with the fluorescence boundary.