

## **Description of Additional Supplementary Files**

**File Name:** Supplementary Movie 1

**Description:** Representative video of real-time fluorescence in vivo. A head and neck squamous cell carcinoma of the tongue is shown. A large necrotic ulcer is visible in the middle of the tumor.

**File Name:** Supplementary Movie 2

**Description:** Representative video of real-time fluorescence in vivo. A fluorescent signal on a breast cancer specimen is shown during a lumpectomy, when the specimen is still in situ. The fluorescent spot on the specimen correlates with a tumor positive surgical margin (see also Fig. 4). The nipple tissue is emitting high intrinsic autofluorescent signals.

**File Name:** Supplementary Movie 3

**Description:** Representative video of real-time fluorescence in vivo. A peritoneal metastasis, originating from a colorectal cancer, is visible on the abdominal wall. The large extraluminal colon tumor mass at the bottom of the screen is moving synchronous with in- and exhaling during anesthesia.

**File Name:** Supplementary Movie 4

**Description:** Representative video of real-time fluorescence in vivo. A head and neck squamous cell carcinoma of the tongue is shown.