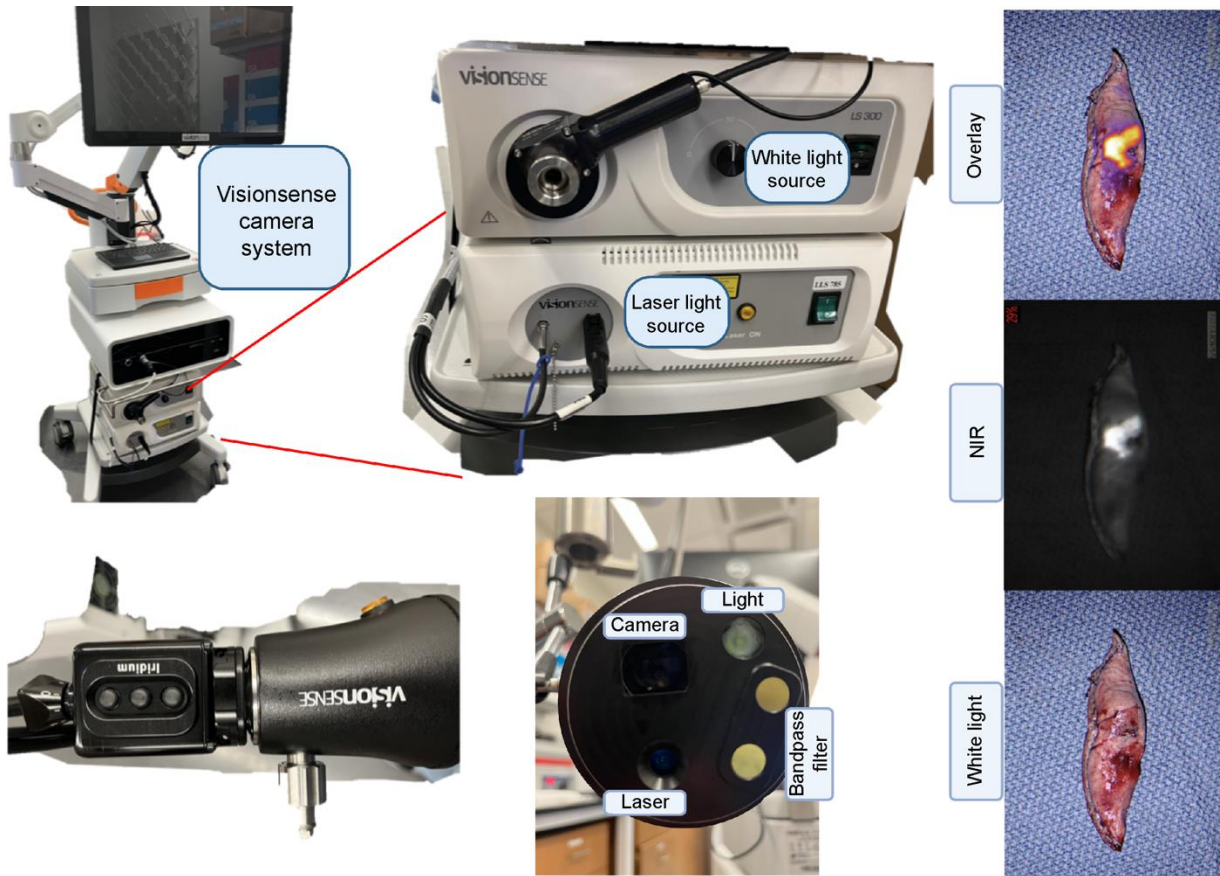


Supplemental Video 1: Demonstration of IMI guided localization of a chondrosarcoma metastatic lesion with ICG. The lesion was followed with serial cross-sectional imaging in a patient with high grade chondrosarcoma that was resected 11 months prior. Standard white light (left), NIR (middle), and overlay (right) video sequences are demonstrated in the segment in a similar manner that the thoracic surgeon would view during the operation.

Supplemental Video 2: IMI guided detection of an occult lesion that was discovered in the same patient as Video 1. This nodule was not noted on cross sectional surveillance imaging. Standard white light (left), NIR (middle), and overlay (right) video sequences are demonstrated in the segment in a similar manner that the thoracic surgeon would view during the operation.

Supplemental Table 1. Imaging systems commonly used in IMI (60).

Imaging System	Company	Excitation Wavelength	Light Source	Real-Time Overlay	Clinical Applications
SPY	Novadaq Technologies	805	Laser	No	Perfusion, Tissue Reconstruction, Lymphatic Mapping, Cerebral Angiography
FL800/400	Leica	750-850	Xenon Light	No	Cerebral Angiography
PDE NEO II	Hamamatsu Photonics	760	LED	Yes	Lymphatic Mapping, Perfusion
Infrared 800	Zeiss	700-780	Laser	No	Neuro-oncology
Fluobeam LX	Fluoptics	680-750	Laser	No	Endocrine surgery
Quest Spectrum	Olympus	400-1000	Laser	Yes	Colorectal Surgery, hepaticopancreaticobiliary surgery, breast cancer, lymphatic mapping, lung cancer
Iridium	EleVision (Medtronic)	805	Laser	Yes	Pancreatic cancer, ovarian cancer, lung cancer, neurosurgery, breast cancer, endocrine surgery.
Onlume	OnLume Surgical	778	Laser	Yes	Neurosurgery, Tissue Perfusion, Vascular and Reconstructive Surgery, Head and Neck Surgery



Supplemental Figure 1. The Visionsense camera system features many of the components common to systems used in intraoperative molecular imaging.