Molecular fluorescence-guided surgery of peritoneal...


Concept of molecular fluorescence-guided surgery is that by using fluorescent tracer molecules injected intravenously, during the operation the surgeon will receive real-time feedback to a microscopic fluorescence system to detect the normal tissue (i.e., unlabelled tissue previously published study performed at A)

Cited by 10
Author: J. H. Kim, Injeong, J. D. grayscale,

Electronic Oncology - Moffitt Cancer Center

https://moffit.org/providers/easyn-go.png

Cited by 1
Author: A. Baer, D. Images, R. U. David, Christopher,

Advances in Molecular Imaging for Surgery - ScienceDirect


In 2011, fluorescence-guided surgery (FGS) is a medical imaging technique that uses fluorescent contrast agents to detect labeled cancer tissue during surgery. A review article describes the approach and the clinical applications provide the illustrated reader a more exhaustive overview of the approach.

Cited by 1
Author: A. Biere, D. Images, R. U. David, Christopher

Inventing the Future of Surgery - SpringerLink

https://link.springer.com/article/10.1007/s00225-014-2679-z

In 2014, an artificial intelligence for real-time magnetic resonance imaging systems is being developed by a team of researchers in collaboration with the University of Michigan. The system is designed to detect and diagnose tumors using a combination of magnetic resonance imaging and optical coherence tomography.

Cited by 10
Author: A. Biere, D. Images, R. U. David, Christopher

Frontiers | Optical Molecular Imaging of Inflammatory...


Recent developments in optical molecular imaging are enabling the localization and quantification of inflammatory cells such as macrophages and neutrophils in the context of imaging-based immunology. This is important because these molecules are an important part of both the cellular and innate immune responses. These techniques can also be used to study the inflammation process in vivo and in vitro.

See more on frontiers.org
Name of Journal: World Journal of Gastrointestinal Oncology
Manuscript NO: 64705
Manuscript Type: REVIEW

Real-time fluorescence image-guided gastrointestinal oncologic surgery: Towards a new era

Martínez-López E et al. Fluorescence image-guided gastrointestinal oncologic surgery

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Abstract

Technological improvements are crucial in the evolution of surgery. Real-time fluorescence-guided surgery (FGS) has spread worldwide, mainly by its usefulness during the intraoperative decision-making processes. The success of any gastrointestinal oncologic resection is based on the anatomic identification.
Molecular fluorescence-guided surgery of peritoneal ...
Concept of molecular fluorescence guided surgery (MFGS). Prior to surgery a fluorescent target tracer is injected intravenously (A). During the operation the surgeon will receive real-time feedback by a molecular fluorescence camera in the detection tumor tissue (B). Unpublished figure from previously published study Harlaar et al 107
Cited by: 6  Author: Judith E.K.R. Hentzen, Steven J. de Jong...
Publish Year: 2018

Frontiers | Optical Molecular Imaging of Inflammatory ...