

Nanorobot for Oncogenics

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References:

This paper presents an innovative hardware architecture for medical nanorobots, using nanobioelectronics, clinical data, and wireless technologies, as embedded integrated system devices for molecular machine data transmission and control upload, and show how to use it in cancer surgery. The integration of medical nanorobotics and surgical teleoperation has the use of robotic laparoscopy concepts. To illustrate the proposed approach, we applied advanced 3D simulation techniques as a practical choice on methodology for molecular machine integrated system analyses and biomedical instrumentation prototyping. --

<https://ieeexplore.ieee.org/document/4276470>

It has been suggested that, in comparison with open radical cystectomy (ORC), robot-assisted radical cystectomy (RARC) results in less blood loss, shorter convalescence and fewer complications, with equivalent short-term oncological and functional outcomes; however, uncertainty remains as to the magnitude of these benefits. --

<https://pubmed.ncbi.nlm.nih.gov/31309688/>

It is already clear that prostate-specific membrane antigen (PSMA) positron emission tomography (PET) is transforming the landscape for diagnosis of prostate cancer (PC). The past 5 yr has seen a surge in the number of publications in this area [1], with impressive specificity and sensitivity reported for PC detection in both the biochemical recurrence and primary staging settings [2,3]. It has been reported that PSMA PET increases the accuracy of pelvic lymph node staging in cases of higher-risk PC [4], and technologies have now been developed to enhance the detection of these lymph nodes intraoperatively. --

[https://www.europeanurology.com/article/S0302-2838\(18\)31047-9/abstract](https://www.europeanurology.com/article/S0302-2838(18)31047-9/abstract)