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## Recent Advances in Robotic Surgery for Cancer Treatment

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## **Abstract**

In parallel with the continuous evolution and discovery of new medical techniques, the evolution of technology has enabled the introduction of robotic systems in the medical applications.

Surgical robotics is one of the most important subdomains of the medical robotics, with a highly potential worldwide, and its development is correlated with the increased life expectancy. The already achieved surgical robotic systems for cancer treatment have shown a continuous evolution in this challenging and difficult research field.

The latest advancements in technology and medicine have successfully increased survival rates and quality of life for many cancer patients.

The European Research Strategies are considering cancer as one of the most important areas in need of fundamental innovation emphasizing the curative role of Precision Surgery and the importance of personalized instrumentation in the fight for higher survival rates and quality of life.

Therefore, it is very important to develop European relevant solutions in the field on oncologic surgery in the form of new smart and adaptive robotic medical devices that will overcome the current frontiers through a new paradigm focused on personalised, minimally invasive interventions that can maximize the therapeutic effects.