Cooperation for greater awareness of high precision radiotherapy for prostate cancer

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Modern radiotherapy for prostate cancer is as effective as surgery with important advantages in preservation of urinary continence and sexual function [1] [2].
Despite growing scientific evidence, radiotherapy remains underutilized in several European countries. Although nearly all men with non-metastatic prostate cancer who require active treatment are candidates for primary radiotherapy according to European guideline (EAU), radiotherapy remains the less frequently used curative modality in many European countries, applied in as few as 12–22% of radically treated patients in some national registries ([3], [4]), while many patients are still insufficiently informed about its potential benefits.
This was highlighted and widely discussed at Europe's largest scientific congress, ESTRO 2026 (European Society for Radiotherapy and Oncology), in Stockholm, as well as on the corresponding congress in the United states, ASTRO 2026 (American Society for Radiation Oncology) in Boston.There is a clear shift underway, where healthcare professionals, researchers and the medical technology industry are increasingly joining forces to overcome persistent misconceptions about radiotherapy.

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Professor Filippo Alongi, from the University of Brescia and Director of the Advanced Radiation Oncology department at IRCCS Sacro Cuore Don Calabria Hospital in Italy, refers to important findings in a British and Canadian study, Pace-A [2] which compared robotic surgery with high-precision radiotherapy delivered in just 5 sessions. The study provides significant long-term evidence on patient treatment outcomes, while radiotherapy showed advantages over surgery in aspects of the long-term side-effect profile.

"*The British ProtecT trial had already provided reassuring long-term oncological effectiveness of radiotherapy compared with surgery.* More recently, *the eight-year follow up of another study comparing surgery with radiotherapy, PACE-A* [2]*, reinforces these findings showing that modern high-precision radiotherapy delivered in just five sessions can offer additional advantages even when compared with the most advanced robotic surgical techniques, particularly in preserving urinary continence and sexual function*," explains Professor Alongi.

"*Thanks to continuous technological innovation, modern radiotherapy allows us to deliver highly precise treatments in just five sessions in most of the cases, without surgery, anaesthesia or hospitalization. Our goal is not only to cure prostate cancer, but also to preserve patients' quality of life over the long term*."

Professor Alongi also highlights the need for closer collaboration between clinicians, scientific societies, patient organizations and the medical technology industry.

"*Patients should be fully informed that modern radiotherapy offers an effective alternative to surgery, with potentially important advantages in terms of long-term quality of life. The evidence is increasingly compelling, and ensuring that patients are aware of these options is our shared responsibility*."

The convergence of robust long-term clinical evidence and continuous technological innovation offers an important opportunity to improve patient awareness, support shared decision-making and expand access to high-precision radiotherapy across Europe.

Need for change highlighted at ESTRO

Signs are emerging that this may be changing. At this year's ESTRO congress in Stockholm, held in May 2026, the need to raise awareness of radiotherapy as a modern, effective and less invasive treatment option received considerable attention.

"*From an industry perspective, this is why we exist—to improve patients' quality of life. It's encouraging to see the growing awareness within the research community and the shift toward closer collaboration across the radiation oncology community."* says Hanna Syrén, COO and QA/RA Director at Micropos Medical, the company behind Raypilot System, one of the technologies enabling highly precise radiotherapy.

Aiming for minimizing the side effects

Minimising side effects, increasing efficiency through fewer treatment sessions and providing patients with clearer information about radiotherapy were among the key themes discussed. Experts from across Europe shared a common vision for the future while contributing their different perspectives and areas of expertise. Some examples from leading voices in the debate include:

Professor Piet Ost, GZA Ziekenhuizen, Antwerp, Belgium:
“We need to stop talking to patients primarily about machines and techniques. That level of detail can be confusing for the patients. The surgeon's message is often much simpler: 'I’ll remove it'. We need to be as clear and decisive as that.”

Professor Stefano Arcangeli, University of Milan Bicocca, Italy, leading ABRUPT [3] - a study on single-fraction treatment of prostate cancer:
"The question is no longer whether prostate cancer treatment can technically be delivered in a single session, but whether this approach can consistently deliver durable tumor control while maintaining an excellent Quality of life. Our recently published research [3] *shows that single-dose radiotherapy, with intrafraction motion control achieved with technologies such as the Raypilot System, can deliver high radiation doses with very low side effects and thereby significantly improve patients’ quality of life.”*

Dr Carmen Rubio Rodriguez, Head of the Radiation Oncology Service of HM Hospitales, Madrid, Spain, and President-Elect of ESTRO:
"Highly precise stereotactic body radiotherapy (SBRT), enabled by advanced image guidance and real-time motion management, has transformed the treatment of localized prostate cancer. Many patients can now receive a curative, non-invasive treatment in just a few outpatient sessions, achieving cancer control comparable to surgery while better preserving urinary continence, sexual function and quality of life. Our responsibility is to ensure that every eligible patient is informed about this highly effective treatment option and can make a truly informed choice."

Professor Duncan McLaren, Edinburgh Cancer Centre, Scotland, head of the PRECISION study, an ongoing thee-fraction clinical study, evaluating treatment with real-time tumor tracking:
“Zero side-effects - or as close as possible to zero side effects – this is what we are working towards. That is why the recent NHS England guidelines to expand access to efficient prostate cancer treatment for patients with localized prostate cancer are so encouraging. Delivering treatment in fewer fractions benefits both patients and healthcare systems by improving radiotherapy capacity and helping reduce waiting times.”

Professor Barbara Jereczek-Fossa, Professor of Radiation Oncology at Milan University, Chair of Radiation Oncology at the European Institute of Oncology, Milan, Italy, President of ESTRO:

“ At the recent ESTRO 2026 Congress in Stockholm, ESTRO President Prof. Barbara Alicja Jereczek-Fossa emphasized that advanced cancer care is not only about improving treatments, but also about improving how we communicate them. As radiotherapy continues to advance, our language should evolve as well. Clear, patient-centered terminology helps reduce unnecessary anxiety and gives patients a better understanding of what to expect."

Dr Berardino de Bari, Department of Radio-oncology at the Réseau Hospitalier Neuchâtelois, in La Chaux-de-Fonds, Switzerland:
“The patient's perspective should always guide our treatment decisions. The efficacy of the two therapeutic approaches is equivalent in localized prostate cancer. The 15-year results of the ProtecT[1] *trial showed that only 3% of patients will die of prostate cancer. The real issue is therefore to choose the treatment that least impacts the quality of life of these long-surviving patients. Preliminary results from the PACE-A* [2] *and PACE-B* [4] *trials showed that, for*

appropriately selected patients, SBRT is a valuable option that fits into routine clinical practice and can minimize side effects without compromising outcomes when compared to moderate hypofractionated radiotherapy and to surgery"

Professor Thomas Zilli, Ospedale Regionale di Bellinzona, San Giovanni (Bellinzona Regional Hospital), Switzerland:
"Urethra sparing represents an important step forward in prostate radiotherapy. By reducing the radiation dose to the urethra without compromising treatment of the tumour, we can significantly reduce urinary side effects and help patients maintain a better quality of life after treatment. This evolution illustrates how technological innovation is increasingly focused not only on improving tumor control but also on preserving patients' QoL"

Precision becomes increasingly important
As treatment is condensed into fewer fractions, accuracy and precision become increasingly important. Modern radiotherapy addresses this challenge through technologies that continuously monitor prostate motion and minimise the risk of radiation to the bladder, other surrounding organs and healthy tissue.

"*Advances in high-precision radiotherapy provide new opportunities to improve prostate cancer care. By working together across specialties, scientific societies, patient organizations and industry, we can ensure that patients receive balanced information, benefit from appropriate technological innovation and have equitable access to the treatment best suited to their individual needs" concludes Hanna Syrén.*

References:

[1] ProtecT: N Engl J Med 2023;388:1547-1558.
[2] Pace A: Eur Urol. 2024 Dec;86(6):566-576.
[3] Radiother Oncol 2015;115:90-95.
[4] Prostate Cancer Prostatic Dis 2017;20:61-66.
[5] Clin Transl Radiat Oncol 2026;58:101127.
[6] Pace B: N Engl J Med 2024;391:1413-1425.

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