



Proton Therapy New Standard of Care for Patients with Oropharyngeal Cancer

Louvain-La-Neuve, Belgium, December 15, 2025 – IBA (Ion Beam Applications S.A., Euronext), the world leader in particle accelerator technology and the world's leading provider of proton therapy solutions for the treatment of cancer, is pleased to share today that, on December 11, **The Lancet – one of the world's most renowned academic journals** – published a landmark study that recommends proton therapy as a new standard of care for patients with oropharyngeal cancer. [This study](#), led by MD Anderson Cancer Center, the world's leading hospital for cancer care, is the first-ever randomized controlled trial (RCT) to provide the highest level of evidence demonstrating the benefits of proton therapy over conventional radiotherapy for this indication.

Oropharyngeal cancer is a type of head and neck cancer that develops in the throat region, a highly sensitive area containing fragile, critical structures, making precisely targeted local treatments particularly relevant. It is a growing global health concern, with more than 100,000¹ new cases diagnosed annually. Standard treatment, with the current state-of-the-art photon radiotherapy, intensity-modulated radiation therapy (IMRT) and chemotherapy, often results in major side effects, including significant weight loss, dependence on feeding tubes, dry mouth, and loss of taste.

The trial involved **over 20 institutions** and enrolled **440 patients**, representing the **first-ever level 1 randomized phase 3 trial** comparing Intensity-Modulated Proton Therapy (IMPT) with advanced photon therapy (IMRT).

The MD Anderson study delivers **Level 1 evidence** with the following key findings:

- **Significant improvement in overall survival:** Five-year overall survival rate of 90.9% with IMPT versus 81.0% with IMRT
- **42% reduction in the hazard of death** with IMPT
- **Significantly reduced rates of severe toxicities** (grade 3 and above) compared to IMRT. Toxicities include lymphopenia, neutropenia, xerostomia, dysphagia, and gastrostomy-tube dependence.

Level 1 evidence is the strongest evidence in medical research in this case coming from a large well-conducted multicenter Randomized Controlled Trial (RCT) -. It provides the most reliable basis for informed clinical decision-making

These results establish **proton therapy** as a **transforming, safe, and patient-focused solution**, poised to redefine the global standard of care for oropharyngeal cancer.

¹ Source: <https://gco.iarc.fr/en>



*“This is important level 1 evidence that proton therapy has both a survival benefit and quality-of-life improvement for these patients and should be the standard of care for advanced cases of oropharyngeal cancer,” commented **Steven Frank, M.D., executive director of technology and innovation and deputy division head of strategic programs for Radiation Oncology**. He added: “these results demonstrate the advantages of proton therapy for head and neck cancer patients, and this study could lay the foundation for increased accessibility for patients who may benefit.”*

Luk Herremans, Chief Market Officer of IBA Proton Therapy, commented: *“This publication in The Lancet truly marks an important milestone for the field of proton radiotherapy. This trial started more than 10 years ago and has robust long term follow-up data demonstrating clear quality-of-life benefits for patients being treated with proton therapy as well as a reduced hazard of death of 42%. The publication is an important landmark to transform proton therapy into the new standard of care for those patients.”*

IBA congratulates Dr. Steven Frank, principal investigator at [MD Anderson Cancer Center Clinical Trial Consortium](#), and all participating institutions and experts for their invaluable contributions to this pivotal research.

IBA previously referred to this trial at prepublication stage at the [Capital Markets Day](#) and in its [Third Quarter Trading Update press release](#).

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About IBA

IBA (Ion Beam Applications S.A.) is the world leader in particle accelerator technology. The company is the leading supplier of equipment and services in the fields of proton therapy, considered as one of the most advanced forms of radiation therapy available today, as well as industrial sterilization, radiopharmaceuticals and dosimetry. The company, based in Louvain-la-Neuve, Belgium, employs approximately 2,100 people worldwide. IBA is a certified B Corporation (B Corp) meeting the highest standards of verified social and environmental performance.

IBA is listed on the pan-European stock exchange Euronext (IBA: Reuters IBAB.BR and Bloomberg IBAB.BB). More information can be found at: www.iba-worldwide.com

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