

Press Release |

Hadron therapy: The new 300 MeV/u superconducting cyclotron developed by INFN will be commercialized by IBA

Louvain-la-Neuve, Belgium, September 26, 2006 – IBA (Ion Beam Applications) confirms having signed an agreement with the Italian National Institute for Nuclear Physics (INFN), about a new cyclotron for hadron therapy developed by the INFN group in Catania. This Agreement has been signed in Rome by the President of INFN, Professor Roberto Petronzio and Mr. Yves Jongen, IBA Founder and Chief Research Officer of IBA.

This new cyclotron, designed by a team led by Dr. Luciano Calabretta and Dr Giacomo Cuttone at the INFN laboratory in Catania will accelerate protons, helium and carbon ions at an energy of 300 MeV/u. It will be used for the therapy of cancer using either protons or light ions.

Protons and light ions allow depositing the radiation dose more precisely in a cancer tumor, reducing greatly the amount of dose received by healthy tissue surrounding the tumor. But in addition to the ballistic accuracy of protons, light ion beams, like carbon beams have an additional advantage in radiation therapy: thanks to their high linear energy transfer, they have a different biological interaction with cells and are very effective even against some type of cancerous cells which resist to usual radiations.

According to the agreement, IBA will support the INFN development by bringing its industrial experience to the well known accelerator experience of the INFN team. The new cyclotron will be included in the range of solutions proposed by IBA for particle therapy and IBA will have the exclusive rights to its commercialization.

This collaboration between two major institutions will produce very positive outputs.

"IBA has a long tradition of collaboration with INFN, and this agreement is a new and important step in this direction. We have known Dr. Luciano Calabretta and his team at Laboratori Nazionali del Sud in Catania for many years and we have always been impressed with his innovations in cyclotron design. This new cyclotron will ideally fit in the IBA range of accelerators marketed for particle therapy. Both in performance and in cost, it is extremely well positioned between IBA successful 230 MeV proton cyclotron, and IBA 400 MeV/u superconducting cyclotron for carbon therapy. Thanks to this alliance, IBA now offers the most complete range of accelerators for proton and carbon therapy on the market", said Yves Jongen, IBA Founder and Chief Research Officer.



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About IBA

IBA delivers solutions of a unique precision in the fields of **cancer diagnosis and therapy**. The company also offers sterilization and ionization solutions to improve the hygiene and safety of everyday life. IBA is listed on the pan-European stock exchange EURONEXT, is integrated into the NextEconomy market segment and belongs to BelMid index.

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