

# BAT-90, AN INNOVATION BY BETAGLUE TECHNOLOGIES

# BETAGLUE TAKES RADIOTHERAPY INSIDE SOLID TUMOURS: FIRST PATIENT TREATED

- The first clinical results have shown that BAT-90 innovative radiotherapy platform makes it
  possible to treat only the area where the tumour is located, while avoiding the surrounding
  tissues, so as to combine treatment efficacy and patient safety
- CEO/CMO, Dr. Antonino Amato, said: "The confirmation in this first patient of the previous findings from the pre-clinical studies with BAT-90 opens up tremendous perspectives for therapeutic nuclear medicine in oncology, which will hopefully lead to improved outcomes and better quality of life for patients affected by several types of cancer. The targeted and localised BAT-90 treatment will strengthen even more the concept of precision medicine in radiotherapy"

Milan, July 11, 2022- BetaGlue Technologies, a highly innovative company working in the Life Sciences sector, announces today that the first patient has been treated in a clinical trial with BAT-90, the company's cancer radiotherapy platform.

The patient, suffering from liver cancer (hepatocarcinoma), was treated with BAT-90, a technology involving the delivery of Yttrium-90-labelled microspheres through a proprietary device straight into the tumour, where they are retained by a fast-curing, biocompatible glue. Two months after injection, clinical results confirmed that BetaGlue Technologies' radiotherapy platform remains localized only in the area where the tumour is located, thus not exposing surrounding tissues or organs to unnecessary radiations.

#### **BAT-90**

BAT-90 ('Beta Ablation Therapy with Yttrium-90') consists of a  $\beta$  radiation-emitting biocompatible matrix, delivered to patients via percutaneous injection: the Yttrium-90-labelled microspheres present inside the matrix are injected into the tumour and, as the carrier takes only 120 seconds to reach full polymerisation, they are retained exclusively in the injected area. This prevents the microspheres from spreading to surrounding tissues or organs, so as to release their radiation energy only to the target tumour. In this way, a very low radioactive dose is needed, much lower than the one used with conventional radio-metabolic treatments, thus enhancing treatment efficacy and patient safety.

#### **Benefits**

BAT-90 opens up **important horizons in oncology**, bringing benefits to both patients and the healthcare systems. Indeed, BAT-90 is a **therapeutic nuclear medicine** solution that is extremely **precise** (it only targets the tumour area), **personalised** (calibrated to the patient's clinical situation), **rapid** (a single injection reaching full polymerisation in just a few minutes) and **safe** (the radiation energy is released where needed, avoiding exposure of surrounding tissues and organs, thus minimizing any risk to either patients or healthcare professionals).



## Current stage and next steps

BetaGlue Technologies is currently running two Phase I/II clinical trials with BAT-90 in patients with primary liver tumour and in patients with early-stage breast cancer. These studies are being carried out at the New Hospitals in Tbilisi, Georgia, an international centre of excellence affiliated with Thomas Jefferson University in Philadelphia (USA). The clinical trial in liver cancer patients is coordinated by Professor Malkhaz Mizandari, President of GACIR (Georgian Association of Cardiovascular and Interventional Radiology), Full Professor at TSMU Radiology Department, Director of Diagnostics and Interventional Radiology Department at New Hospitals and Director of 'GEOJEFF' Ultrasound Education Centre 'GEOJEFF'.

Following the treatment of the first patient, **Professor Malkhaz Mizandari** stated: "SIRT (Selective Internal Radio-Treatment) of HCC/liver metastases using Y90 microspheres is widely accepted in oncology practice by interventional radiologists using a trans-arterial approach. BAT-90 enables a much easier access by using image-guided direct administration into the tumor; the bio-compatible glue allows Y90 microspheres adequate fixation after injection with very high confidence. BAT90 is a promising new type of SIRT, which seems to be effective at least at the same degree, being however at the same time significantly cheaper and easier than conventional SIRT. Most likely, BAT90 should be accepted as the treatment option for inoperable HCC/metastatic nodules".

BetaGlue Technologies' Executive Chairman, Dr. Riccardo Palmisano, said: "The beginning of the first clinical trial with BAT-90 with a positive confirmation of efficacy and safety is a very meaningful step for patients with solid tumours, for oncologists and radiotherapists treating them, and for BetaGlue Technologies, which today takes a major leap forward in creating value for the shareholders who believe in our project".

### BetaGlue Technologies SpA

BetaGlue Technologies is a highly innovative company working in the Life Sciences sector.

The Company has developed BAT-90, an advanced radiotherapy platform targeting inoperable solid tumors and/or surgical resection margins. BetaGlue is also patenting a medical device that enables safe biopsies in oncology, preventing even severe complications after lung or liver procedures.

BetaGlue enjoys the support of a highly qualified Scientific Advisory Board, as well as of leading national and international advisers, in the development of its solutions.

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