

Long term follow-up of patients with Small Intestine Neuroendocrine Tumors submitted to Ex Vivo Beta- Radioguided Surgery with Y-90-DOTATOC

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BACKGROUND

Complete surgery is the milestone of treatment of Small Intestine (SI) Neuroendocrine Tumors (NET) and could improve the prognosis in these patients. As we recently published, radioguided surgery (RGS) with beta-radioisotopes probe, provides a clearer delineation of the lesions with low radiation exposition for surgeons.

RESULTS

One patient, operated on March 2017, remained stable for 2 years and when progressed, he received PRRT with Lu-177-oxodotretotide (800 mCi) obtaining a stabilization of disease; his blood examinations did not showed any long term toxicity.

One patient, operated on May 2017, has a stable disease at the last follow up of December 2020; he is in therapy with SSA; his blood examinations do not show any haematological or renal impairment.

One patient, operated on July 2017, has a stable disease at the last follow up of December 2020; he is in therapy with SSA; his blood counts and kidney function are normal.

One patient, operated on January 2018, has a stable disease at the last follow up of April 2021; he is in therapy with SSA, with normal blood examinations. **One patient**, operated on November 2018, presented a systemic progression of disease, after 4 months from surgery, and died few months after (this patient had also an important carcinoid syndrome with carcinoid cardiopathy).

All the patients tolerated very well the administration of Y-90-DOTATOC and the following surgery; there were no surgical complications or late side effects (no kidney function alteration, normal values on blood counts) during all the follow up period.

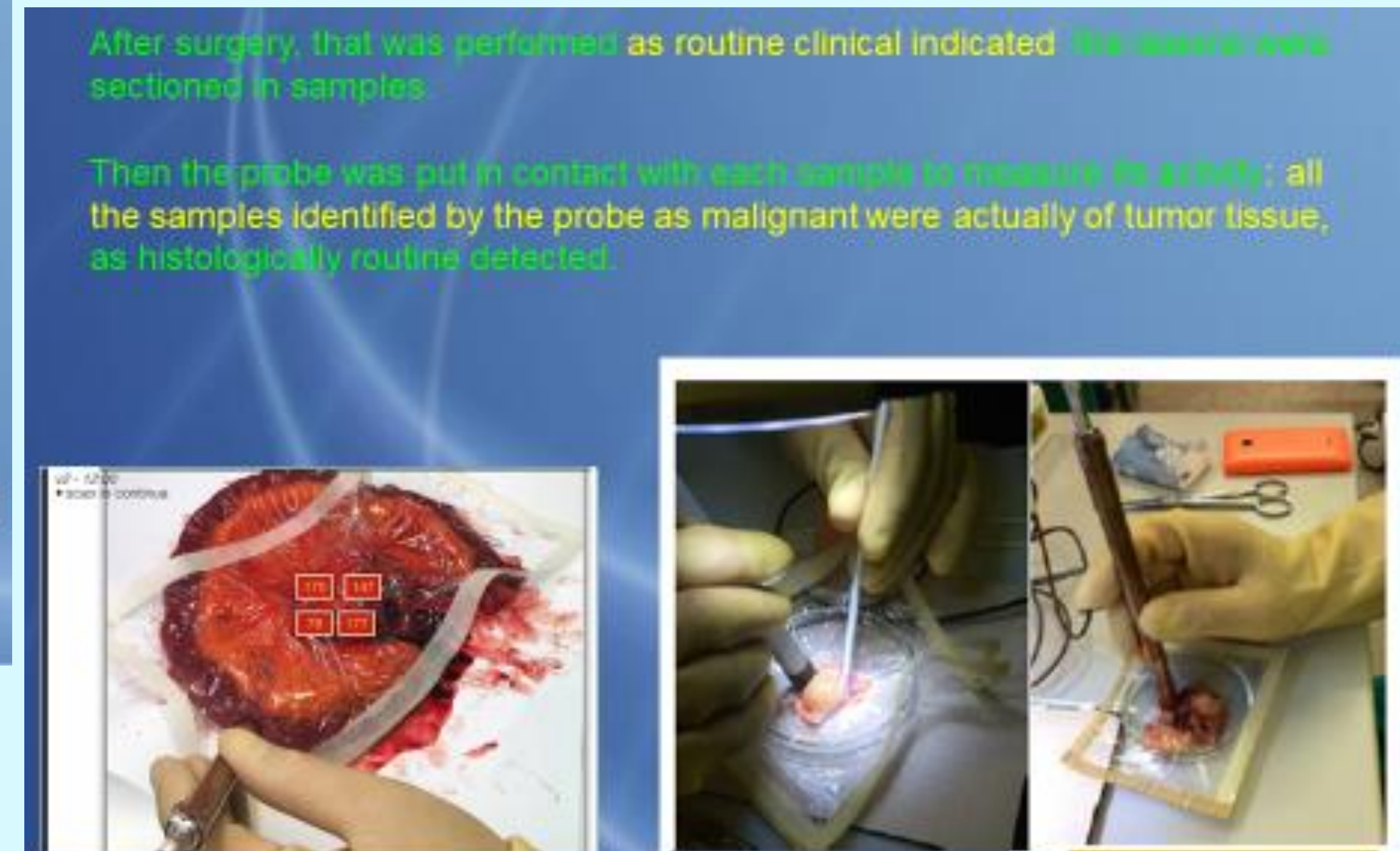
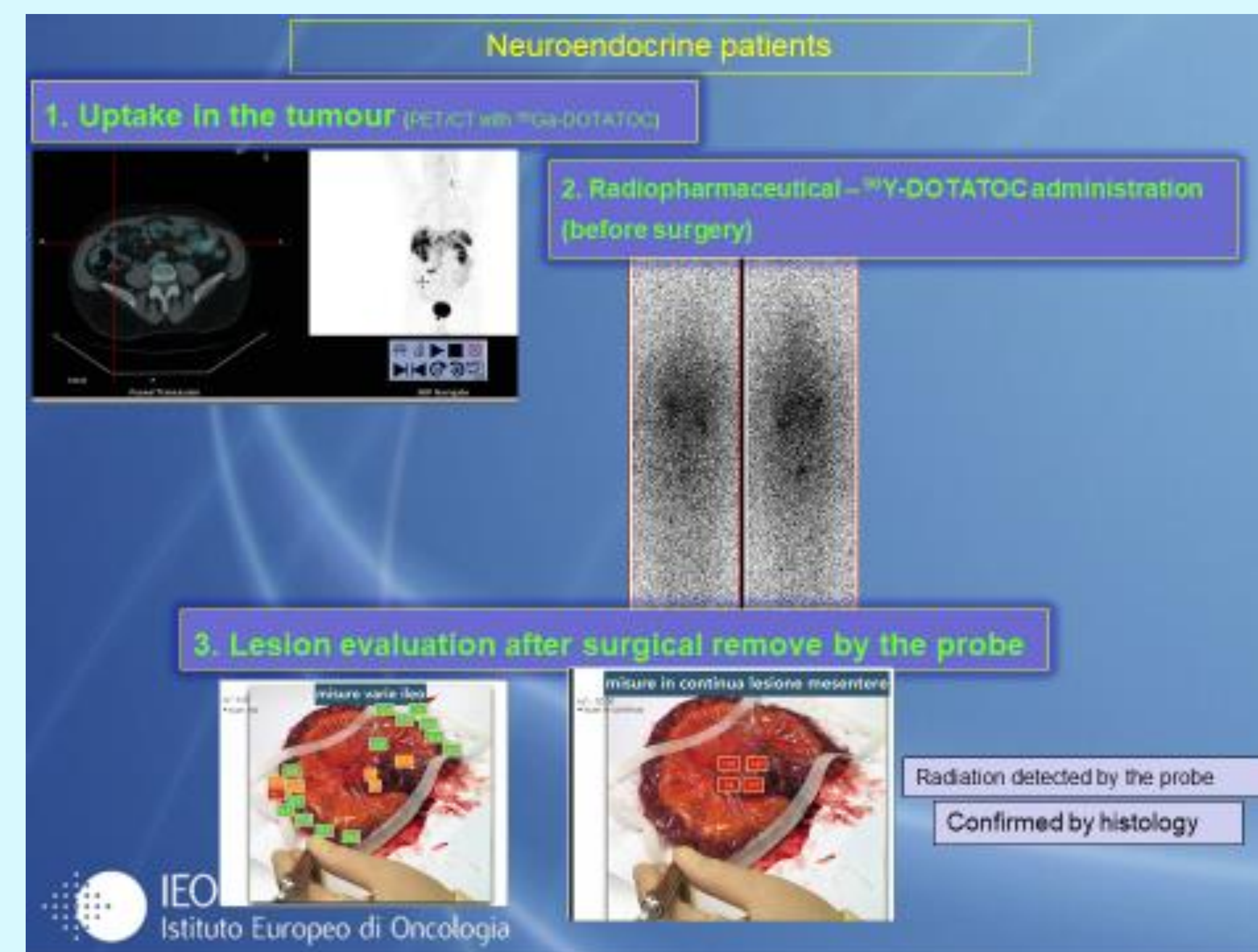
AIM, MATERIALS AND METHODS

Five SI-NET patients with liver and abdominal lymph node metastases (4 male and 1 female, median age 61.8 years (range 51–71 years) were enrolled in our protocol receiving 5 mCi of Y-90-DOTATOC and subsequently operated, with the the ex-vivo analysis of their surgical specimens.

After surgery, patients received the standard and periodical follow up with morphological and functional imaging, blood examinations and clinical visits.

Here we report their follow up, with particular attention to late side effects.

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CONCLUSIONS

This multidisciplinary approach that includes radioguided surgery with Y-90-DOTATOC administration is a safe procedure.

We believe the importance of going on with the trial with the in-vivo application of the technique.