

## **Natural History of Small Sporadic Non-Functioning Pancreatic Neuroendocrine Tumors: An Observational Bi-Centric Study**

**Stefano Partelli<sup>1</sup>, Sébastien Gaujoux<sup>2</sup>, Frédérique Maire<sup>2</sup>,  
Pietro Coletta<sup>1</sup>, Béatrice Larroque<sup>2</sup>, Stefano Crippa<sup>1</sup>,  
Alain Sauvanet<sup>2</sup>, Massimo Falconi<sup>1</sup>, Philippe Ruszniewski<sup>2</sup>**

<sup>1</sup>“AOUI Ospedali Riuniti, Università Politecnica delle Marche”. Ancona, Italy.

<sup>2</sup>Beaujon Hospital, AP-HP. Clichy, France

**Context** Asymptomatic sporadic non-functioning well-differentiated pancreatic neuroendocrine tumors (AS-NF-PNET) are increasingly diagnosed, and their management is controversial because of their overall good but heterogeneous prognosis.

**Objective** The aim of the present study was to assess the natural history of AS-NF-PNET below 2 cm in size, and the benefit-risk balance of a non-operative management. **Methods** From January 2000 to June 2012, 46 patients with proven AS-NF-PNET below 2 cm in size were followed-up for at least 18 months with serial imaging. **Results** Patients were mainly female (65%), with a median age of 60 years. Tumors were mainly located in the pancreatic head (52%), with a median lesion size of 13 mm (range: 9-15 mm). Distant or nodal metastases appeared on imaging in none of the

patients after a median follow-up of 34 months (range: 24-52 mm) and an average of 4 (range: 3-6) serial imaging. A  $\geq 20\%$  increase in size was observed in 6 (13%) patients. Overall median tumor growth was 0.12 mm per years and no patients neither tumor characteristics were found to be significant predictors of tumor growth. Overall, 8 patients (17%) underwent surgery after a median time from initial evaluation of 41 months (range: 27-58 months); all resected lesions were ENETS T stage 1 (n=7) or 2 (n=1), grade 1, node negative, with neither vascular nor peripancreatic fat invasion. **Conclusion** In selected patients non-operative management of AS-NF-PNET below 2 cm in size is safe. Larger and prospective multicentre studies with long-term follow-up are now needed to validate this “wait and see” policy.