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***Is there a place for re-challenge of PRRT in
neuroendocrine tumors?***

DISCLOSURE OF INTEREST

- ⦿ No conflict of interest

Background

Insulinoma is a rare pancreatic neuroendocrine tumour with insulin hypersecretion that causes hypoglycaemic episodes. It is considered malignant when metastatic.

Conventional therapies provide a transient and partial effect and may be associated with severe adverse effects.

The experience with PPRT (peptide receptors radionuclide therapy) in this context is scarce.

Clinical case

Previously asymptomatic 50-yo woman, with no relevant past medical history, diagnosed with a pancreatic neuroendocrine tumor with hepatic involvement (multiple nodes)

2011/05 Hepatic biopsy: “metastasis of well differentiated NET”
Corpo-caudal pancreatectomy: **pNET, G2** (Ki67 10%) – pT1N0M1

2011/ 12 Started **Sunitinib** 37,5mg id

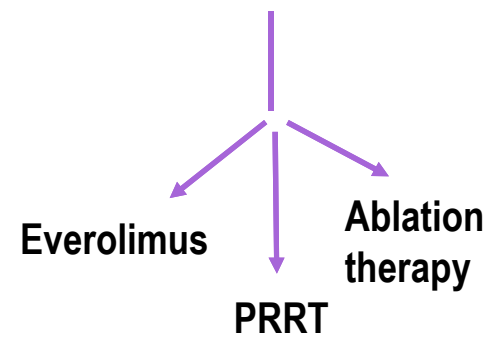
2015/06 CT scan: PD and **sunitinib discontinuation**

2016/06 Hypoglycaemia episodes and diagnosis of **malignant insulinoma**
Started **Diazoxide** 25mg 8/8h, with limited clinical benefit

2016/10 ⁶⁸Ga-DOTANOC-PET: hepatic hyperexpression of somatostatin receptors

2016/12 **PRRT** - ¹⁷⁷Lu-DOTA-TATE

What to do?

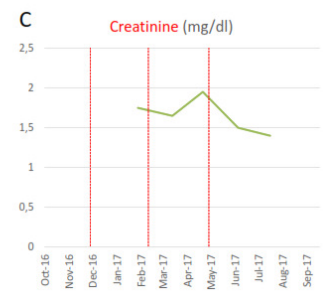
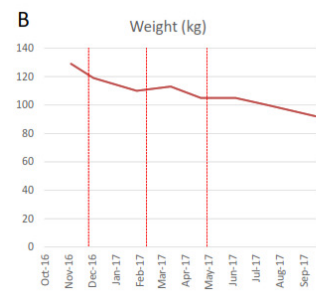
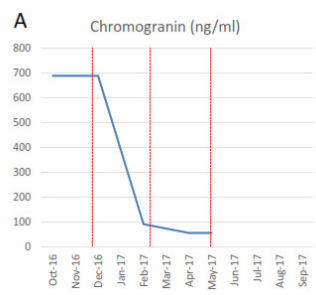


- 3 cycles of PRRT every 12 weeks (cumulative activity of 14.4 GBq)
- Octreotide LAR 30mg i.m. at the 1st and 4th week of the 1st and 2nd cycles of PRRT and then, q28d (maintenance treatment)

2nd Dec: 1st PRRT with ¹⁷⁷Lu-DOTA-TATE

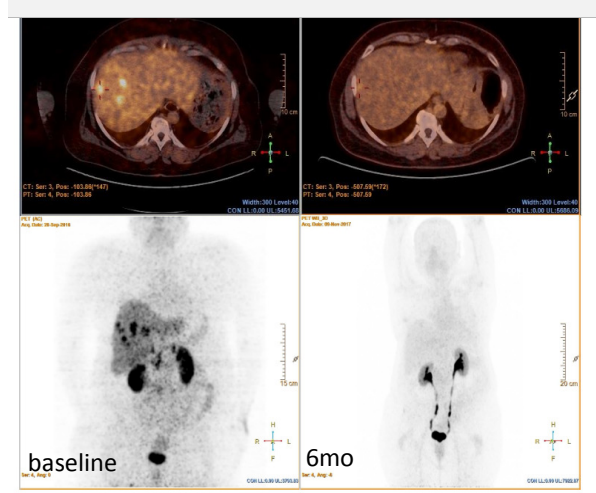
5th Dec: Resolution of hypoglycaemia episodes

24th Dec: Stopped Diazoxide



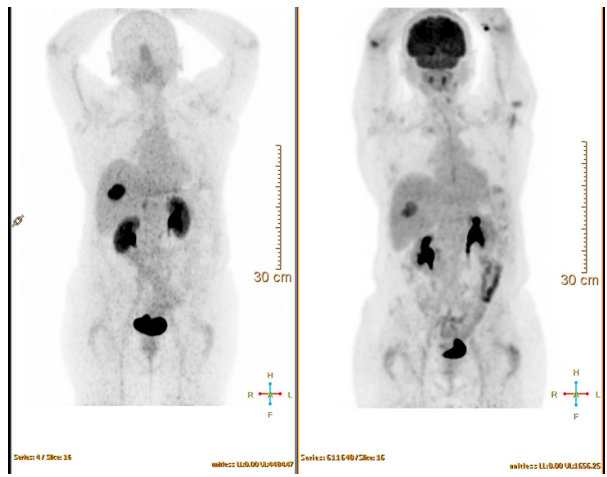
2017/04 6 mo after:
⁶⁸Ga-DOTANOC-PET: complete metabolic response,
 residual uptake in liver posterior aspect.

¹⁸F-FDG-PET: negative

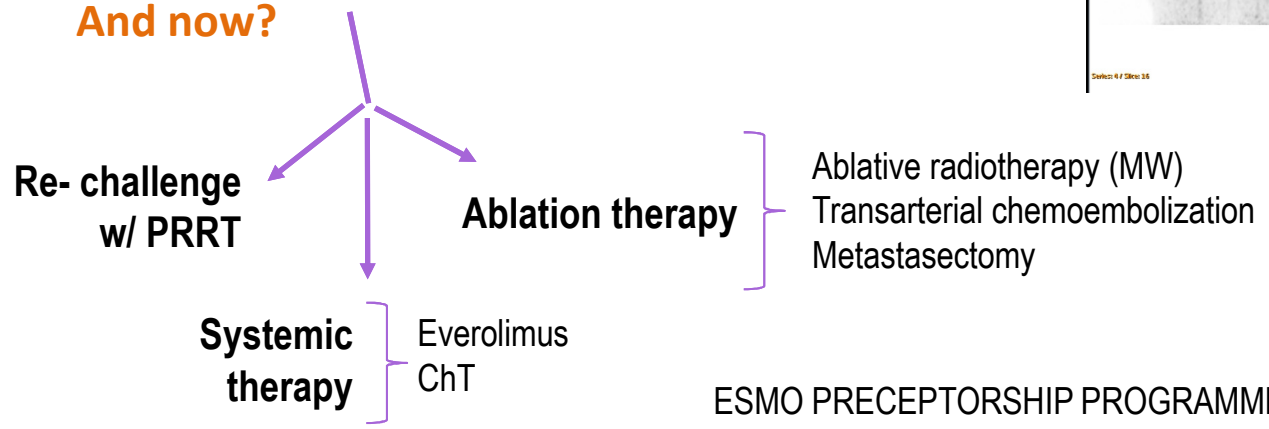


2018/04 ⁶⁸Ga-DOTANOC-PET: 1 hepatic lesion w/
 hyperexpression of somatostatin receptors
¹⁸F-FDG-PET: 1 hypermetabolic lesion, concordant with
 lesion detected by PET-Ga

*Relapse: 1 lesion - now positive signal in
 both FDG- and Ga-PET*



And now?

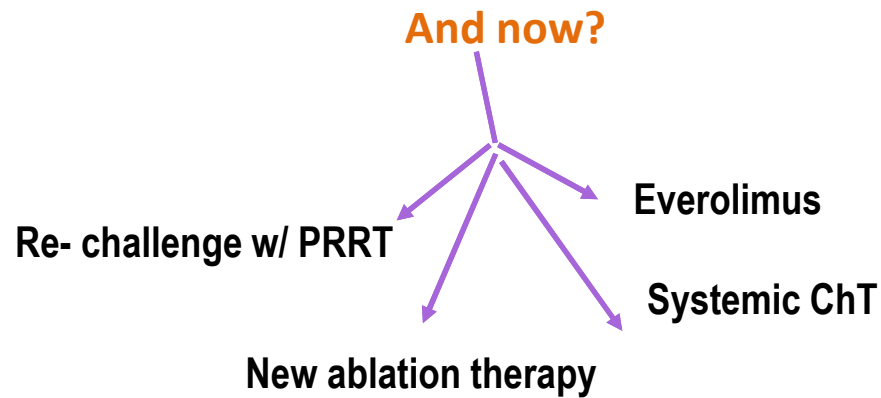
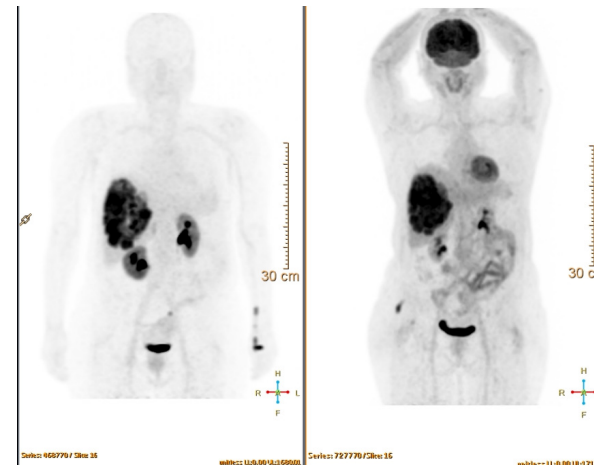


2018/06 Chemoembolization

2019/01 ⁶⁸Ga-DOTANOC- PET: Hepatic hyperexpression of somatostatin receptors (SSTR2, SSTR3 and SSTR5)

¹⁸F-FDG-PET: Secondary hepatic lesion, occupying the majority of the right lobe, with SUVmax 12.6 (previous 8.5)

2019/02 Re-start SSA





Thank you!