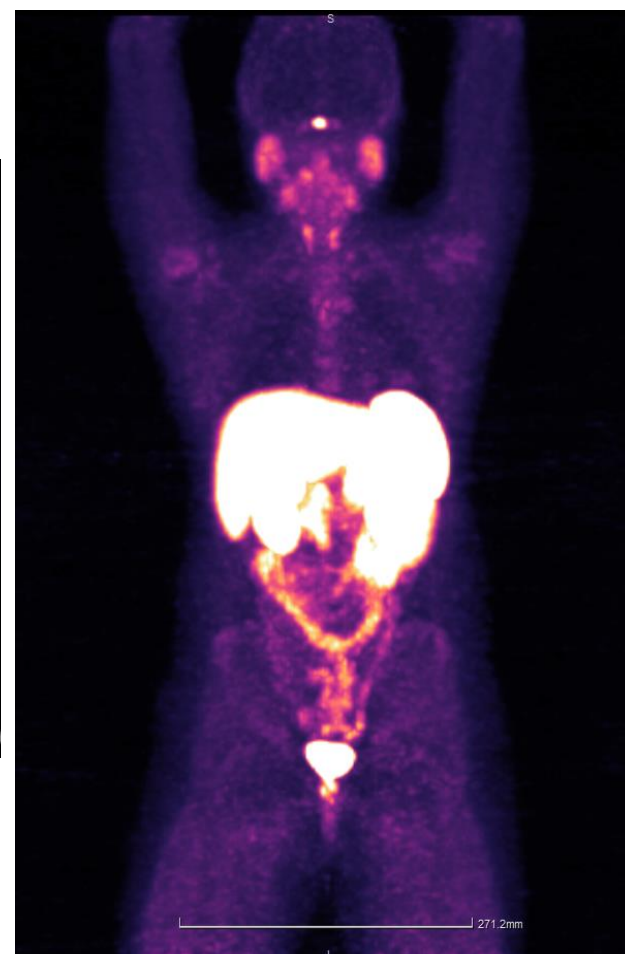
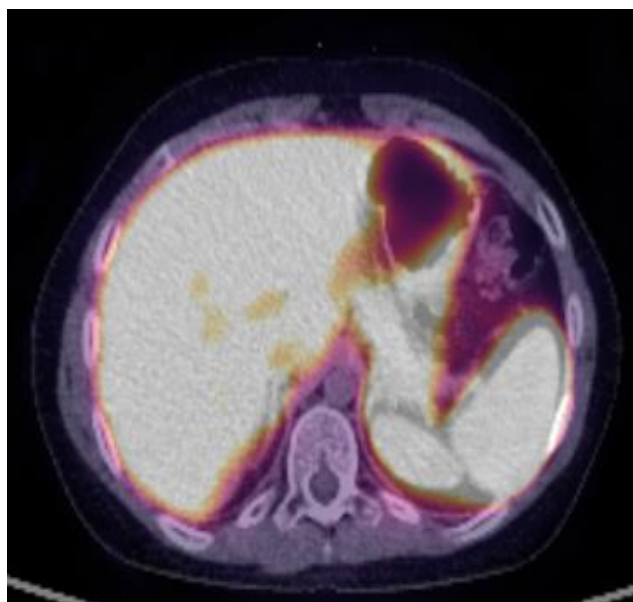
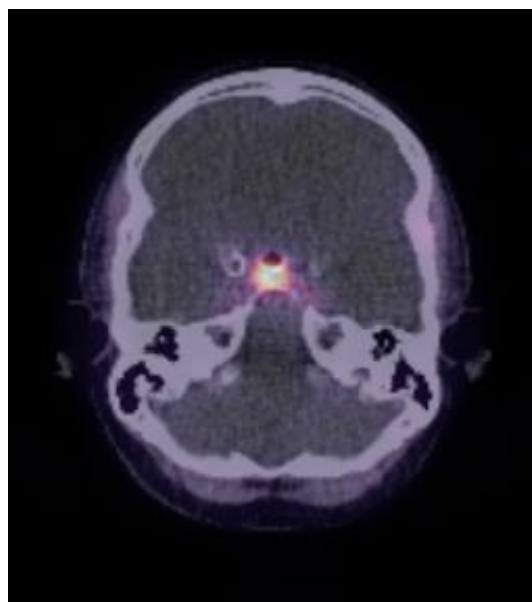


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**Purpose** In January of 2019 began for first time in Greece in-House synthesis of radiopharmaceuticals. Aim of this study is to correlate the biodistribution values of Ga68-DOTATATE in normal tissues of patients with known or suspected neuroendocrine tumor (NET) measured in our department with those of the international bibliographic standards.

**Methods** 69 patients with confirmed or suspected diagnosis of NET underwent examination on a Siemens Biograph 6/16Hi-Rez PET/CT scanner 60±5 minutes after the administration of 189±13,5 MBq of Ga68-DOTATATE synthesised in-House using a synthesizer by Scintomics, a Ge68/Ga68 Eckert & Ziegler generator and ABX DOTA-TATE acetate (GMP). The process is supervised by a Radiopharmacist ensuring the quality of the final product (HPLC, TLC, Endotoxin detection test). We calculated the SUVmax values of specific normal tissues using the syngo MI.PET/CT software and correlated them to the literature reference.

**Results** The SUVmax values of blood pool, pituitary gland, liver, spleen, kidneys and adrenal glands was 1.2±0.29, 8.85±2.34, 12.62±6.62, 21,57± 9.58, 12,2±5.8 and 12,78±5,49 respectively. The pancreas was divided in two sections, head and body, which were measured separately. The SUVmax from those areas had not a statistically significant difference. Statistically congruent were also the values between patients with and without depicted disease, always consistent with the literature reference.



**Conclusions** SUVmax values measured in our department conform with the international bibliographic standards constituting an independent control factor of the quality of the examination