

## MEDICAL REPORT

PATIENT NAME	
HIS ID	
EXAMINATION DATE	09-02-2022
DOB	
POLICE ID	
	GESY REGISTRY NO

**Procedure:** 18F-FDG PET/CT scan

Cc: Dr. K. Ferentinos

**Medical History:** Atypical myofibroblastic tumour of the right maxillary sinus infiltrating the pterygoid muscles.

**Indication/Medical question:** Staging.

**Patient's personal data:** Weight= 102 Kg, Height= 185 cm, Serum glucose (immediately prior to injection) = 104 mg/dl

**Technique:** Imaging was performed 60 minutes after intravenous administration of 333 MBq 18F-FDG (Fludeoxyglucose). Images were acquired using a Discovery IQ PET/CT system (3 rings; 16 slices) of General Electric. The images were obtained from thorax to toes in supine position with elevated arms. Additional images were obtained from head to upper mediastinum with lowered arms. Axial, sagittal and coronal PET reconstructions with and without attenuation correction were performed. Corresponding CT images were reviewed in axial, coronal and sagittal planes. The CT scan was a limited non-contrast study for the purposes of anatomical correlation and attenuation correction (only pertinent findings will be reported). This resulted in a total DLP of the CT-examination of 1327 mGy-cm. All SUV measurements provided are given as SUV Peak (as measured in the MAC+SIR reconstruction using commercially available software) unless otherwise stated.

**Comparison:** Sinuses-MRI of 03.02.2022, C-CT of 03.02.2022 and external Paranasal Sinuses-MRI of 03.01.2022.

### Findings:

Average SUV of the liver 2,5.

### Head/Neck:

Secretions of the right mastoid cells with discreet FDG-uptake (Se2701, Se16/Im40) of inflammatory nature. Intensely hypermetabolic malignancy affecting the right maxillary sinus provoking osteolysis of the maxilla, zygomatic bone, temporal bone,

muscular structures of masticatory space, ethmoid and sphenoid cells (SUV=14; Se2701, Se16/Im32-50 and Se17/Im41-65); the possibility of right temporal lobe invasion cannot be excluded. Left mastoid cells and paranasal sinuses free. Moderate FDG-uptake of the right palatine tonsil (SUV=5,1; Se2701, Se16/Im57), primarily not suspicious. Discreetly hypermetabolic cervical LNs of levels I and II bilaterally and symmetric, most with fatty hilum (SUV=3,0; Se2701, Se16/Im67,71,73) and of the level III right (SUV=2,8; Se2701, Se16/Im85), primarily not suspicious.

#### Thorax:

No evidence of suspicious pulmonary lesions. Absence of pleural or pericardiac effusion. Normal appearance of the mediastinal and axillar lymph nodes.

#### Abdomen/Pelvis:

Physiological and homogeneous hepatic metabolism. Normal metabolic status of the rest parenchymatous upper abdominal organs. Prostatomegaly without suspicious FDG-uptake. Infradiaphragmatic lymph nodes of normal size without FDG-uptake.

#### Musculoskeletal system:

Apart from the per continuitatem osteolysis described above, no other suspicious FDG-foci of the skeleton.

#### **Impression**

1. FDG-avid malignancy affecting the right maxillary sinus provoking osteolysis of the maxilla, zygomatic bone, temporal bone, muscular structures of masticatory space, ethmoid and sphenoid cells; the possibility of right temporal lobe invasion cannot be excluded.
2. Cervical LNs described above, presenting discreet FDG-uptake, primarily not suspicious. Sonography suggested.
3. No metabolic evidence of distant metastasis.

With kind regards,

Prof. Dr. Alexis Vrachimis, MD, PhD  
Director of Nuclear Medicine

Dr. Ioannis Tsechlidis

(The report has been electronically signed), 10-02-2022 14:53