Multidisciplinary approach to locally advanced HER2-positive gastric cancer
NR, male, 67 year-old, married
Father: deceased due to colon cancer
Former smoker: 15 pack/years
Arterial hypertension, under control with ACE-inhibitor
From May 2012: dyspepsia and weight loss
Endoscopy revealed a ulcerated lesion at gastric cardia
Biopsy: “adenocarcinoma”
ECOG performance status (PS): 0
Staging at diagnosis

- CT thorax-abdomen: thickening of the cardia (25 mm x 60 mm), celiac and peri-esophageal lymph nodes enlargement (23x16 mm)
- 18F-FDG PET: lesion at the lower esophagus-cardia-gastric fundus (SUVmax 10.2)
- EUS: uT2N2 cancer of the cardia
- Laparoscopy: no evidence of peritoneal involvement, confirmed locally advanced cancer of the cardia
- Molecular analyses: HER2 2+ at IHC, FISH-amplified
Multidisciplinary approach

- MDT discussion: peri-operative treatment with fluoropyrimidine plus platinum derivative
- Dec/2012-Feb/2013: the patient received 6 cycles of FOLFOX chemotherapy
- Chemotherapy was well tolerated: nausea G1, diarrhea G1, neutropenia G1
- CT scan performed after 6 cycles: minimal reduction of the primary tumor dimension, enlarged lymph nodes remained unchanged (disease stabilization according to RECIST)
- MDT re-evaluation: surgery was planned
Surgery and adjuvant therapy

- 21/Mar/2013: subtotal esophagectomy was performed
- Histology: G2 adenocarcinoma, pT3N3, 21 lymph nodes involved/34 examined, R1 resection due to microscopic infiltration of the esophageal section
- Good recovery after surgery: ECOG PS 1
- Jun/2013: adjuvant radiotherapy (IMRT) was performed (25 Gy in 5 fractions)
- Subsequent follow up with no evidence of disease progression at endoscopy and imaging until Dec/2014
Disease progression and first-line therapy

- Dec/2014: 18F-FDG PET scan revealed abnormal fixation at esophago-gastric anastomosis (SUVmax 2.6) and in the liver (segment 5, SUVmax 3.3)
- Endoscopy: biopsy at the site of anastomosis revealed adenocarcinoma
- CEUS: multiple liver lesions (max 5 cm) in segments 4, 5 and 6
- Jan/2015: stereotactic radiotherapy was performed at the site of local recurrence (15 Gy in 3 fractions)
Disease progression and first-line therapy

- Mar/2015: the patient was screened for eligibility for the NCT01774786 phase III trial (JACOB)
- Central evaluation confirmed HER2 2+/FISH-amplified
- Mar/2015-Jun/2015: he received first-line therapy with capecitabine, cisplatin, trastuzumab and pertuzumab/placebo
- Poor tolerance after the first cycle: nausea G3, asthenia G3, anorexia G2, diarrhea G2, stomatitis G1 (reduction in chemotherapy dose required)
- After 3 cycles: reduction in the largest diameters of the multiple liver lesions (-25%)