Challenges of treating advanced HER2+
DISCLOSURE OF INTEREST

- None
CLINICAL CASE

- 49 year old female, Caucasian, medical secretary non smoker.
- No allergies
- No significant personal medical history.
- No family history of cancer.
- No medication
History

- 2009, self-examination ➔ breast mass
- Diagnosis of a invasive ductal carcinoma grade III, 13mm RH+, HER2-. (5N+R+/22N)
- Treatment strategy:
  - Conservative surgery - lumpectomy and axillary lymph node dissection November 2009
  - Adjuvant chemotherapy (4FEC-4Taxotere)
  - Radiotherapy (breast et boost, internal mammary chain and supraclavicular).
  - Endocrine therapy by Tamoxifene 5 years.
August 2011:

Following an epileptic seizure, discovery by CT scan multiple brain metastasis (5 lesions, 14 to 25mm).

- Treatment strategy:
  - Whole brain irradiation - 30Gy in 10 fractions;
  - 1st line chemotherapy: CARBOPLATINE/TAXOL/BEVACIZUMAB followed by maintenance treatment with BEVACIZUMAB and endocrine therapy.

- Recovery of the initial surgery paraffin blocks!!!
Discovery of HER2 expression on the initial tumour

Following the discovery of HER2 expression:

- Stop CARBOPLATINE & AVASTIN

- Introduction of HERCEPTIN/TAXOL until march 2012 followed by maintenance therapy by Herceptin + Femara.
On the follow-up examination, discovery on a new occipital lesion

Treatment strategy:
  - Stereotaxic irradiation 11Gy in 3 fractions.
  - 2nd line therapy with HERCEPTIN (4mg/Kgc) / TYVERB (1000mg)
Follow-up examination discovery on the MRI:
- Increased contrast enhancement of the right paramedian portion of the corpus callosum

No neurological symptoms
- Neurological examination correct
- PET/CT: Negative
- Blood tests within limits
Suspicion of brain metastasis progression or Radio necrosis??

- Complementary exam:

  Choline PET/MRI:
  - Confirms the reactivation and evolution of the lesion.
PET MRI
Discussion: Treatment options

- Radiotherapy ? Surgery?
  - 30 Gy in 5 fractions

- Continuation of the HERCEPTIN/TYVERB ? Or Change in treatment ? If change in treatment what options??
  - Continue treatment

- Last follow up in august 2019 ➔ good response, continue the systemic treatment.