Conclusions The EPE for histological diagnostic purposes in the management of breast tumors remains an excellent diagnostic test when no preoperative diagnostic tools are available.

Objectives Mutations on BRCA1/2 genes are known to confer high risk of breast and ovarian cancers. The identification of these mutations not only helps in selecting high risk individuals that need appropriate prevention approaches but also led to the development of the PARP-i therapy. This study aims to evaluate the Eisenger score (ES) risk for hereditary form of breast cancer.

Methods We calculated in 200 patients with breast cancer (BC) the ES which is a score taking into account all family history validated for oncogenetic consultation (GC). A GC was indicated for any ES>2. The method used for the genetic study was next generation sequencing (NGS).

Results The average score was 5.9 with extremes ranging from 0 to 17. Two patients had a score of 0: the first had a mother who died of BC at 80 years and the second had a cousin who had pancreatic cancer at early age. A majority of 85.7% of patients had an indication for family GC (ES>2). In 14.3% of patients, the usefulness of the genetic investigation we considered low according to the score. Among the 200 patients, we were able to perform only 28 genetic studies. 14 patients had a BRCA1 gene mutation (50%) and 11 BRAC2 mutation (39.3%). A mutation of CHEK2 gene was found in 2 patients and that of TP53 in 1 patient.

Conclusions The ES is predictive of BC risk in BRCA1 and BRAC2 carriers. This score must be carried out systematically in order to optimize the therapeutic management.