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.

**EP033/#52**

**A QUALITATIVE EXPLORATION OF PERCEIVED CAUSES OF BREAST CANCER IN BUSIA AND TRANS NZOIA, WESTERN KENYA**

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**Objectives** The Primary Integrated Care for Four Chronic Diseases (PIC4C) is an initiative by the Kenyan Ministry of Health and Moi Teaching Hospital to pilot screening, referral, treatment integration for diabetes, hypertension, breast cancer, cervical cancer in Busia and Trans-Nzoia, Western Kenya. A major aspect of the PIC4C qualitative arm was to determine how localized knowledge affects perceptions of breast cancer causes in the two counties and to use this information to develop targeted interventions.

**Methods** 174 participants were included in 18 focus group discussions (FGDs) engaging patients, community members (CHVs), health care providers (HCPs). 12 patients with breast cancer were included in patient FGDs. The group sessions were facilitated by trained moderators and captured using audio recorders and field notes. Two analysts independently coded and analyzed the data using NVivo 12.

**Results** Overall, patients, CHVs, HCPs perceived breast cancer to be a chronic disease that could be treated, but led to death. All participants perceived genetics, unhealthy eating, low breastfeeding rate to cause breast cancer. Three factors were reported by patients and community members, but not by HCPs: poor breast hygiene, poorly fitting bras, witchcraft. Only HCPs cited smoking as a cause of breast cancer.

**Conclusions** This study reports how localized knowledge affects perceptions of breast cancer causes in Busia and Trans-Nzoia. Our study shows that misconceptions and inadequate knowledge about breast cancer causes persist in the two counties. Our findings suggest a need for improved screening and treatment via dedicated health education campaigns, treatment resources, training for CHVs and HCPs to ensure communities receive accurate information.

**EP034/#944**

**EVALUATION OF THE EISINGER SCORE FOR GENETIC TESTING IN TUNISIAN PATIENTS WITH BREAST CANCER**

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**Objectives** Mutations on BRCA1/2 genes are known to confer high risk of breast and ovarian cancers. The identification of these mutations not only helped 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 externes 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 bpancreatic 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 was 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.

**EP035/#1039**

**HOW TUNISIAN YOUNG ADULT PATIENTS FOLLOWING BREAST CANCER LIVE THEIR DISEASE EXPERIENCE?**

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**Objectives** Young adult patients may confront breast cancer differently because of expectations in life and future planning. We aimed to investigate the experience of young adult patients in the Tunisian context.

**Methods** Patients aged 20 to 40 years treated for breast cancer regardless of stage (n = 62) were asked to complete a questionnaire in April 2022. The survey included items about: socioeconomic conditions, coping strategies, sexuality, body image and future life projects.

**Results** Mean age was 35 years old [26-40]. Eight patients (12%) were under 30. Twenty-nine patients (46%) felt less physically attractive. Negative impact on sexuality was revealed in 21 patients (34%). Thirty patients (48%) reported less self-confidence. Fear of infertility was described by 33 patients (53%). Thirty-nine (63%) patients asked ‘Why Me God?’. Forty-one patients (66%) thought about stopping treatment. Twenty-five patients (40%) consulted a psychiatrist or desired to consult. Feeling less physically attractive impacted negatively on sexuality (OR: 0.86 [0.66–0.89]) and self-confidence (OR: 3.8 [1.2–10.9]). Spiritual practice (prayer) had positive impact on self-confidence (OR: 0.14 [0.08–0.22]). Sixteen (25%) patients stopped planning for future (marriage, children bearing, buying a property) which was impacted by less self-confidence (OR 4.94 [1.37–17]), fear of infertility (OR: 10.1136/ijgc-2022-igcs.124
ECONOMIC CHALLENGES FACED BY YOUNG ADULT TUNISIAN PATIENTS FOLLOWING BREAST CANCER
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10.1136/ijgc-2022-igcs.127

Objectives Young adult Tunisian patients treated for breast cancer are confronting, in addition to disease, its financial impact. We aim to investigate socioeconomic profiles and financial challenges of young adult patients in the Tunisian context.

Methods Patients aged 20 to 40 years treated for breast cancer regardless of stage (n=62) were asked to complete a questionnaire in April 2022. The survey included items about: socioeconomic conditions and future life projects.

Results Mean age was 35 years old (26–40). Eight patients (12%) were under 30. Thirty-four patients (54%) had high educational level. Thirty-six patients (58%) had job. Twenty-seven patients (43%) lost their jobs because of sick leaves and 19 patients (30%) found difficulties to get job when announcing disease to employers. Twenty-four patients (38%) were economically dependent on their husbands and 12 patients (19%) to their parents. Thirty-six patients (58%) reported financial difficulties. Immigration intention to developed countries was reported by 25 patients (40%) and 12 patients (19%) to their parents. Thirty-four patients (54%) had high educational level (OR: 4.64 [1.5–14.3]) and following current treatment (OR: 0.29 [0.09–0.9]) because mostly of better health system and financial support (61.5%).

Conclusions Tunisian young adult patients following breast cancer are facing economic and social difficulties that must be considered on the same level as others sides of health care.

THE EFFECT OF 7-KETOCHOLESTEROL ON BREAST CARCINOMA CELL LINES TREATED WITH TAMOXIFEN IN VITRO
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Objectives Oxysterols are oxidative derivatives of cholesterol that play many roles in human physiology and pathology, including cancer. For example, oxysterols modulate cell proliferation, apoptosis, or migration. This study aimed to analyze the role of important oxysterol, 7-ketocholesterol (7-KC), in response of breast carcinoma cell line models to treatment with tamoxifen.

Methods Two estrogen receptor (ER) positive (MCF-7 and T47D) and one ER-negative (BT-20) breast carcinoma cell lines were employed. Cell lines were co-incubated with tamoxifen and 7-KC at different concentration ratios, and the viability of cells, proliferation, cell cycle, caspase activity, and gene expression changes were evaluated. Next, the ability of 7-KC to stimulate cell migration and invasivity was tested.

Results 7-KC slightly increased the IC50 value of tamoxifen in the MCF7 cell line, but decreased it in the BT-20 cell line. No significant difference was observed for T47D cells. In line with these data, caspase 3/7 activity was enhanced by 7-KC in BT-20 cells, but not in any ER-positive cell line. Gene expression analysis showed upregulation of tamoxifen metabolizing genes, e.g. CYP1A1 and CYP1B1 in MCF-7 while downregulation in BT-20 cells. Finally, we found that the presence of 7-KC potentiates cellular migration and invasivity.

Conclusions 7-KC seems to modulate the response of breast carcinoma cells to tamoxifen according to ER status in vitro, making it an interesting candidate for future studies. The study was supported by projects INTER-ACTION no. LTAUSA19032 and AZV no. NU20–90–00174.

PREDICTIVE FACTORS OF AXILLARY LYMPH NODE INVOLVEMENT IN TUNISIAN WOMEN WITH EARLY BREAST CANCER
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Objectives This study aimed to identify clinicopathological predictive factors of axillary lymph node metastases in patients with early breast cancer.

Methods We included patients with clinical T0, T1 and T2 invasive breast carcinoma who underwent resection of the primary tumor and axillary staging by sentinel lymph node biopsy and/or axillary lymph node dissection between 2012 and 2018.

Results Of the 135 patients included, 41.5% had ALNI. Regarding univariate analysis, clinical factors correlated with positive ALNM were clinical tumour size > 30 mm (p=0.006), clinical tumour stage (p=0.047), clinical number of tumours (p=0.016), clinical axillary nodal status (p<0.001) and nodal status on ultrasound (p<0.001). Pathologic factors associated with nodal involvement were pathologic tumour stage (p=0.003), tumor grade SBR (p=0.001), number of foci (p<0.001), lympho vascular invasion (p<0.001), perineural invasion (p=0.001) and Ki67 > 20% (p=0.049). In multivariate logistic regression, clinical axillary nodal status (OR=4.31, CI 2.26–50, p=0.032), pathologic tumour stage (OR=3.66, CI 3.75 [1.04–13.4]) and negative sexuality impact (OR: 1.87 [1.34–2.61]).

Conclusions Breast cancer impacts on self-confidence, future life perception and sexuality of young adult Tunisian who need personalized psychological care.