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

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%) reported financial difficulties. Immigration intention to developed countries was reported by 25 patients (40%) mostly in patients under 30 years old (OR: 0.18 [0.03–0.98]), with 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.

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 IC_{50} 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. NU20–09–00174.