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P163**Impact of the COVID-19 outbreak on the level of distress in patients with breast cancer**

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Goals: In a very short period of time, during the first wave of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic, the coronavirus disease 2019 (COVID-19) became a great threat worldwide in terms of health, as well as social and economic aspects. From the beginning of the outbreak, patients with cancer were considered a high-risk population with regard to the COVID-19 infection. Epidemiological measures imposed during the pandemic, such as social distancing and lockdowns, additionally burdened patients with cancer. Psychological distress is common in such patients. The prevalence of distress in patients with breast cancer ranges approximately 20–40%. The aim of this study was to examine the impact of the COVID-19 outbreak on the level of distress among patients with breast cancer in Croatia, during extreme epidemiological measures. We also sought to examine whether disease or socio-demographic characteristics were predictors for distress.

Methods: A total of 545 patients with breast cancer were approached to participate in the study; 201 patients completed the questionnaire with disease and socio-demographic characteristics. All patients were actively receiving systemic oncological treatment (neoadjuvant, adjuvant, or metastatic setting), with disease stages ranging I–IV. The level of distress was measured using the Distress Thermometer with a cut-off value of 4, followed by a problem list. The study was conducted from April 20, 2020 to May 24, 2020, while all extreme epidemiological measures (lockdown and strict social distancing) were ongoing and equally applied to all regions in Croatia.

Results: High distress level was reported in 54.2% of patients. The most prominent problems were worry, fatigue, sleep, nervousness, fear, and child care. Highly distressed patients had more practical problems (child care, housing, and work/school) and emotional problems (depression, fear, nervousness, sadness, worry, and loss of interest for usual activities), than those in the low distress group. None of the socio-demographic or disease characteristics of the patients were linked to the level of distress.

Conclusion(s): Even in a country with a favorable epidemiological situation, at the beginning of the COVID-19 pandemic, every second patient with breast cancer had a high level of distress. COVID-19-induced distress should be promptly addressed and additional psychological and social support, targeting specific practical and emotional problems, should be provided for those patients.

Conflict of Interest: No significant relationships.

P164**Line of therapy adjustment in a patient with advanced triple-negative breast cancer (TNBC) by using personalized ctDNA test for treatment response monitoring**

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Goals: Metastatic triple-negative breast cancer (TNBC) is an aggressive form of cancer and is challenging to treat due to the absence of hormone/growth factor receptors and the limited efficacy and duration of response to chemotherapy. Circulating tumor DNA (ctDNA) is a robust biomarker that can identify the molecular changes of the disease and inform on optimizing/change in treatment strategy.

Methods: A 40-year-old female was diagnosed with TNBC on biopsy of her left breast mass. The patient underwent neoadjuvant chemotherapy with weekly administration of paclitaxel and carboplatin followed by dose-dense doxorubicin with cyclophosphamide. Following one-month, the patient underwent bilateral mastectomy that showed ypT2 pN0 staging. The patient underwent periodic radiological imaging along with ctDNA assessment using Signatera® (bespoke mPCR NGS assay) to identify the molecular residual disease (MRD) and treatment response.

Results: After surgery, MRD assessment using ctDNA was positive (0.41 MTM/mL) prompting PET/CT scan, indicating liver metastasis. Continued ctDNA monitoring showed continuous increase in ctDNA (287.09 MTM/mL). Separate analyses indicated MSI-high and PD-L1 positive tumor status, leading to the initiation of the first-line of therapy (nab-paclitaxel and Atezolizumab), which resulted in ctDNA decline (39.62 MTM/mL). Weekly ctDNA monitoring noted a rapid increase a month later (178 MTM/mL to 833.69 MTM/mL) within a 2-week interval, corresponding to disease progression on imaging. Given non-responsiveness with the first-line therapy, the patient was initiated with sacituzumab govitecan. Following this, a rapid decline in ctDNA was observed within a week (364.07 MTM/mL) with a downward trend to 73.03 MTM/mL by two weeks. An interval PET/CT scan showed a mixed response. Continued monitoring indicated ctDNA levels of <5 MTM/mL for a period of 2 months before serially rising again (to 89.27 MTM/mL). PET-CT ordered due to rising ctDNA levels, confirmed progression involving hepatic and lung lesions. A new line of therapy with nivolumab and ipilimumab was subsequently initiated.

Conclusion(s): Serial monitoring of ctDNA enables early detection of therapy resistance and provides a rationale for treatment change/optimization/ discontinuation as compared to periodic imaging. In this case study, ctDNA analysis performed as frequently as every week identified earlier non-responsiveness to IO and treatment resistance to antibody-drug conjugate, enabling a prompt switch to alternative therapy.

Conflict of Interest: G.A. is a member of the Natera, Inc. advisory board, and is a speaker for Natera, Inc. and Guardant Health Inc. S.K., A.T., A.K.M., M.M., P.R.B., A.R. and A.A. are employees of Natera, Inc. with stock/options to own stock in the company.

P165**Is metaplastic breast cancer more aggressive than “classic” triple-negative ductal carcinoma? Recent prognostic and therapeutic consideration**

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Goals: Metaplastic breast carcinoma (MBC) is a rare condition accounting for 0.2–5% of all breast tumors. If compared with other BC histotypes, MBC shows aggressive clinical evolution since about 50% of these patients develop distant metastasis after primary breast surgery. The aim of the study is to evaluate MBC clinical evolution,