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## Epidemiologic analysis of mammographies and the pandemic impact on the early detection of neoplastic lesions in Tocantins from 2020 to 2023

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**Objective:** This study aimed to analyze the number of screening mammograms and the results obtained in the female population from 50 to 69 years old in the state of Tocantins during the pandemic and post-pandemic period. **Methodology:** This is a quantitative and comparative study from the pandemic period of 2020/2021 and the post-pandemic period of 2022/2023. Data were collected from the Cancer Information System (SISCAN/DATASUS) of women from 50 to 69 years old, comparing the mammography results from the pandemic and post-pandemic period. **Results:** During the pandemic, 9601 mammographies of women from 50 to 69 years old were performed considering the classified results by the Breast Imaging Reporting and Data System (BI-RADS) in comparison with the total of 12,208 mammographies in post-pandemic in the same conditions, representing an add of 27.1%. Considering the categories with major relevance, BI-RADS 0 has an increase of 33.57%, BI-RADS 4 with a rise of 100%, and BI-RADS 5 with an accrual of 27.77% in the post-pandemic interval. This increase in both categories with major malignity has an add of 85.71%. Furthermore, BI-RADS 1, 2, and 3 showed an increase of 25.5%, gathering most women in the screening age, and BI-RADS 6 with follow-up in two patients. **Conclusion:** A significant increase was observed in the detection of suspected lesions when bringing expressive accrual results in more malignancy categories in post-pandemic, demonstrating a bigger detection in advanced cases that result in biopsy and follow-up with hormone therapy and chemotherapy. It is necessary to emphasize health prevention to identify women who do not take back their needs and the periodicity of mammography recommended by the government.

**Keywords:** breast cancer; diagnostic screening programs; mammography; pandemics.

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