Application of an Artificial Neural Network to Determine the Risk of Malignant Tumors from the Images Resulting from the Asymmetry of Internal and External Thermograms of the Mammary Glands

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Abstract : Among the main problems of medicine is breast cancer, from which a significant number of women around the world are constantly dying. Therefore, the detection of malignant breast tumors is an urgent task. For many years, various technologies for detecting these tumors have been used, in particular, in thermal imaging in order to determine different levels of breast cancer development. These periodic screening methods are a diagnostic tool for women and may have become an alternative to older methods such as mammography. This article proposes a model for the identification of malignant neoplasms of the mammary glands by the asymmetry of internal and external thermal imaging fields.

Keywords : asymmetry, breast cancer, tumors, deep learning, thermogram, convolutional transformation, classification

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