

## FEMALE BREAST CANCER: INVESTIGATING PHENOTYPIC CHARACTERISTICS WITH IMMUNOHISTOCHEMISTRY

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Cancers associated with *BRCA1* are poorly differentiated infiltrating ductal carcinomas (IDC's) with higher mitotic counts and pleomorphism and less tubule formation than sporadic tumours. In Pernambuco, Northeast Brazil, the incidence of IDC is high in the poor population but data are incomplete regarding the familial or sporadic occurrence of this tumour in patient family history. This work aims to investigate the positivity of IDCs for vimentin an immunohistochemical marker for *BRCA1* germline mutation in familial breast cancers. Results indicated that 25 cases (44.6%) of 56 diagnosis as IDC expressed marker for vimentin. Analysis were develop in duplicate and results evaluated double-blinded. Comparing results with data from patient interview a low number of matches are observed between the knowledge of familial history of breast cancer and new diagnosis. Based on that polymerase chain reaction using *BRCA1* primers are under development to confirm if the vimentin positive patients are mutation carriers

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