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AN IN SÍLICO ANALYSIS DETECTED MEMBERS OF THE PLECKSTRIN HOMOLOGY-LIKE DOMAIN FAMILY B AS POTENTIAL PROGNOSTIC BIOMARKERS IN PATIENTS WITH BREAST CANCER

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Objectives: Despite advances in the molecular classification of breast cancer, our understanding of the pathophysiology of the disease is still limited mainly due to the considerable intratumoral heterogeneity. Thus, hundreds of other candidates for biomarkers are being investigated and studied for possible implications for diagnosis, prognosis, and personalized therapy. In this context, members of the Pleckstrin homology-like domain family B (PHLDB), which is composed of three genes located on different chromosomes: PHLDB1 (11q23.3), PHLDB2 (3q13.2), and PHLDB3 (19q13.3), are under investigation by different research groups as potential biomarkers in different types of cancer. It has been reported that the altered expression of these genes is involved in the tumorigenic process. In this study, we sought to understand the prognostic and predictive value of genes from the PHLDB family as potential biomarkers in breast oncology. **Conclusions:** Our findings provide new insights into the potential role of PHLDB family members as clinical predictors in breast cancer. Unlike what has already been described in the literature, it appears that members of the PHLDB family are potential tumor suppressor genes in breast cancer. Further clinical and experimental studies are needed to better understand the relationship between the expression of the members of the PHLDB family and the tumorigenic process of the breast and its prognostic and predictive values in breast cancer.

Keywords: Biomarkers; Breast Cancer; PHLDB.