

## **Differences in gene expression in triple negative breast cancers associated with a better disease-specific survival of the hereditary cancer patients.**

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Hereditary triple-negative breast cancer patients have better disease-specific survival than sporadic ones. High expression of some of the miRNAs is related to worse overall and disease-free survival of triple-negative breast cancer patients. Thus, miR-214 showed significantly higher expression level in sporadic tissues than in hereditary ones ( $p = 0.0005$ ). Triple-negative breast cancer patients with high level of miR-214 showed significantly worse disease-specific survival than patients with low level ( $p = 0.0314$ ). Furthermore, comparison of global expression patterns between sporadic and hereditary breast cancer patients revealed a number differentially expressed genes. Expression of some of these genes - C12ORF23, C1ORF19, AMMECR1L - correlated with expression levels of miR-214. According to our results miR-214, and maybe some other miRs can be an indicator of the triple negative breast cancer patient's poor prognosis and possibly could be used as a potential prognostic biomarker.