

Breast cancer prognosis associated with oncometabolite accumulation

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The metabolic profile of cancer cells can be used to develop therapies and identify biomarkers associated with cancer outcome. In this issue of the *Journal of Clinical Investigation* Stefan Ambs and colleagues at the National Cancer Institute discovered an association between the oncometabolite 2-hydroxyglutarate (2-HG) levels, DNA methylation patterns, and breast cancer prognosis.

The authors identified a breast cancer subtype with high levels of 2-HG, and a distinct DNA methylation pattern that was associated with reduced survival.

This breast cancer subtype was common in African-American breast cancer patients, who as a group have a high prevalence of aggressive breast cancers.

This study indicates that evaluation of 2-HG along with DNA methylation may be a useful biomarker for [breast cancer](#) diagnosis and prognosis

More information: MYC-driven accumulation of 2-hydroxyglutarate is associated with breast cancer prognosis, *J Clin Invest.* [DOI: 10.1172/JCI71180](https://doi.org/10.1172/JCI71180)

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