

# Clinical Case Study: How Combined Monogenic + Polygenic Risk Assessment Change Breast Cancer Management



## Background

Stone Oak Women's Center offers women a proactive, personalized approach to healthcare. The providers at Stone Oak integrate advanced risk assessment tools, preventive screening strategies, and precision medicine to improve long-term outcomes for patients. The practice emphasizes early detection, including the use of genetic testing and comprehensive breast cancer risk assessments to help guide clinical management decisions.

Their proactive approach, incorporating Allelica's genetic testing, results in life-changing clinical decision making for patients.

## Patient case details

Dr. Michelle Harden at the Stone Oak Women's Center saw a patient who had been identified as a carrier of a pathogenic *BARD1* variant. Although *BARD1* increases breast cancer risk, **the monogenic result alone did not clearly indicate the best management strategy or whether prophylactic surgery was warranted.**

In order to allow for a more informed decision, Dr. Harden offered the patient Allelica Multi-Ancestry Breast Cancer PRS testing.

To provide a precise and individualized assessment of risk, the patient underwent Allelica Multi-Ancestry Breast Cancer PRS testing integrated with the CanRisk model.

The combined CanRisk+Allelica PRS model incorporated:

- Monogenic carrier status (*BARD1*)
- Allelica genome-wide multi-ancestry breast cancer PRS
- Personal clinical factors
- Family history information

The integrated analysis **classified the patient as high risk for breast cancer**, helping provide greater clarity around preventive management options and supporting a confident clinical decision regarding prophylactic surgery.

### Why this case matters

This case demonstrates how combining monogenic findings, genome-wide polygenic risk assessment, and clinical and family history factors informed the patient's decision to undergo prophylactic surgery.

Allelica's multi-ancestry breast cancer PRS integrates hundreds of thousands of validated genetic variants and is designed for use across diverse populations.



*"This testing made a huge difference for both myself and my patient. Having a more complete understanding of her individualized risk helped support a much more confident clinical decision."*

Dr. Michelle Harden, MD PLLC,  
Stone Oak Women's Center

Contact us to start ordering PRS  
testing for your patients today:

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