At least 1 in 5 breast cancer patients found to be at high risk for \textit{BRCA1} or \textit{BRCA2} mutation

As medical technologies advance, identifying individuals with \textit{BRCA} mutations has become increasingly important. By identifying patients at an earlier, more treatable stage, medical management options for mutation carriers have proven to decrease the incidence of breast and ovarian cancers. The authors of the following paper examined the prevalence of high-risk breast cancer patients in a mammography center appropriate for \textit{BRCA} testing using a self-administered family history questionnaire.


\textbf{Purpose:} To determine the prevalence of family histories suggestive of hereditary breast and ovarian cancer in patients with a personal history of breast and/or ovarian cancer presenting for mammography.

\textbf{Design and Methods:} In this study, 14,597 women completed a self-administered family history questionnaire. The questionnaires were evaluated for suspicion of an underlying hereditary predisposition to breast and ovarian cancer.

\textbf{Results:} Of the 14,597 women who completed the family history questionnaire, 1764 had a personal history of breast and/or ovarian cancer.

\textbf{Patient Distribution by Cancer Site}

- 46.2\% of the affected patient population was diagnosed with breast cancer under 50 years of age or ovarian cancer at any age

- Using conservative criteria\(^*\), 20.6\% of patients were classified as “high-risk”

\textbf{Bottom Line:} Identification of women with a \textit{BRCA} mutation is essential in determining appropriate surgical and medical management options. In this study, 1 in 5 women with a personal history of breast and/or ovarian cancer were defined as “high risk” for a \textit{BRCA1} or \textit{BRCA2} mutation. Of note, almost half of the affected patient population had a personal history of early-onset breast cancer or ovarian cancer.

\(^*\) >10 \% chance of a \textit{BRCA} mutation