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[BRCA1/BRCA2 specific gene mutations in Iranian](#)
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Source

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Abstract
OBJECTIVE:

To estimate the penetrance of breast cancer genes 1 and 2 BRCA1/BRCA2 specific gene mutations in Iranian women with breast cancer.

METHODS:

We conducted this study in the Department of Biostatistics, Tarbiat Modares University, Tehran, Iran between January and May 2008. The information was collected from the referral database of the Cancer Clinics, Day General Hospital, Tehran, Iran. We estimated the penetrance of breast cancer in carriers of BRCA1/2 specific gene mutations based on the modified kin-cohort method.

RESULTS:

Three hundred and forty-five probands were examined for specific mutations of BRCA1/2 genes. The estimated penetrance for the age groups among BRCA1/2 carriers was 31.9% (or =50 years).

CONCLUSION:

The reliable information of penetrance is considered important in genetic counseling. The low value of the estimated penetrance in this study might be attributed to the rare mutation in Iranian patients. Establishment and use of a kin-cohort gene databank is proposed as a solution for the preparation of the screening programs and the estimation of the penetrance to help reduce the risk of

cancer.

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