How is genetic risk for breast cancer evaluated?

A letter in the current *People* magazine referring to Jolie's recent announcement of the removal of her ovaries, following a double mastectomy last year, illustrates how at least one person is misconstruing the genetics of Jolie's situation:

"How did she go about getting these types of tests and elective surgeries? It would be good to know if the same options are available for all women or if these procedures are something only afforded to the rich and famous."

Angelina Jolie was tested and treated because of her family history, not her fame and fortune. Any genetic counselor or primary care provider would have been alert to her background: Her mother, grandmother, greatgrandmother, aunt, and a cousin had *BRCA1*-associated cancers.

That heritage places Jolie at far greater risk than most women. Mutations in the two *BRCA* genes account for only 5-10% of breast cancer cases and about 15% of ovarian cancers, according to the <u>National</u> <u>Cancer Institute</u>. Based on her family history, Angelina faced an 87% chance of developing breast cancer about five times the general population risk — and a 50% risk of developing ovarian cancer.

Read full original article: Assessing Breast Cancer Risk: Beyond the Angelina Effect