

## Will ‘Jolie effect’ lead more women to seek unnecessary surgery?

Angelina Jolie Pitt’s decision to have her ovaries surgically removed, which the actress and director detailed in *The New York Times*, was justified by her family history of breast and ovarian cancer as well as the discovery that she carries a gene mutation known to strongly increase risk for these diseases. Her story is expected to inspire other women to seek out genetic testing for cancer — but some will find themselves in a much less clear-cut situation.

After Jolie Pitt disclosed in 2013 that she carries a risk-increasing mutation in the gene *BRCA1* and had undergone a preventive double mastectomy, researchers documented a surge in demand for genetic testing. They called it the “Angelina Jolie Effect.” But not everyone who pursues genetic testing comes away with a definite course of action.

Thousands of possible mutations in *BRCA1* and the related gene *BRCA2* elevate a woman’s risk of developing cancer. But it is impossible to say whether many of these mutations predispose someone to cancer, because researchers simply have not seen them enough to know their effects with statistical certainty.

These mysterious mutations are called variants of unknown significance. And they create a headache because it is hard to know whether people should act on them — for instance, by undergoing preventive surgery.

“The standard in the field is that you shouldn’t be making decisions based on things we don’t understand, but it’s very complicated,” says cancer geneticist Fergus Couch of the Mayo Clinic in Rochester, Minnesota. “If you develop cancer while you’re waiting to find out more, there can be a bit of finger-pointing going on.”

**Read full original article:** [Gene counsellors expect resurgence of ‘Jolie effect’](#)