Cascade Genetic Testing

Cascade testing, according to the CDC, is the process of informing family members of a genetic condition discovered within the family, followed by family members getting tested for the condition.

This individual has a pathogenic genetic mutation that puts him at risk of developing hereditary cancer. A full-panel genetic test found the mutation.

Every one of **his children has a 50% chance of inheriting the exact same mutation** that might put them at risk for developing cancer associated with the mutation.

However, **cascade testing** can identify who inherited the mutation and who did not. This will allow those who have inherited the mutation to take steps to reduce the risk of cancer. Genetic testing saves lives.

Tested positive. This child inherited the germline mutation.

This individual's children each have a 50% chance of inheriting the exact same mutation and need to be tested.

Tested positive for the mutation. This individual's children each have a 50% chance of inheriting the exact same mutation and they need to be tested.

Tested positive for the mutation. This individual's children each have a 50% chance of inheriting the exact same mutation and will need to be tested.

Genetic testing needed.

Tested. Did not inherit the mutation.

Children are not at risk.

No genetic testing needed.

No genetic testing needed.

Tested positive. This child inherited the germline mutation.

This individual's children each have a 50% chance of inheriting the exact same mutation and need to be tested.

Tested positive for the mutation. This individual's children each have a 50% chance of inheriting the exact same mutation and they need to be tested.

Tested. Did not inherit the mutation.

Children are not at risk.

No genetic testing needed.

Tested positive for the mutation. This individual's children each have a 50% chance of inheriting the exact same mutation and will need to be tested.

Genetic testing needed.

This child was tested and did not inherit the mutation.

This individual's children are not at risk. There is no mutation to be passed on. Genetic testing for this particular mutation can stop. The mutation does not skip generations.

No genetic testing needed.

No genetic testing needed.

No genetic testing needed.

Some of the genetic mutations that increase the risk of cancer:

BRCA1
BRCA2
CHEK2
ATM
PALB2
BARD1
BRIP1
CDH1
STK11
MLH1
MSH2
MSH6
PMS2
EPCAM
TP53
PTEN
RAD51C
RAD51D
CDK4
CDKN2A

Cascade Testing *is one of the most important steps in breaking the cycle of hereditary cancer in families. This testing-sharing-testing-sharing of genetic information plays a vital role in protecting the health and lives of loved ones in families with a history of cancer. It requires two important steps:*

1. Having testing done. 2. Sharing that information, which includes test results and the specific mutation in the gene, like 3773delTT in BRCA2.

Created by MARKiX All rights reserved. www.MARKiX.net

GENETIONARY™
www.genetionary.org