

# Understanding Your Positive HHTNext Genetic Test Result

INFORMATION FOR PATIENTS WITH ONE **PATHOGENIC MUTATION** OR **VARIANT, LIKELY PATHOGENIC**

Result	<b>POSITIVE</b>	The result of your genetic testing shows you either have a change that is known to be disease-causing (pathogenic mutation) or a change or gene variant that is likely to be disease-causing (likely pathogenic), in a gene that causes capillary malformation-arteriovenous malformation (CM-AVM) syndrome. Either should be considered as the same type of positive result.
Gene	<b>DEFINITION</b>	Everyone has two copies of each gene. We get one copy from each of our parents. A mutation (change in the gene, like a spelling mistake) in one copy of the <i>RASA1</i> or <i>EPHB4</i> genes can cause CM-AVM.
Diagnosis	<b>CAPILLARY MALFORMATION-ARTERIOVENOUS MALFORMATION (CM-AVM) SYNDROME</b>	CM-AVM is a hereditary disease that most often causes vascular abnormalities including capillary malformations on the skin and arteriovenous malformations/arteriovenous fistulas in various tissues, which may occur with soft-tissue and skeletal enlargement (also known as Parkes Weber syndrome).
Management Options	<b>FOR PATIENTS WITH CM-AVM</b>	Medical management options include: surgery or surveillance. Talk to your healthcare providers about which may be right for you.
Family Members	<b>50/50 CHANCE</b>	Your children have a 50/50 chance of inheriting the pathogenic mutation or likely pathogenic variant that you carry. Other blood-related family members (like your parents, siblings, aunts, uncles, cousins) also have a chance of carrying this mutation. Any of your blood relatives can be tested for the inherited mutation.
Next Steps	<b>DISCUSS</b>	Please share this with family members so they can talk with their healthcare providers and learn more about genetic testing with Ambry Genetics at <a href="http://ambrygen.com">ambrygen.com</a> .
Reach Out	<b>RESOURCES</b>	<ul style="list-style-type: none"> <li>National Society of Genetic Counselors <a href="http://nsgc.org">nsgc.org</a></li> <li>Canadian Association of Genetic Counsellors <a href="http://cagc-accg.ca">cagc-accg.ca</a></li> <li>Genetic Information Nondiscrimination Act (GINA) <a href="http://ginahelp.org">ginahelp.org</a></li> </ul>

## CM-AVM Mutations in the Family

There is a 50/50 chance to pass on a pathogenic mutation or likely pathogenic variant to your sons and daughters. The image below shows that both men and women can carry and pass on these mutations. Those who DO NOT have these mutations may not be at risk for CM-AVM.

Please discuss this information with your healthcare providers. The field of genetics is continuously changing, so updates related to your genetic testing results and/or medical management options may be available over time. This information is not meant to replace a discussion with a healthcare provider, and should not be considered or taken as medical advice.

