

# Understanding Your Moderate Risk *RET* Genetic Test Result

## INFORMATION FOR PATIENTS WITH A MODERATE RISK MUTATION OR LIKELY PATHOGENIC VARIANT

### 6 Things to Know

|   |                                |  |
|---|--------------------------------|--|
| 1 | Result                         | Your testing shows that you have a moderate risk mutation or likely pathogenic variant (VLP) in the <i>RET</i> gene.   |
| 2 | <i>RET</i> -related conditions | People with <i>RET</i> moderate risk mutations or VLPs have multiple endocrine neoplasia type 2 (MEN2) or a different type of MEN2 called familial medullary thyroid carcinoma (FMTC).   |
| 3 | Cancer Risks                   | You may have an increased chance to develop medullary thyroid cancer, but lower than that of typical <i>RET</i> mutations. You may also have an increased risk for pheochromocytoma (PCC). Some people with <i>RET</i> moderate risk mutations or VLPs never develop cancer.   |
| 4 | Other medical concerns         | You may have an increased risk for parathyroid overgrowth that can cause hyperparathyroidism and a rare skin condition known as cutaneous amyloidosis lichen.  |
| 5 | What you can do                | Risk management decisions are very personal. There are options to detect cancer early or lower the risk to develop cancer. It is important to discuss these options with your healthcare provider and decide on a plan that works for you.                                     |
| 6 | Family                         | Family members may also be at risk – they can be tested for the <i>RET</i> moderate risk mutation or VLP that was found in you. It is recommended that you share this information with your family members so they can learn more and discuss with their healthcare providers. |

### *RET* Moderate Risk Mutations in the Family

There is a 50/50 random chance to pass on a *RET* moderate risk mutation or VLP to each of your children. The image below shows that everyone can carry and pass on these mutations or VLPs, regardless of their sex at birth.



The lifetime risk for medullary thyroid cancer in people with typical *RET* mutations or VLPs is 95-100%; however, you were found to have a moderate risk *RET* mutation or VLP. The risk for medullary thyroid cancer in people with a moderate risk *RET* mutation or VLP is known to be lower, and varies based on a person's specific mutation or VLP. Your report will include details about the specific mutation or VLP found in you.

Your healthcare provider can help assess your cancer risk and incorporate your medical and/or family history into your risk assessment.

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| <b>RESOURCES</b> | <ul style="list-style-type: none"> <li>• Association for Multiple Endocrine Neoplasia Disorders (AMEND) <a href="http://amend.org.uk">amend.org.uk</a></li> <li>• Thyca: Thyroid Cancer Survivors' Association <a href="http://thyca.org">thyca.org</a></li> <li>• National Society of Genetic Counselors <a href="http://nsgc.org">nsgc.org</a></li> <li>• Canadian Society of Genetic Counsellors <a href="http://cagc-accg.ca">cagc-accg.ca</a></li> <li>• American Multiple Endocrine Neoplasia Support <a href="http://amensupport.org">amensupport.org</a></li> </ul> |
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Please discuss this information with your healthcare provider. The cancer genetics field is continuously evolving, so updates related to your *RET* result, medical recommendations, and/or potential treatments may be available over time. This information is not meant to replace a discussion with a healthcare provider, and should not be considered or interpreted as medical advice.