MyCode® results reported
1489 patient-participants have received results* from the Genomic Screening and Counseling Program

For the latest results, see geisinger.org/MyCode-results.  
April 1, 2020

<table>
<thead>
<tr>
<th>Risk Condition</th>
<th>Patients per risk condition</th>
<th>Gene</th>
<th>Patients per gene</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CDC tier 1 conditions</strong> (click link)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hereditary breast and ovarian cancer (early breast, ovarian, prostate and other cancers)</td>
<td>374</td>
<td>BRCA1</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BRCA2</td>
<td>253</td>
</tr>
<tr>
<td>Familial hypercholesterolemia (early heart attacks and strokes)</td>
<td>157</td>
<td>APOB</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LDLR</td>
<td>121</td>
</tr>
<tr>
<td>Lynch syndrome (early colon, uterine and other cancers)</td>
<td>175</td>
<td>PMS2</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MSH6</td>
<td>78</td>
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<tr>
<td></td>
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<td>MSH2</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MLH1</td>
<td>11</td>
</tr>
<tr>
<td><strong>Cardiovascular risk</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Cardiomyopathy (diseases of the heart muscle with dangerous complications)</td>
<td>106</td>
<td>MYH7</td>
<td>25</td>
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<td></td>
<td></td>
<td>MYBPC3</td>
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<td></td>
<td></td>
<td>TPM1</td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td>TNNI3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TNNT2</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MYL2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MYL3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LMNA</td>
<td>6</td>
</tr>
<tr>
<td>Arrhythmia (irregular heartbeat with risk for cardiac arrest)</td>
<td>139</td>
<td>SCN5A</td>
<td>50</td>
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<tr>
<td></td>
<td></td>
<td>KCNQ1</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td></td>
<td>KCNE1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>KCNH2</td>
<td>9</td>
</tr>
<tr>
<td>Arrhythmogenic right ventricular cardiomyopathy (disease of the heart muscle with risk for cardiac arrest)</td>
<td>92</td>
<td>DSP</td>
<td>35</td>
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<tr>
<td></td>
<td></td>
<td>PKP2</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DSG2</td>
<td>24</td>
</tr>
<tr>
<td></td>
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<td>DSC2</td>
<td>9</td>
</tr>
<tr>
<td>Marfan syndrome (connective tissue disease that can cause heart, eye, and skeletal problems)</td>
<td>12</td>
<td>FBN1</td>
<td>12</td>
</tr>
</tbody>
</table>

(continued on next page)
1489 patient-participants have received results* from the Genomic Screening and Counseling Program

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<tr>
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<th>Patients per gene</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cardiovascular risk</strong> (continued from front)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heritable thoracic aortic disease (genetic predisposition to weakening of the wall of the aorta, leading to swelling and sometimes rupture)</td>
<td>20</td>
<td>ACTA2</td>
<td>18</td>
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<tr>
<td></td>
<td></td>
<td>SMAD3</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>TGFBR1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Cancer risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hereditary pheochromocytomas and paragangliomas (tumors that can release extra hormones and, rarely, become cancer)</td>
<td>32</td>
<td>SDHB</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SDHC</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SDHD</td>
<td>5</td>
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<tr>
<td></td>
<td></td>
<td>SDHAF2</td>
<td>2</td>
</tr>
<tr>
<td>Multiple endocrine neoplasia type 1 (tumors that can release extra hormones and, rarely, become cancer)</td>
<td>6</td>
<td>MEN1</td>
<td>6</td>
</tr>
<tr>
<td>Multiple endocrine neoplasia type 2 (early thyroid cancer)</td>
<td>41</td>
<td>RET</td>
<td>41</td>
</tr>
<tr>
<td>PTEN hamartoma tumor syndrome (early breast, thyroid, uterine and other cancers, with intellectual disability in some cases)</td>
<td>7</td>
<td>PTEN</td>
<td>7</td>
</tr>
<tr>
<td>Tuberous sclerosis (multiple types of benign [non-cancer] tumors)</td>
<td>6</td>
<td>TSC1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TSC2</td>
<td>3</td>
</tr>
<tr>
<td>Li-Fraumeni syndrome (early breast, soft tissue, brain, adrenal and other cancers)</td>
<td>13</td>
<td>TP53</td>
<td>13</td>
</tr>
<tr>
<td>Familial adenomatous polyposis (early colon cancer)</td>
<td>14</td>
<td>APC</td>
<td>14</td>
</tr>
<tr>
<td>Von Hippel-Lindau syndrome (early kidney cancer and benign tumors of brain, eye, pancreas and adrenal gland)</td>
<td>2</td>
<td>VHL</td>
<td>2</td>
</tr>
<tr>
<td>Retinoblastoma (early eye cancer)</td>
<td>1</td>
<td>RB1</td>
<td>1</td>
</tr>
</tbody>
</table>

(continued on next page)
**MyCode® results reported (continued)**

1489 patient-participants have received results* from the Genomic Screening and Counseling Program

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<th>Gene</th>
<th>Patients per gene</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Malignant hyperthermia</strong></td>
<td>85</td>
<td>RYR1</td>
<td>85</td>
</tr>
<tr>
<td>(life-threatening condition usually triggered by exposure to certain drugs used for general anesthesia)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fabry disease</strong></td>
<td>4</td>
<td>GLA</td>
<td>4</td>
</tr>
<tr>
<td>(enzyme defect leading to damage of blood vessels in the skin and cells in the kidneys, heart, and nervous system)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vascular Ehlers-Danlos syndrome</strong></td>
<td>6</td>
<td>COL3A1</td>
<td>6</td>
</tr>
<tr>
<td>(disease of the connective tissues, including arteries and muscles, that can increase the risk for health complications, such as rupture of arteries)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hereditary hemochromatosis</strong></td>
<td>203</td>
<td>HFE</td>
<td>203</td>
</tr>
<tr>
<td>(too much iron in blood, can lead to liver and heart problems)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hereditary hemorrhagic telangiectasia</strong></td>
<td>1</td>
<td>ENG</td>
<td>1</td>
</tr>
<tr>
<td>(abnormal blood vessel formation in skin, mucous membranes, lungs, liver and brain)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Juvenile polyposis syndrome/hereditary hemorrhagic telangiectasia</strong></td>
<td>1</td>
<td>SMAD4</td>
<td>1</td>
</tr>
<tr>
<td>(intestinal polyps, cancer of the intestine, including colon/abnormal blood vessel formation in skin, mucous membranes, lungs, liver &amp; brain)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>1497</td>
<td></td>
<td>1497</td>
</tr>
</tbody>
</table>

*Number of patient-participants with reported results and the number per gene variant/condition may not be equal due to the possibility of a participant having more than one result.