Biomarker for Risk of Cardiovascular Disease

**DESCRIPTION**
This technology is a biomarker for predicting increased risk of high cholesterol levels and heart disease in subjects prior to the presentation of any of these ailments. The HTT Gene is a promoter of the human 5-hydroxytryptamine serotonin transporter gene. Examination of the promoter for the HTT gene has revealed the presence of an allele that be used to predict a subject’s predisposition toward heart disease and therefore longevity. This will allow for early medical intervention with preventative therapies in high risk subjects. The diagram to the left shows the various genotypes and their associated risk factors.

**KEY ASPECTS**
- LS heterozygote for the insertion/deletion polymorphism in the HTT LPR have an increased risk of developing cardiovascular disease
- SS homozygotes for the insertion/deletion polymorphism in the HTT LPR have a greater probability of survival past eighty years of age

**INTELLECTUAL PROPERTY**

<table>
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<th>Title</th>
<th>US Patent Number</th>
<th>Issued</th>
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<td>Association of the Serotonin Transport (HTT) Gene with Cardiovascular Disease and Longevity</td>
<td>6,653,073</td>
<td>11/25/2003</td>
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