

# ClinVar Report

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**Sourcing ClinVar input from:** clinvar\_2014-02-11.vcf

**Sending output to:** Report\_2014-02-11.pdf

# 1 Collect and Merge ClinVar Data

## 1.1 Import ClinVar VCF

## 1.2 Merge ClinVar with 1000 Genomes and ExAC

## **2 Summary Statistics**

### **2.1 Fraction of Individuals with Pathogenic Non-Reference Sites**

### 3 Penetrance Estimates

#### 3.1 Max/Min Penetrance as a Function of $P(D)$ and $P(V|D)$

The left end of the boxplot indicates  $P(V|D) = 0.01$ ,  
the bold line in the middle indicates  $P(V|D) = \text{point value}$ ,  
the right end of the boxplot indicates  $P(V|D) = 1$ .

Note: Some diseases have mean theoretical penetrance = 1 because the assumed allelic heterogeneity is greater than is possible, given the observed prevalence and allele frequencies.

#### 3.2 Penetrance Estimates by Ancestry