



**Hypothesis:** Two copies of the protective allele *P* confers ASD protection and reduces ASD incidence by 10-fold; a *P* allele with a population frequency of 87%, and a non-protective *p* allele at 13%, results in a 4:1 male sex bas.

<b>C</b>	<i>PP</i>	<i>Pp</i>	<i>pP</i>	<i>pp</i>	<i>P</i>	<i>p</i>
Sex	Female				Male	
Protective effect	Present	Absent			Absent	
Population genotype frequency	37.8%	5.7%	5.7%	0.8%	43.5%	6.5%
ASD incidence in genotype	0.16%	1.6%	1.6%	1.6%	1.6%	1.6%
ASD incidence in population	0.006%	0.09%	0.09%	0.01%	0.70%	0.10%
Total ASD incidence	1.00%					
Total ASD incidence by sex	0.20%				0.80%	
Sex ratio of ASD incidence	1.0				4.0	