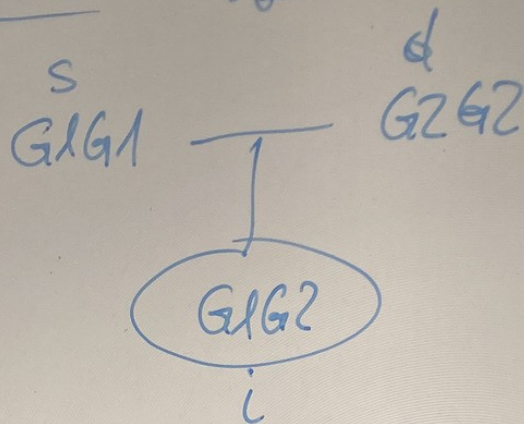


Parents homozygous - different



$$\begin{aligned} u_s &= 2q\alpha \\ u_d &= -2p\alpha \\ u_i &= (q-p)\alpha \end{aligned}$$

$$\begin{aligned} m_i &= u_i - \frac{1}{2}(u_s + u_d) \\ &= (q-p)\alpha - \frac{1}{2}(2q\alpha + (-2p\alpha)) \\ &= (q-p)\alpha - q\alpha + p\alpha = 0 \end{aligned}$$

