Prior probability for non-causal SNPs

$$\mathcal{N}\left(v_i|0,\sigma_{\mathrm{bg}}^2\right)$$

Likelihood $\mathcal{L}(v_0, v_i)$

Prior probability for causal SNPs
$$\mathcal{N}\left(v_i|0,\sigma_i^2\right)$$

Effect size (v_i)