

 $y_i \sim \text{Weibull}(\sigma, \alpha)$ $r_{j|i} \sim \text{Normal}(0, \tau)$ $\tau \sim \text{half-Cauchy}(2.5)$ $h_i \sim \text{MultiNormal}(0, \Sigma)$ $\Sigma = \upsilon \times \text{VCV}_{phy}$ $\upsilon \sim \text{half-Cauchy}(2.5)$ $\beta \sim \text{Normal}(0, 10)$ $\alpha \sim \text{half-Cauchy}(2.5)$