

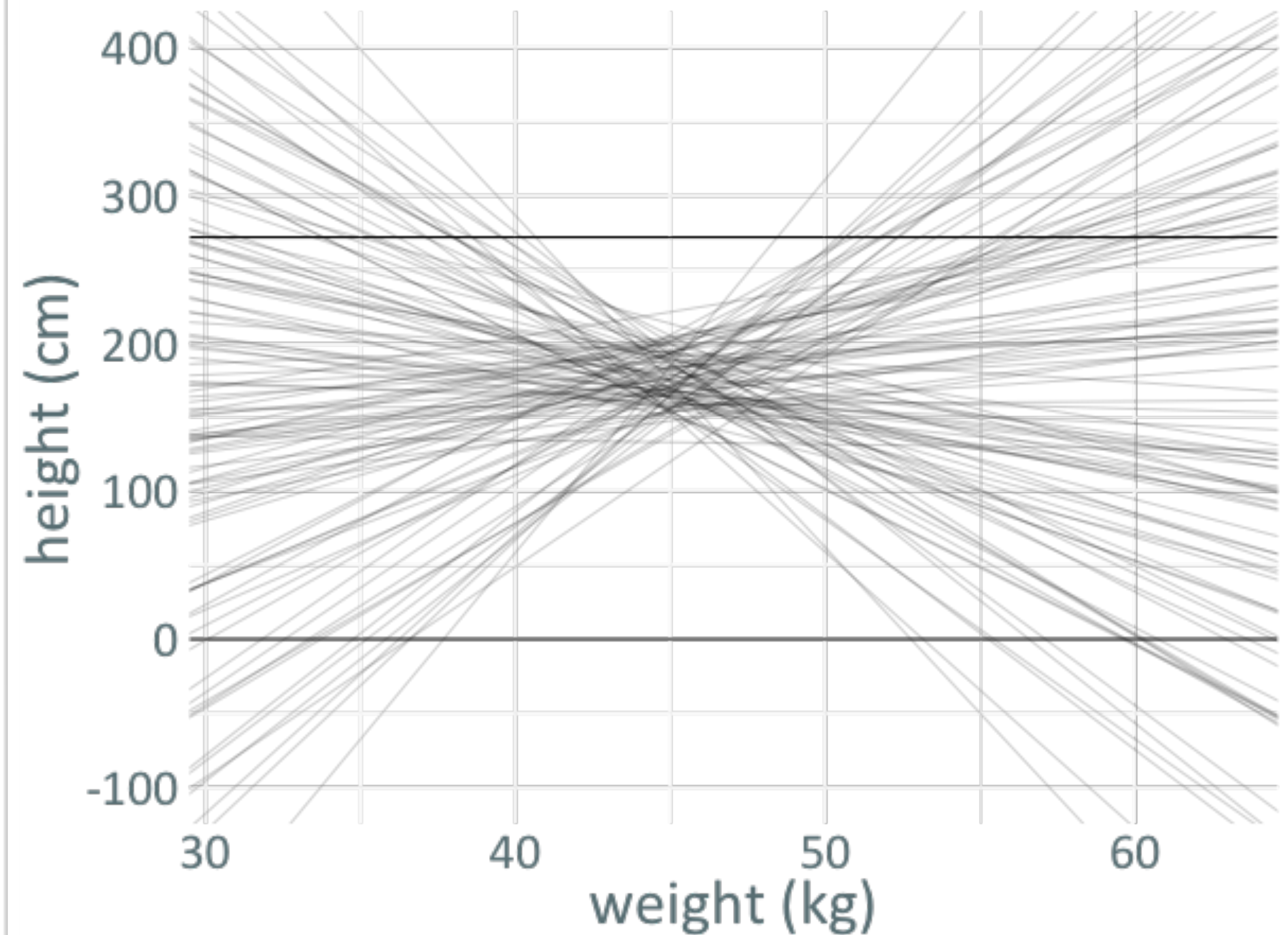




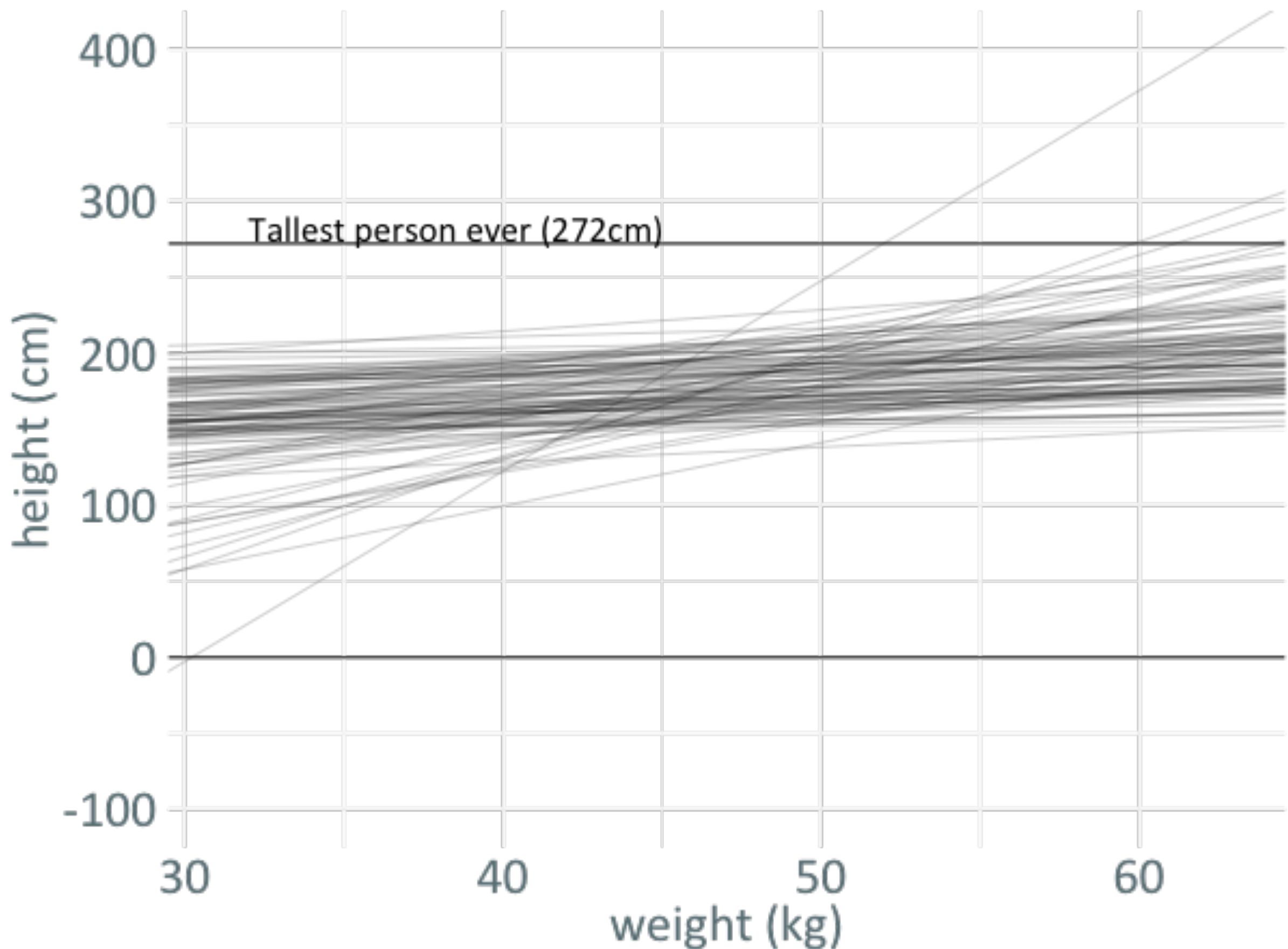
WIDE VS NARROW PRIOR

This is sometimes called a non-informative prior

$\beta \sim \text{Normal}(0, 10)$



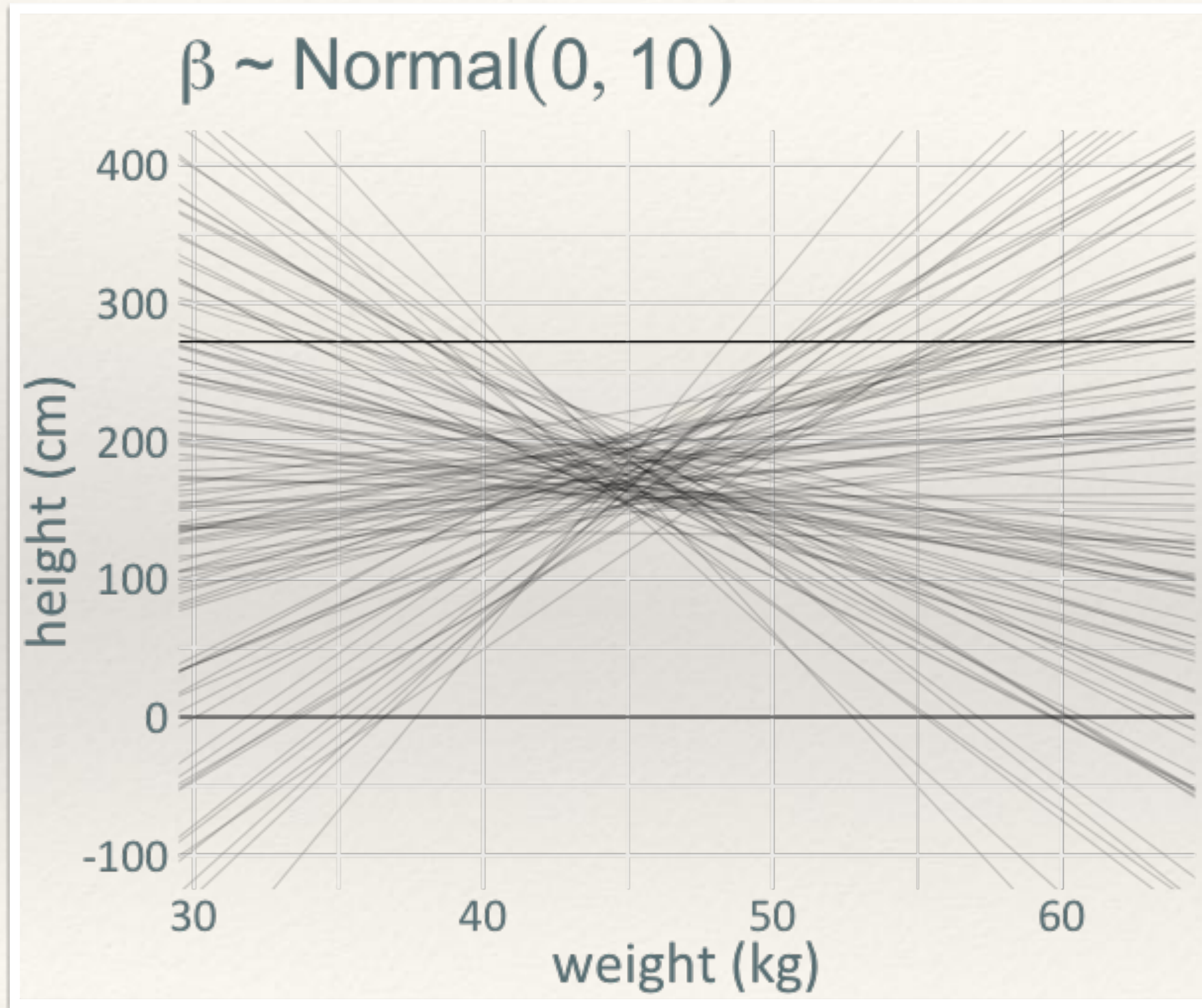
$$\log(\beta) \sim \text{Normal}(0, 1)$$



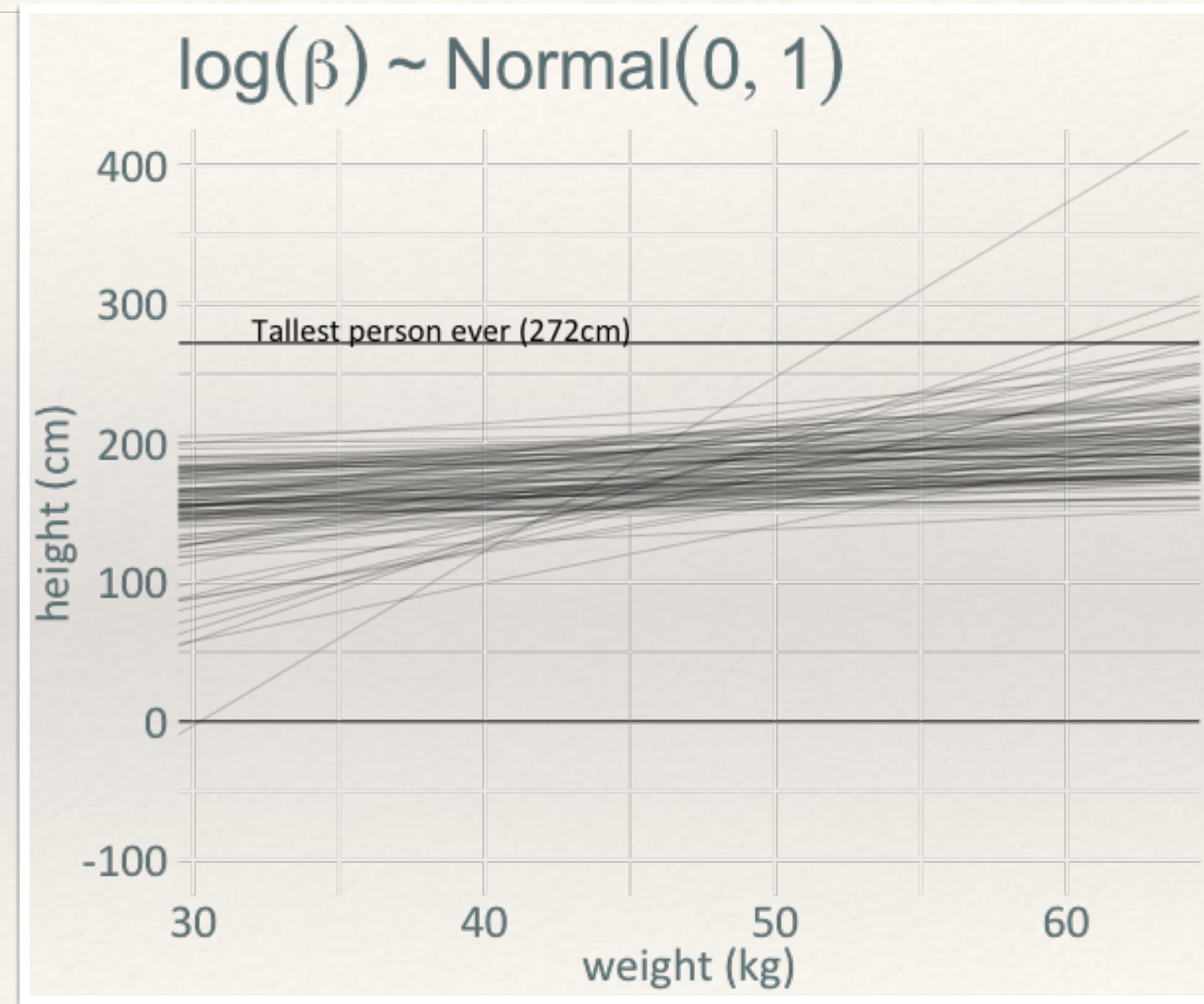
This prior is informative, but in a good way!



# WIDE VS NARROW PRIOR



This is sometimes called a non-informative prior



This prior is informative, but in a good way!



# OUR MODEL FOR THE HEIGHT DATA

$$y_i \sim \text{Normal}(\mu_i, \sigma)$$

$$\mu_i = \alpha + \beta x_i$$

$$\alpha \sim \text{Normal}(0, 20)$$

$$\beta \sim \text{lognormal}(0, 1)$$

$$\sigma \sim \text{Exponential}(1)$$

