Both models are 'bad'
$P(Y \mid RR\_1) \approx P(Y \mid RR\_0)$

The H0 model is 'better'
$P(Y \mid RR\_1) < P(Y \mid RR\_0)$

Legend: $P(Y \mid RR\_0)$ — $P(Y \mid RR\_1)$

$E[Y \mid RR\_a]$
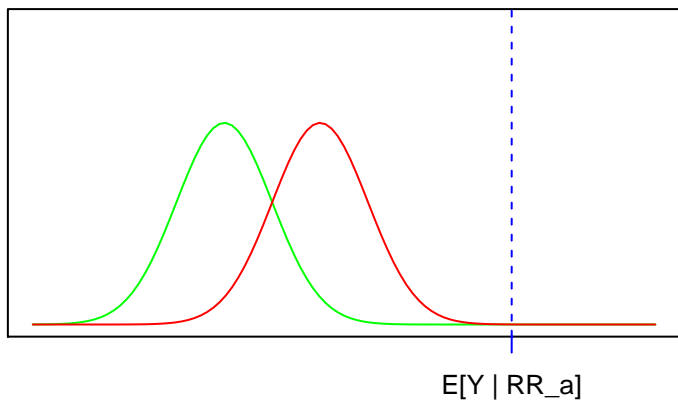
Poor H1 can delay signal generation
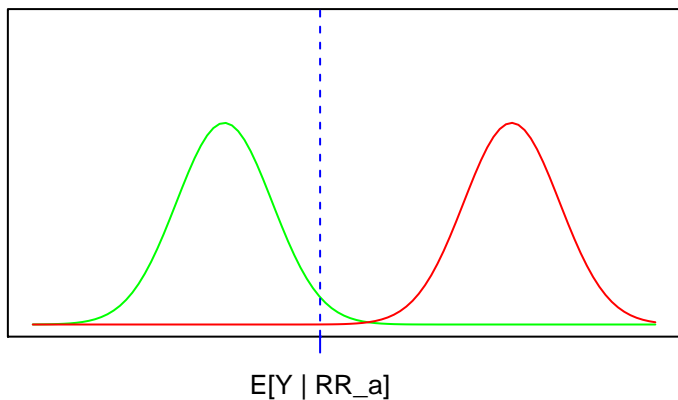
Poor H1 can increase Type II error rate