```
> set.seed(2, sample.kind="Rounding")
Warning message:
In set.seed(2, sample.kind = "Rounding") :
  non-uniform 'Rounding' sampler used
> make_data <- function(n = 1000, p = 0.5,
+ mu_0 = 0, mu_1 = 2,
+ sigma_0 = 1,  sigma_1 = 1){
+
+ y <- rbinom(n, 1, p)
+ f_0 <- rnorm(n, mu_0, sigma_0)
+ f_1 <- rnorm(n, mu_1, sigma_1)
+ x <- ifelse(y == 1, f_1, f_0)
+
+ test_index <- createDataPartition(y, times = 1, p = 0.5, list = FALSE)
+
+ list(train = data.frame(x = x, y = as.factor(y)) %>% slice(-test_index),
+ test = data.frame(x = x, y = as.factor(y)) %>% slice(test_index))
+ }
> dat <- make_data()
>
> set.seed(1, sample.kind = "Rounding")
Warning message:
In set.seed(1, sample.kind = "Rounding") :
  non-uniform 'Rounding' sampler used
> delta <- seq(0, 3, len=25)
> res <- sapply(delta, function(x) {
+ dat <- make_data(mu_1 = x)
+ fit_glm <- dat$train %>% glm(y ~ x, family = 'binomial', data = .)
+ p_hat_glm <- predict(fit_glm, newdata = dat$test, type = "response")
+ y_hat_glm <- ifelse(p_hat_glm > 0.5, "1", "0") %>% factor()
+ mean(y_hat_glm == dat$test$y)
+ })
> qplot(delta, res)
>
```