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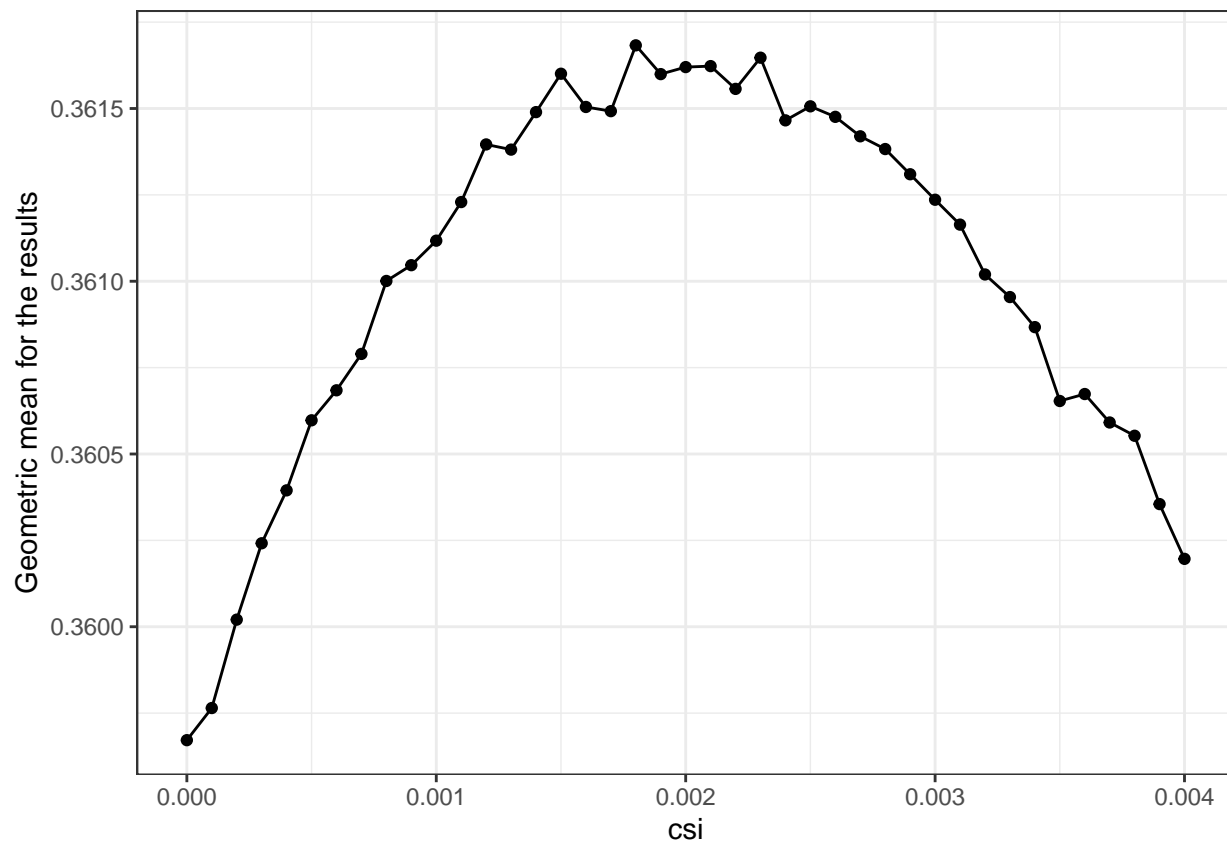
```
library(dplyr)
library(ggplot2)

load("data/lst_csi_mod_0_pred_0.RData")

csi = as.numeric(names(lst_csi_mod_0_pred_0))
GeoMean_Results = NULL
GeoMean_Scores = NULL
for(i in 1:length(lst_csi_mod_0_pred_0)) {
  GeoMean_Results[i] = lst_csi_mod_0_pred_0[[i]]$GeoMean_Results
  GeoMean_Scores[i] = lst_csi_mod_0_pred_0[[i]]$GeoMean_Scores
}

tib_csi = tibble(csi, GeoMean_Results, GeoMean_Scores)

tib_csi %>%
  ggplot(aes(x = csi, y = GeoMean_Results)) +
  geom_line() +
  geom_point() +
  theme_bw() +
  ylab("Geometric mean for the results")
```

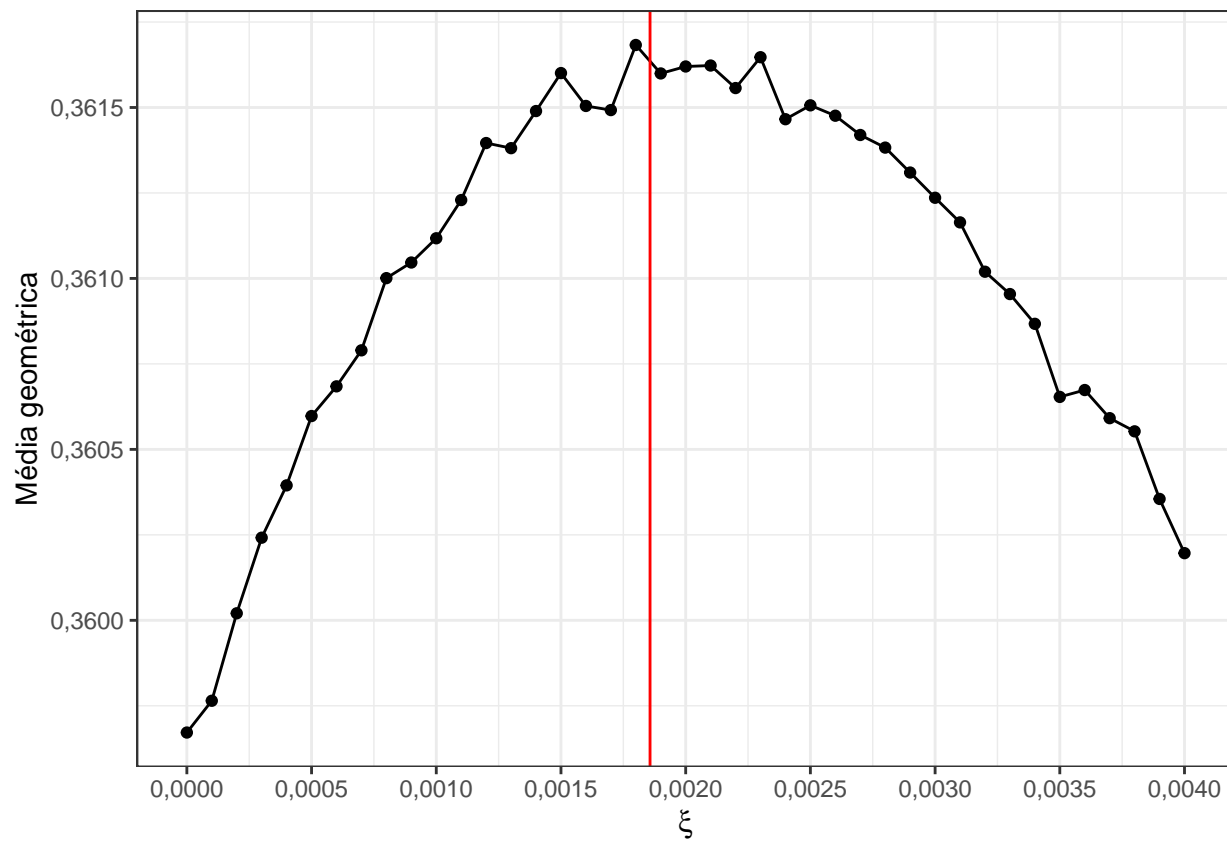


```
library(latex2exp)
```

```
## Warning: package 'latex2exp' was built under R version 4.0.5
```

```
options(OutDec = ",")
```

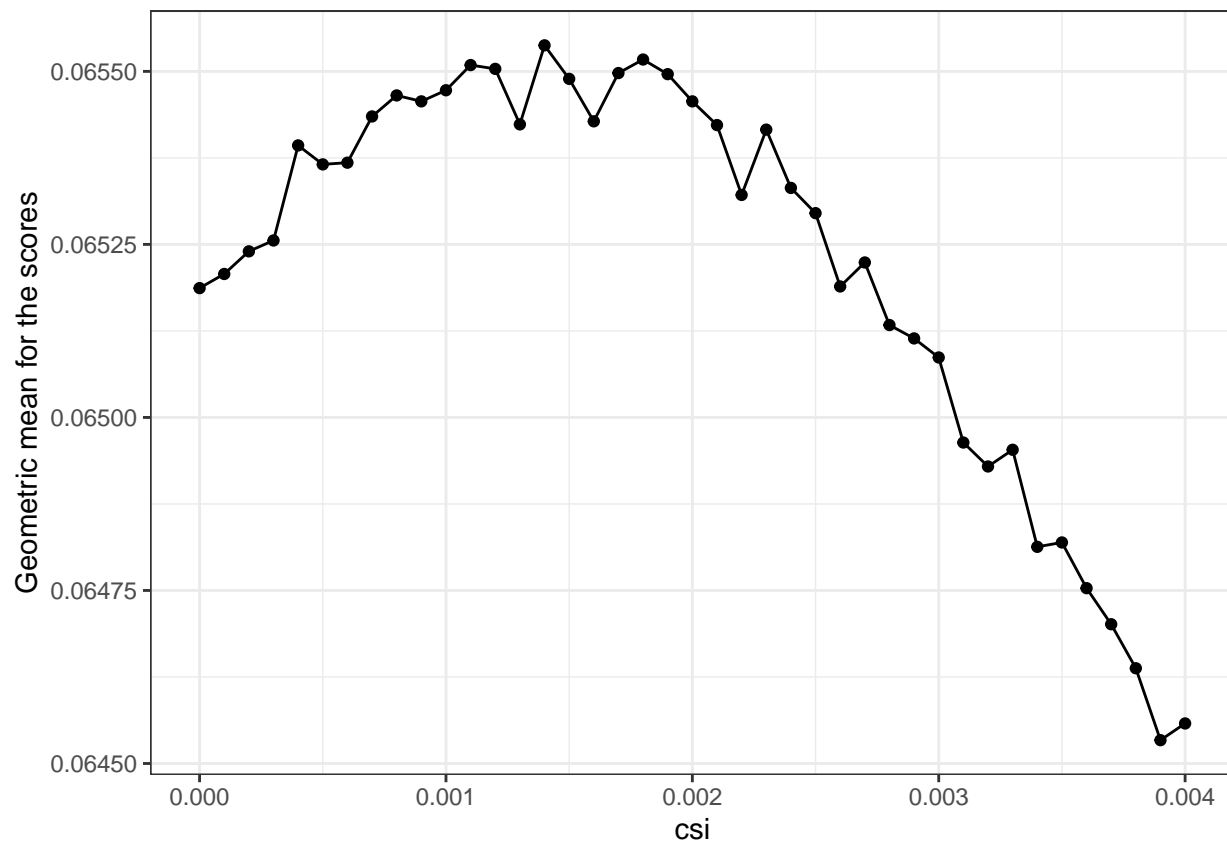
```
p = tib_csi %>%
  ggplot(aes(x = csi, y = GeoMean_Results)) +
  geom_line() +
  geom_point() +
  theme_bw() +
  ylab("Média geométrica") +
  xlab(TeX("$\\xi$")) +
  scale_x_continuous(breaks = c(0, 0.0005, 0.001, 0.0015, 0.002, 0.0025, 0.003, 0.0035, 0.004)) +
  geom_vline(xintercept = 0.0065 / 3.5, col = "red")
p
```



```
ggsave(filename = "xi.png",
        plot = p, width = 10, height = 5, dpi = 1000)
```

```
options(OutDec = ".")
```

```
tib_csi %>%
  ggplot(aes(x = csi, y = GeoMean_Scores)) +
  geom_line() +
  geom_point() +
  theme_bw() +
  ylab("Geometric mean for the scores")
```



```
tib_csi %>%
  arrange(desc(GeoMean_Results))
```

```
## # A tibble: 41 x 3
##       csi GeoMean_Results GeoMean_Scores
##   <dbl>         <dbl>         <dbl>
## 1 0.0018         0.362         0.0655
## 2 0.0023         0.362         0.0654
## 3 0.0021         0.362         0.0654
## 4 0.002          0.362         0.0655
## 5 0.0015         0.362         0.0655
## 6 0.0019         0.362         0.0655
## 7 0.0022         0.362         0.0653
## 8 0.0025         0.362         0.0653
## 9 0.0016         0.362         0.0654
## 10 0.0017         0.361         0.0655
## # ... with 31 more rows
```

```
tib_csi %>%
  arrange(desc(GeoMean_Scores))
```

```
## # A tibble: 41 x 3
##       csi GeoMean_Results GeoMean_Scores
##   <dbl>         <dbl>         <dbl>
```

```
## 1 0.0014      0.361      0.0655
## 2 0.0018      0.362      0.0655
## 3 0.0011      0.361      0.0655
## 4 0.00120     0.361      0.0655
## 5 0.0017      0.361      0.0655
## 6 0.0019      0.362      0.0655
## 7 0.0015      0.362      0.0655
## 8 0.001       0.361      0.0655
## 9 0.0008      0.361      0.0655
## 10 0.0009     0.361      0.0655
## # ... with 31 more rows
```

```
# Dixon & Coles csi
0.0065 / 3.5
```

```
## [1] 0.001857143
```