

# Package ‘icertool’

July 22, 2025

**Title** Calculate and Plot ICER

**Version** 0.0.3

**Description** The app will calculate the ICER (incremental cost-effectiveness ratio) Rawlins (2012) <[doi:10.1016/B978-0-7020-4084-9.00044-6](https://doi.org/10.1016/B978-0-7020-4084-9.00044-6)> from the mean costs and quality-adjusted life years (QALY) Torrance and Feeny (2009) <[doi:10.1017/S0266462300008461](https://doi.org/10.1017/S0266462300008461)> for a set of treatment options, and draw the efficiency frontier in the costs-effectiveness plane. The app automatically identifies and excludes dominated and extended-dominated options from the ICER calculation.

**License** GPL-3

**Encoding** UTF-8

**RoxygenNote** 7.1.2

**Imports** shiny, shinythemes, purrr, DT, tidyverse, readxl, ggplot2, ggrepel, digest, shinyhelper

**NeedsCompilation** no

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**Repository** CRAN

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**Description**

The app will calculate the ICER (incremental cost-effectiveness ratio) (Rawlins, 2012) doi: [10.1016/B9780702040849.000446](https://doi.org/10.1016/B9780702040849.000446) from the mean costs and quality-adjusted life years (QALY) (Torrance and Feeny, 2009) doi: [10.1017/S0266462300008461](https://doi.org/10.1017/S0266462300008461) for a set of treatment options, and draw the efficiency frontier in the costs-effectiveness plane. The app automatically identifies and excludes dominated and extended-dominated options from the ICER calculation.

**Usage**

```
icertool()
```

**Value**

The function 'icertool()' does not return a value. 'icertool()' returns a plot that can be copied from the graphical interface.

In the results tab, to copy an image of the graph to a word-processor document, right-click with your mouse on the graph and select 'Copy image', then go to your word-processor document and select 'Paste Special' and 'Bitmap image'

**Examples**

```
if (interactive()){  
  
  data.0 <- as.data.frame(read_excel("icer.xlsx"))  
  
  cq<-myicer(data.0)  
  
  my_ce <- ce_plot(data.0,cq)  
  
  my_ce + theme(text = element_text(size = 12)) + geom_text_repel()  
  
  cq  
  
}
```

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