



世界中医药学会联合会

World Federation of Chinese Medicine Societies

中药新型给药系统专业委员会

Specialty Committee of TCM Drug Delivery System

附件 2：中药制剂大会壁报模板（电子格式文件可联系会务组）



Make Interactive Complex Heatmaps in R

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Introduction

Heatmap is a powerful visualization method on two-dimensional data to reveal patterns shared by subsets of rows and columns. I previously developed an R/Bioc package *ComplexHeatmap* that provides a general solution for making complex heatmaps. Here, I developed an R/Bioc package *InteractiveComplexHeatmap* that can easily export static complex heatmaps into interactive heatmaps as *Shiny* applications. It also provides flexible functionalities for integrating interactive heatmap widgets into other *Shiny* applications.

Features

1. It works for all kinds of heatmaps as long as they are generated by *ComplexHeatmap*.
2. It can also interactive heatmaps from *heatmap()*, *heatmap.2()* and *pheatmap()*.
3. It allows integrating interactive heatmaps as parts of larger *Shiny* applications.
4. Response to mouse actions can be self-defined.

Usages

For the simplest usage, users only need to call one line of code after the heatmaps are generated.

```
htShiny() # yes, with no argument!
```

Examples



Figure 1. Default panels and tools in the interactive heatmap. A) The original heatmap. B) The selected sub-heatmap. C) The information of the heatmap cell that was clicked or the sub-heatmap that was selected.

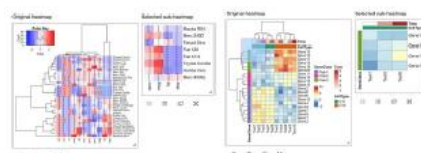


Figure 2. Interactive heatmaps from *heatmap.2()* and *pheatmap()*.

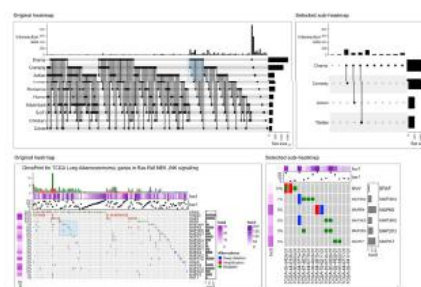


Figure 3. Interactive UpSet plot and oncoPrint.

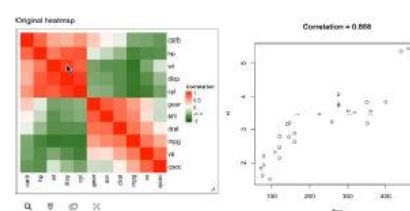


Figure 4. Self-define the response to the mouse click action.



Figure 5. Integrate with *shinydashboard* package.

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