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## Rank-Heat Plot

User Guide

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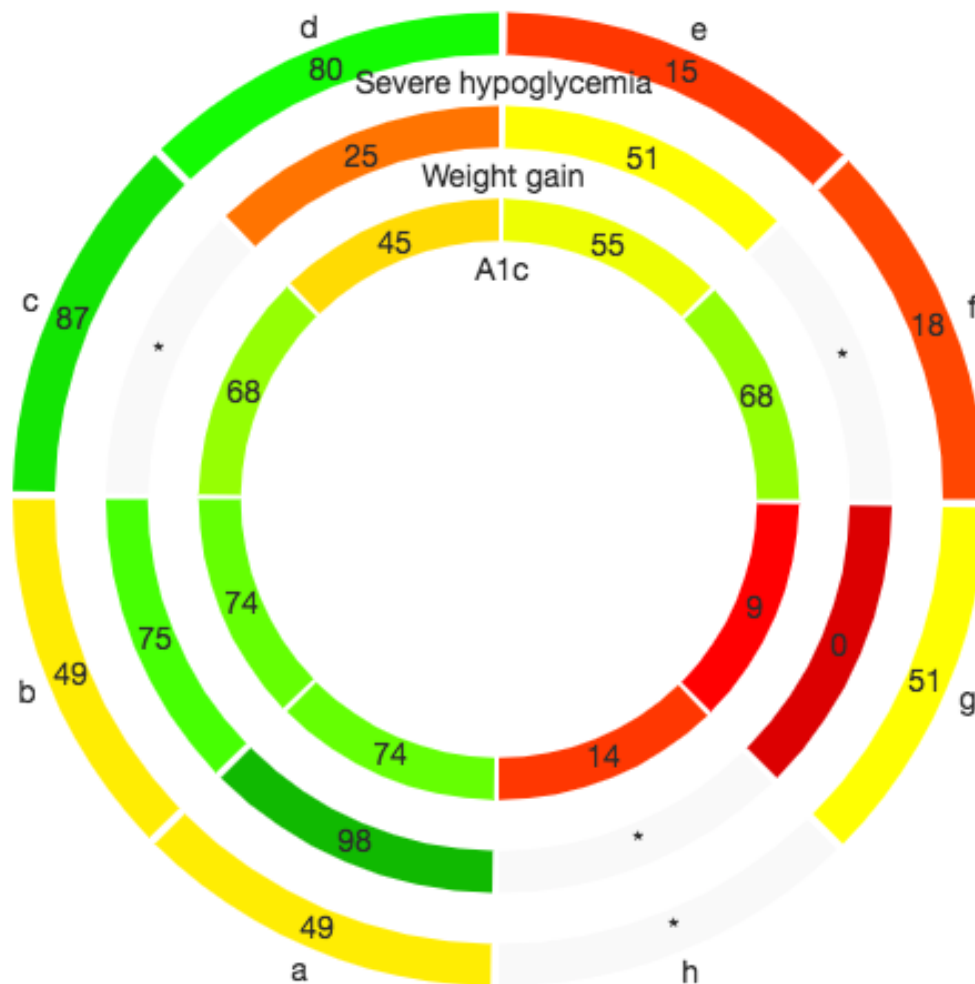
## Table of Contents

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1.0 - Purpose .....	3
2.0 – Interactive version .....	4
2.1 – Filter Options .....	5
3.0 – Create a Rank-Heat Plot .....	11
3.1 – Filter Options .....	11
3.2 – Uploading data .....	12
4.0 – Contacting Us .....	13

## 1.0 – Purpose

The Rank-Heat Plot is a tool that graphs the treatment ranking in a network meta-analysis (NMA), including multiple outcomes. An example of a rank-heat plot is shown below:



Each ring of the circle represents a different outcome, while each section (labeled with letters in this example) represents a different treatment or intervention. With this graph, one is able to compare the effectiveness and/or safety of each treatment included in a network meta-analysis across different outcomes.

There are two ways to use this tool:

1. **Interactive Version:** Interact with existing rank-heat plots provided as examples
2. **Treatment Ranking:** Create your own rank-heat plot by uploading your data

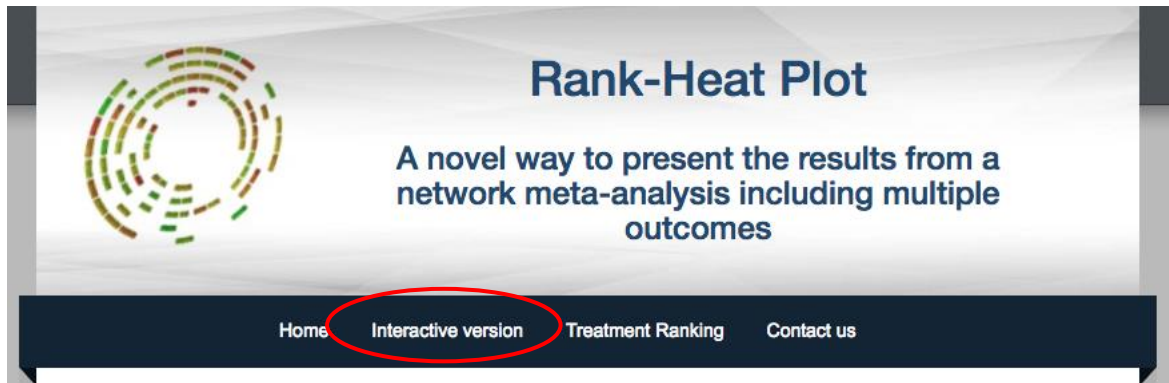
## 2.0 – Interactive version

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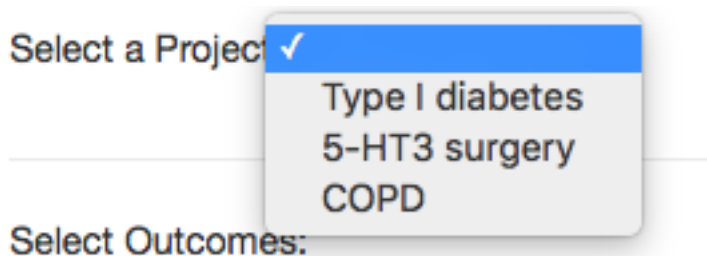
The rank-heat plot tool has several projects with pre-loaded data. Three different examples that the tool include are:

1. Type I diabetes example
2. 5-HT3 surgery example
3. Chronic obstructive pulmonary disease (COPD) example

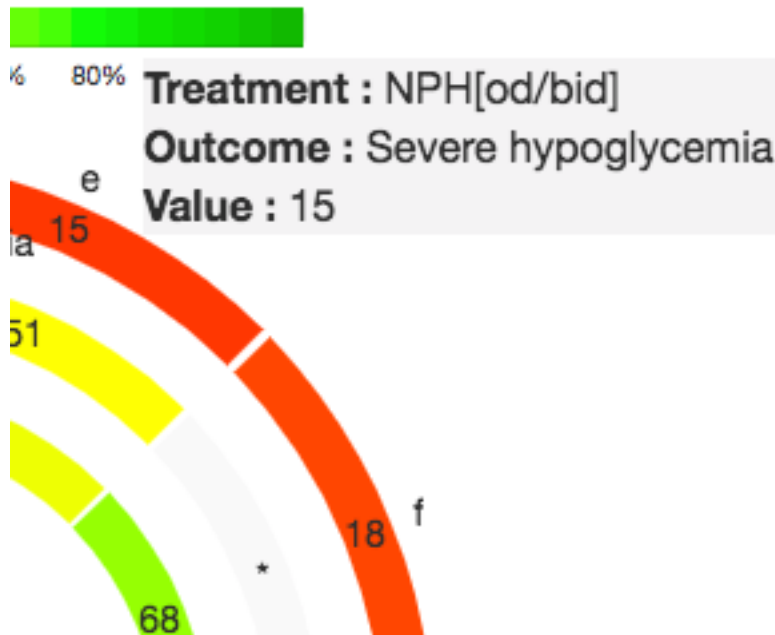
To view any of these rank-heat plots, click on the “Interactive Version” link on the menu.



Next, choose a project from the “Select a Project:” drop-down.



You can now see the data and rank-heat plot related to that specific project. For every rank-plot graph, you can move (drag and drop) any of the legends, the bar scale or the main graph as preferred. You can also hover over a section of the graph to show the treatment, outcome and value of the section, as seen below:



## 2.1 – Filter Options

There are a few options you can do to alter your graph:

- Hide/Show the outcomes of the plot
- Choose the colour palette of the plot
- Hide/Show the asterisk symbol in the plot
- Hide/Show the treatment values in the plot
- Change the treatment label type

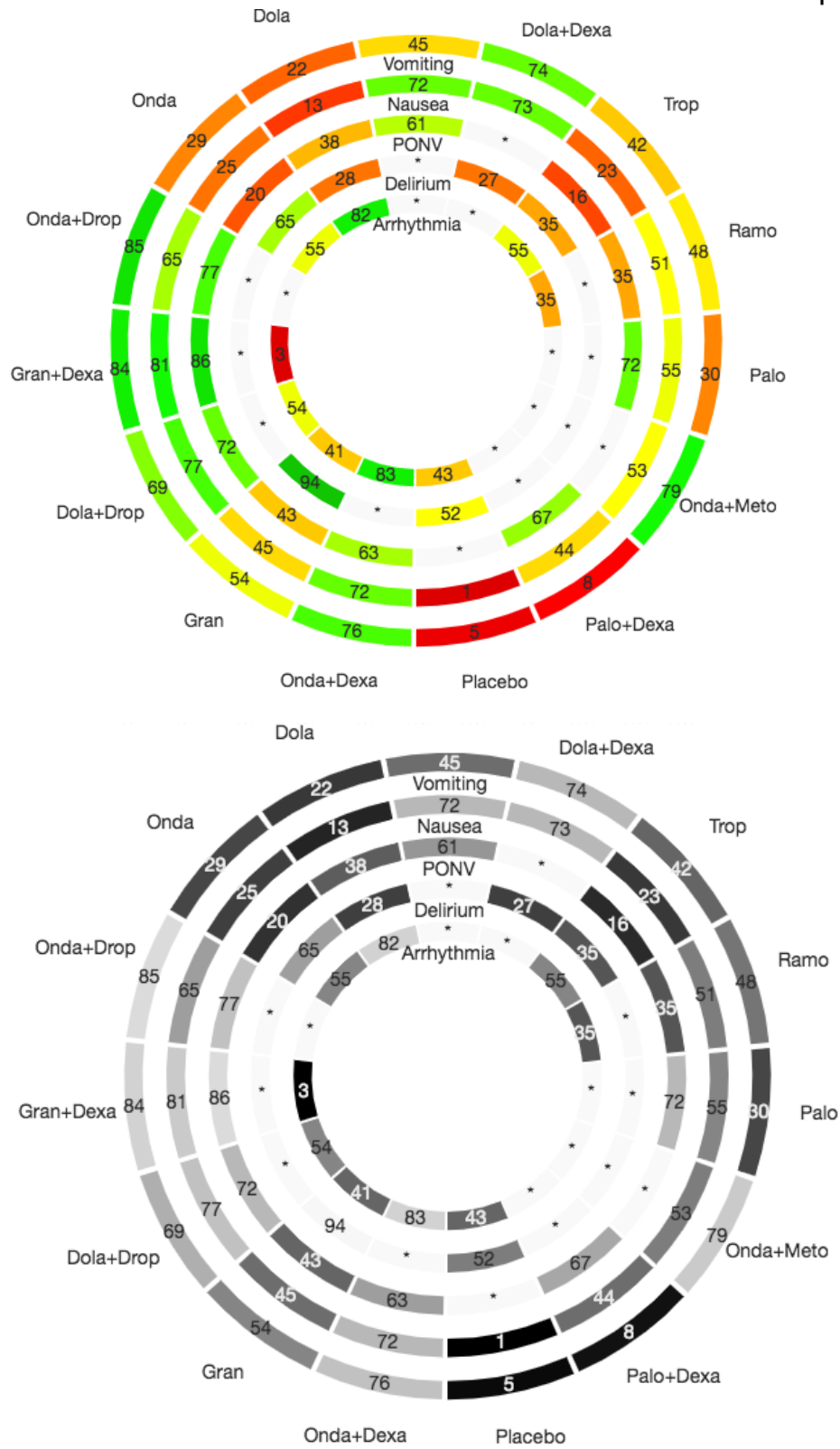
To hide or show outcomes of the plot, there will be a list of outcomes with checkboxes under the “Select Outcomes” list. If there is nothing listed under “Select Outcomes”, please verify that you have chosen a project in the drop-down above.

Select Outcomes:  Severe hypoglycemia  Weight gain  A1c

You may click on the checkboxes to show or hide outcomes from the plot.

The rank-heat plots also have two colour-schemes:

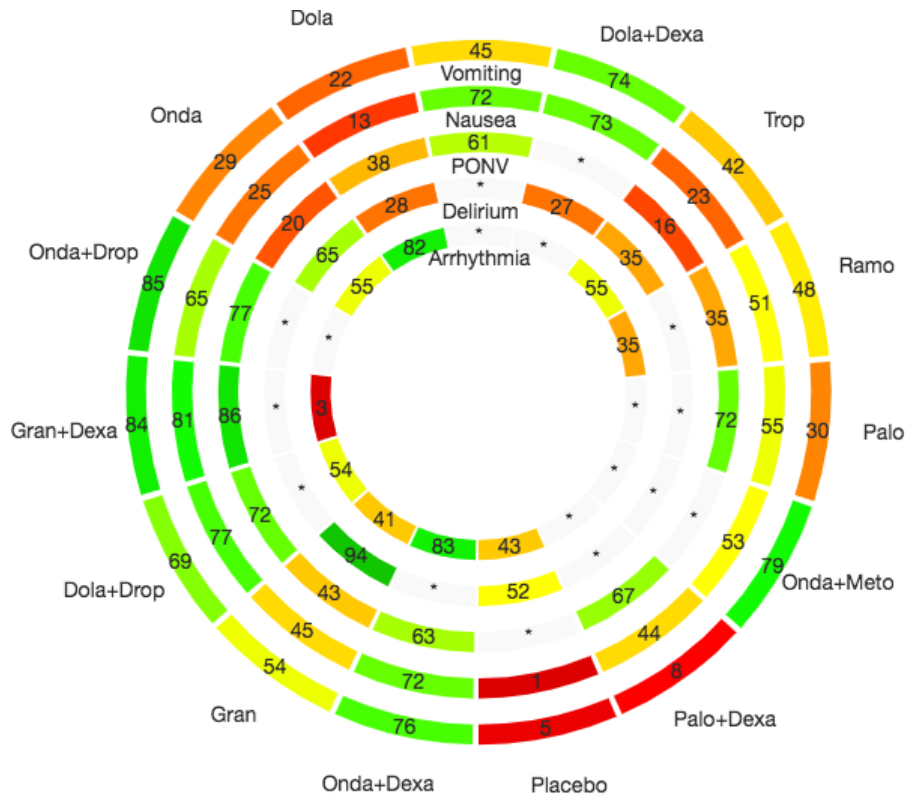
- Colour
- Grey



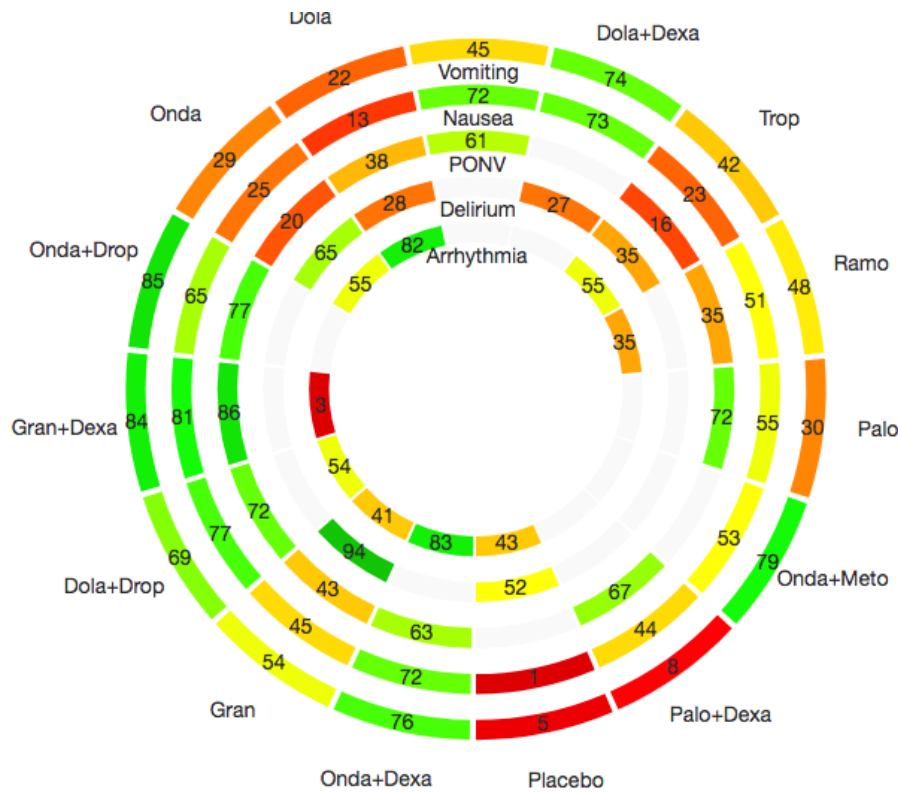


Choose whichever colour palette you prefer.

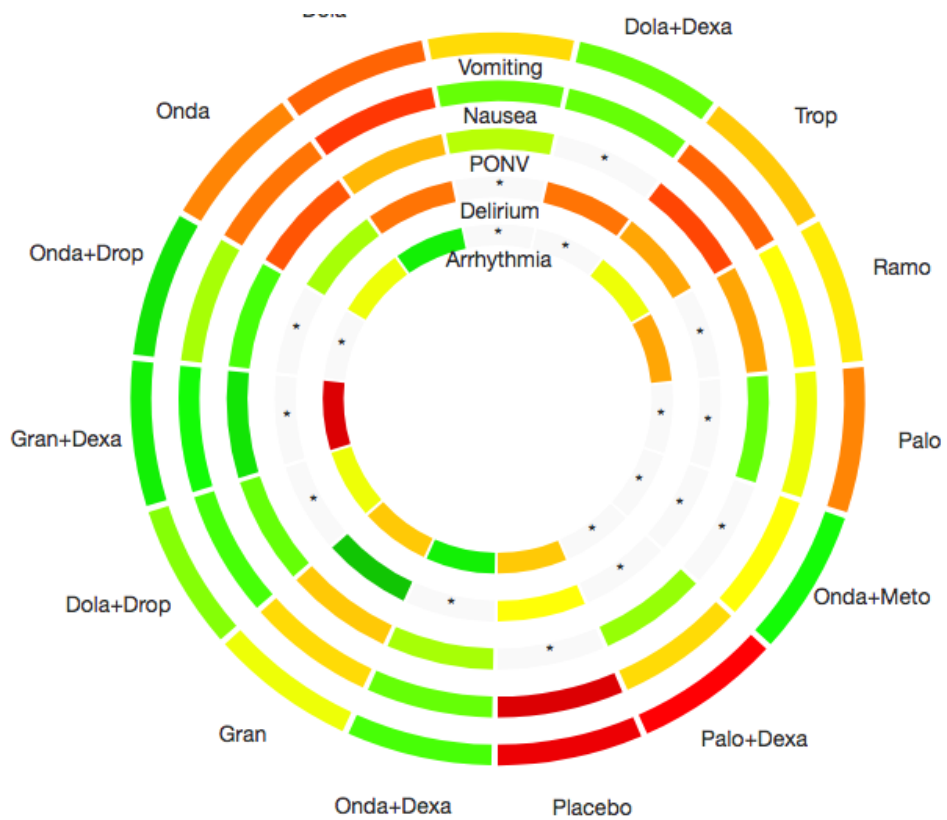
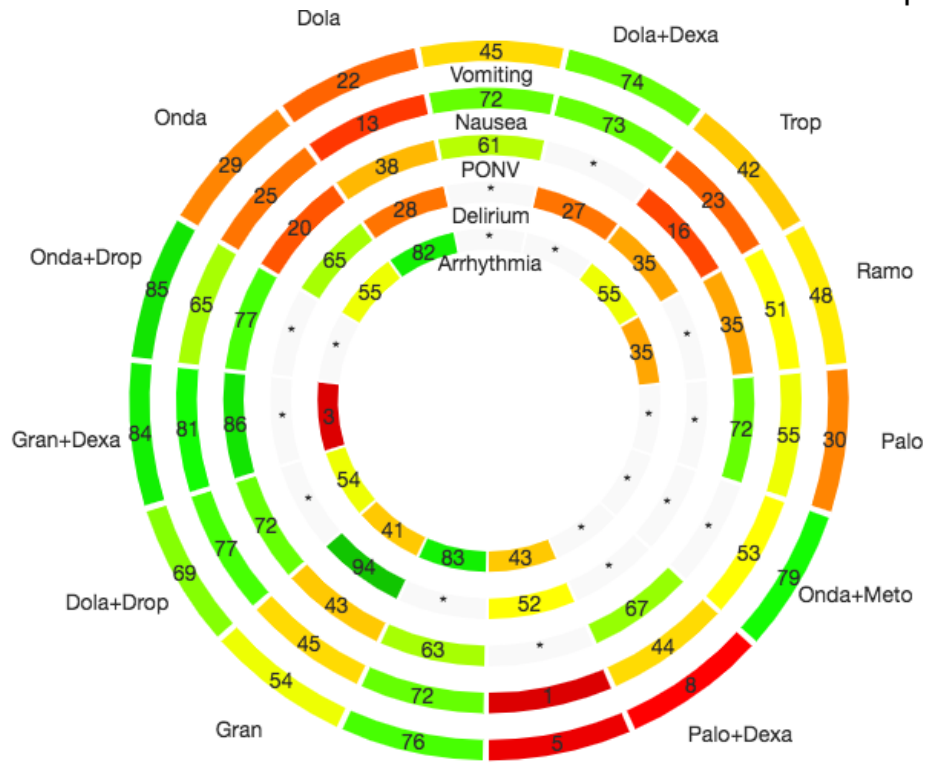
On colour plots, you can also have the option of hiding the asterisks on the graph. This is not available on the grey plots. Below are two examples for comparison. The first plot is the plot with asterisks in blank fields. The second plot is the plot without the asterisks.







In addition, you can hide or show the treatment values on the plot. These are the numbers that appear on each section of the rings. Below are two examples for comparison. The first plot is the plot with treatment values and the second plot is the plot without treatment values.





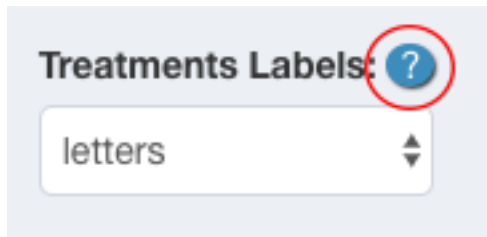
Finally, you can change the labels showing each treatment. There are three options:

- Letters
- Numbers
- Default titles (e.g., show the name of the treatment instead of letters or numbers)

All previous examples showed default titles label. An example of letters for titles is shown below for comparison:



If you are unsure what each of these drop-down menus mean, please click on the question mark symbol next to each field. A box will pop-up with the field's description, and visual examples of what each option looks like:



### 3.0 – Create a Rank-Heat Plot

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To create your own rank-heat plot using Treatment Ranking statistics, click on the "Treatment Ranking" link on the menu.



#### 3.1 – Filter Options

There are several options for filters:

- Ranking statistics
- Choose color palette
- Asterisk symbol
- Show treatment values on plot
- Treatment labels
- Treatment legend

Ranking Statistics tells the tool what kind of data you will upload to the application. With "**SUCRA**" or "**Probability**" of being the best" (values ranging between 0 and 100) referring to SUCRA values or the probability of being the best depending on the ranking statistic used in a network meta-analysis.



	A	B	C	D
1		treatment one	treatment two	treatment three
2	outcome 1	32	14	2
3	outcome 2	3	100	53
4	outcome 3	68	67	
5	outcome 4		45	21

The option "**rank**" refers to median or mean rank of the included treatments depending on the ranking statistic used in a network meta-analysis.

	A	B	C	D	E	F	G	H	I
1		treatment 1	treatment 2	treatment 3	treatment 4	treatment 5	treatment 6	treatment 7	treatment 8
2	outcome 1	7		3.4	4.6	6.3	2.6	1.4	4.4
3	outcome 2	3.4		5	1		3.7		2.3
4	outcome 3	3.3	6.8	8	2.7	2.5	4.2	2.5	2

The above shows how data file may look like before you upload the data.

Like in the previous section (Interactive version), you can choose the colour palette and show/hide the asterisk. Visual examples of both can be seen in section 2.1.

You can also choose the type of label you want: letters or numbers. The label type for default titles is not available in this method. You can also show or hide the values of the respective ranking statistic used (the numbers on each section of the plot), and show/hide the treatment legend as well. Visual examples of showing and hiding the ranking statistic's values and the type of label for the treatments can be seen in section 2.1.

### 3.2 – Uploading data

This is where you upload the file containing the data to create a rank-heat plot. See section 3.1 about "Ranking statistics" to see how the data files should look on based on what you select for the "Ranking Statistics" field in the filter options. Acceptable file formats are csv, xls or xlsx. You can either choose the file from your computer or drag and drop into the dotted box.

## Import your data

Data with columns corresponding to the treatments included in the network meta-analysis and rows corresponding to the studied outcomes.

Load your data from a csv, xls or.xlsx file: ?

Drop your file here!

Choose File No file chosen

If you are unsure as to what each of these drop-down menus mean, please click on the question mark symbol next to each field. A box will pop-up with the field's description, and visual examples of what each option looks like:

**Treatment legend:** ?

yes

As with the Interactive Plot, you can also move the legends and the graph around by dragging and dropping them. The plot can also be downloaded as an image file through the "Download image" button at the end of the page. To clear all settings and data, click on the "Reset" button.

Download image Reset

## 4.0 – Contacting Us

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There are two ways to contact us:

1. For a general contact form, click on the "Contact us" link in the menu. Fill out the form with the appropriate information.
2. To provide any feedback on the tool itself, go to either the "Interactive version" or "Treatment Ranking" pages, and click on the "Add Comment" button. Clicking on this will cause a comment box to appear under. Write a comment or suggestion into the box, and click on send.



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Add a comment

**We value your feedback and suggestions for improvement on our rank-heat plot.**

Add a comment or suggestion

Send