Guide for Extraction – Web Application

Thank you for participating in our trial to test a new web app for outcome data extraction. Please read and have handy the following instructions for this part of the trial, which is to test the new web application as a method of data extraction.

If you have any questions, please don't hesitate to contact Fala Cramond (f.cramond@imperial.ac.uk), Alison O'Mara-Eves (a.o'mara-eves@ucl.ac.uk) or James Thomas (james.thomas@ucl.ac.uk).

Checklist before you start

- Read this document and have copy to refer to throughout extraction
- Watch the YouTube video, outlining the basics on how to use the application
- Have your 5 digit code ready

Procedure

You will be presented with 27 different graphs and the task is to extract data from all of them. They vary in complexity, style and number of points. The frame of the work flow will be as follows:

1. From the front page, download the user manual and watch the link of the YouTube video
2. Enter your **unique 5 digit code** into the box on the home page, then click 'Submit'
3. You will be taken to a page with the graphs to be extracted on
4. To select a graph to extract, click on the number in the top left hand corner of the red box. Make sure that the cursor changes to a "hand" icon when you hover over the number before clicking. Upon clicking, the extraction page will open up.
5. Extract data (see next section for more details)
6. After having extracted data, to continue to the next graph, click 'Save Data' which will automatically return you to the PDF with all the graphs on so you can extract from the next graph
7. If you wish to leave the app and come back to it at another time, that is fine, just enter the same 5 digit code into the box on the front page and continue where you left off.

Data Extraction

The generic work flow of extracting data from graphs using the app is as below:

1. Choose the graph type from the list, looking for:
    a. The graph type
    b. If you will need data for both X and Y (like scatter plots)
    c. If the graph has the individual subjects on it, as well as a mean/median (if so tick the 'include individuals' box)
        i. You will only need to tick 'include individuals' for the dot plots, which are graphs numbered 4, 11, 17, 23, 19
2. For ease, when choosing from the list if it has a mean/median and error bars please select **Mean and SEM**. This is to keep reviewers in the trial consistent.

3. Enter the number of Data Series and Data points **per series** (not in total). If the graph has a mean and individuals then the number of data points per series is 1 as you do not need to count the individual data points.
4. Select whether you will need to measure one or both axes
    a. Both axes will only need to be selected for scatter plots and ROC curves.
    b. To help you make this decision, consider the axis labels – discrete categories, dose and time won't need to be extracted, but %, response, Y, units will.
        i. Line graphs (numbers 2, 7, 9, 15, 21, 27) only need **one axis** extracting
5. Press 'Next'
6. Click on the beginning and then the end (i.e. left to right for x-axis, bottom to top for y-axis) of the axes to be measured, then on 'Complete!' on the right hand side
    a. If both, then click for the **X axis first**
7. Enter the axis scale and click 'Ok'
8. A box will appear the correct size for you data series and points (if this has not appeared it may be because your browser window isn't maximised). Change the names of the series to correspond with the labels for the data series.
    a. Tip: if you enter one, you can press tab to go to the next one
9. Click on the first box in the table for 'Mean' and then click the corresponding point on the graph. This will automatically enter into the box and then you can click straight onto the variance for that point.
    a. For ease of comparison between reviewers please enter data points from **left to right** and then **bottom to top.**
10. To adjust a point, click on the data entered into the box for that point. The point will be highlighted on the graph and you can move it using the keyboard arrow keys
    a. Tip: To move it faster, hold down Shift whilst using the arrow keys
11. Once you have entered all points, click 'Save Data', which will take you back to the page of all graphs, where you can continue on with the next graph

Other details

- Try and keep the browser window **maximised** throughout the trial as otherwise the boxes outlining the graphs on the front page may misalign. If this happens you can move the boxes back by dragging them – however, ensure the cursor is the **hand,** otherwise you will end up drawing a new box.
    - If you draw a new box by accident, click it so the red outline changes to black and press 'delete' on your keyboard
- For Scatterplots – select the data type as 'XY scatter plot', set the number of data series as 1 and then count the number of data points and enter that as 'data points'.
    - When entering data for this you will only see the X data in the box, but the Y data is also be collected (you can view this by selecting 'View Data')
- If there is no variance, like in scatter plots or a couple of the dot plots, then select 'Mean Only' even if it is technically not a mean.

What next?

After completing the data extraction, please contact Fala (f.cramond@imperial.ac.uk) for the next steps.

Many thanks again for participating, your time is truly appreciated.