



# Feasibility Explorer

## Instructions for using the Feasibility Explorer

The Feasibility Explorer is the tool for selecting proband collectives in the process of submitting a usage application for data and/or biomaterials in the DZHK. Applicants can use the Feasibility Explorer to obtain an overview of data and biomaterials available in the DZHK. By means of different filter settings, the population can be limited and a collective, which is suitable to examine the underlying scientific problem of a usage application, can be formed. If the size of the selected proband collective is sufficient to answer the problem, it is advisable to file a usage application for data and/or biomaterials. The selected filter settings can be exported by the 'Generate Token' function and transferred to the usage application.

On the basis of the following figure 1, the functions and the use of the Feasibility Explorer are explained in more detail in the following sections.

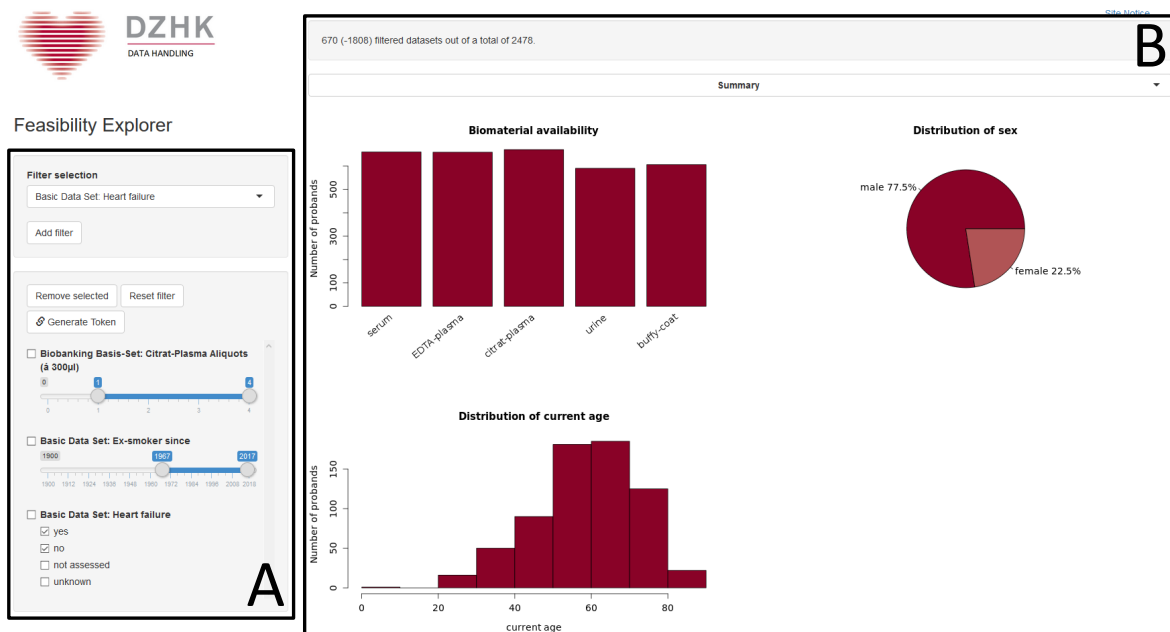


Abbildung 1: Feasibility Explorer

## Selecting proband collectives

Section A of figure 1 depicts the various functionalities available in the Feasibility Explorer for the selection of proband collectives. Functions for filtering data from the population, removing set filters and saving performed filter settings are described in the following sections.

### Filtering data

The population can be limited by different filter settings and thus a collective according to specific requirements can be formed. The addition of a filter causes a further restriction of the previous partial data set.

The available characteristics can be selected in the filter menu (see figure 2). It is possible to scroll through the selection or enter a term directly. The Backspace key can be used to reset the selection in the search field. The characteristic to be filtered must be added using *Add filter*.

The figure consists of two screenshots of a web interface titled "Filter selection".

The top screenshot shows a search input field with the placeholder text "Enter filter here and click 'Add filter'.". Below the input field is a dropdown menu with the following options:

- Biobanking Basis-Set
- Biobanking Basis-Set: Serum Aliquots (á 300µl)
- Biobanking Basis-Set: EDTA-Plasma Aliquots (á 300µl)
- Biobanking Basis-Set: Citrat-Plasma Aliquots (á 300µl)
- Biobanking Basis-Set: Urine Aliquots (á 300µl)
- Biobanking Basis-Set: Buffycoat Aliquots (á <300µl)

The bottom screenshot shows the same interface with the dropdown menu closed. The search input field now contains the text "Biobanking Basis-Set: Citrat-Plasma Aliquots (á 300µl)". Below the input field is a button labeled "Add filter".

Abbildung 2: Filter selection

For numeric variables, the filter is set to the 1st and 99th percentiles per default, for discrete variables, the filter is set to the most common options. Every newly added filter is displayed in the filter list (see figure 3) and the graphics (see section B of figure 1) are automatically updated according to the set values.

Any number of filters can be selected, which are displayed in the filter list according to the order from the drop-down menu. Checkboxes and sliders can be used to adjust the filter settings.

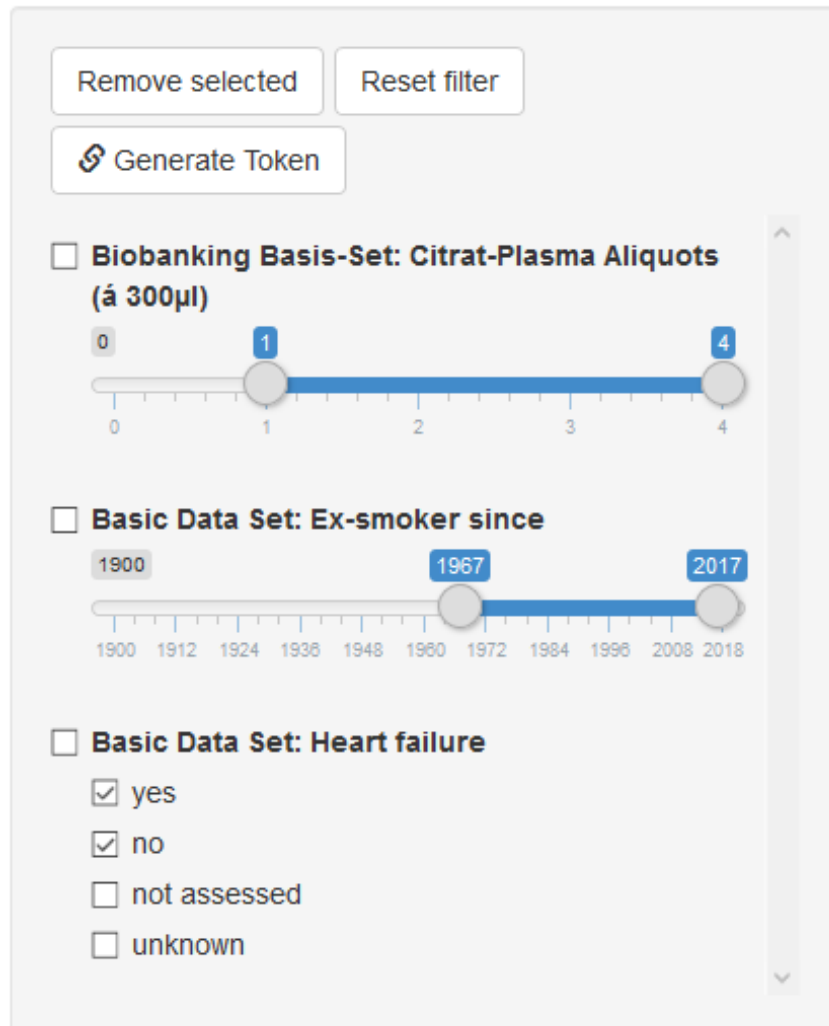


Abbildung 3: List of selected filters

### Removing added filters

There are two ways to delete added filters, both presented in figure 3: The buttons (1) *Remove selected* and (2) *Reset filter*.

Checkboxes in front of the listed filters can be used to select several of these filters. *Remove selected* removes these selected filters, whereas *Reset filter* resets all filter settings. The graphics are updated according to the action performed.

## Saving filter settings

Since the currently selected filters are passed to the URL of the Feasibility Explorer, the compilation of the collective can be continued at a later point in time by saving the web page via the browser's bookmark function. The same can be done using the *Generate Token* button (see figure 3) of the Feasibility Explorers. The filter settings can be saved in form of a generated short URL, that can be added to the browser's favorites or shared with others (see figure ??).

In particular, the highlighted 7-digit character string (see figure ??) is used for submitting a usage application for data and/or biomaterials: In the application form, this character string must be included in order to specify the collective and therefor the required data and biomaterials.

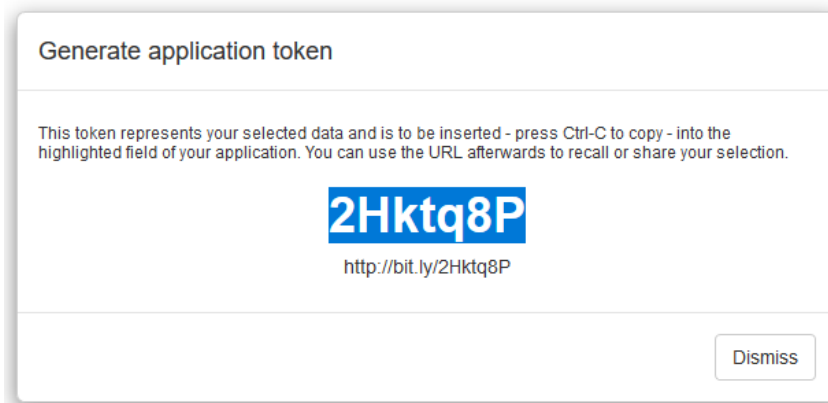


Abbildung 4: Saving filter settings

## Graphical information display

Section B of figure 1 depicts the graphical display of selected data sets in the Feasibility Explorer. Detailed information about the composed proband collective are shown in a graphic, which can be chosen from a list of graphics via a drop-down menu. For example, the age and sex distribution of the partial dataset, the availability of biomaterials as well as an overview consisting of the individual graphics are displayed. In order to avoid re-identification, detailed information are no longer displayed if the filter settings lead to a partial data set with less than ten probands.

Above the graphics, information about the number of probands are shown: the total number, the current number of probands in the selected partial data set and in parentheses the number of data sets filtered out.