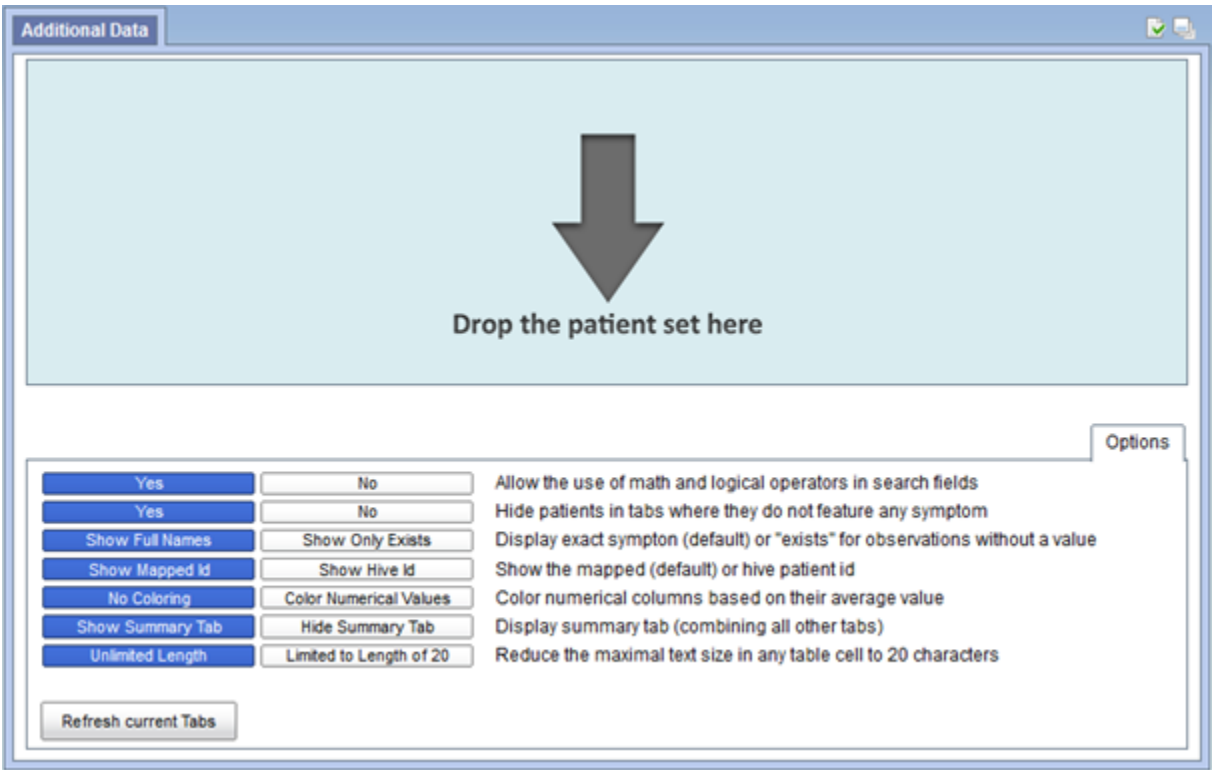


# 420. Manual / Features

The usage of the plugin is quite simple. Just log into the i2b2 webclient, choose **Analysis Tools** and choose **Additional Data** from the list of plugins. The following plugin screen should appear:



Using the now displayed **Options** tab it is possible to decide for a number of persistent options. However, these options can also be changed while data is displayed. In this case, the button **Refresh Current Tabs** must be pressed. This function of the options will now explained shortly.

|  |   |
|--|---|
| Allow the use of math and logical operators in search fields                 | <p>If this option is enabled it is not only possible to filter table columns using matching character sequences. It is also possible to use the mathematical operators <math>&gt;</math>, <math>&gt;=</math>, <math>&lt;</math>, <math>&lt;=</math> in columns that contain only numbers to filter for specific numerical ranges.</p> <p>Also in all columns <math>=</math> can be used to find an absolute match to the search term. <b>[empty]</b> can be used to find empty cells and <b>[filled]</b> can be used to find filled cells.</p> <p>Additionally <b>&amp;&amp;</b> can be used to combine two different conditions using the logical AND statement. Similarly <b>  </b> can be used to combine two different conditions using the logical OR statement.</p> |
| Hide patients tabs where they do not feature any symptom                     | <p>This will hide patients in specific modifier tabs if they do not feature any of the concepts shown in this tab.</p>  |
| Display exact symptom (default) or "exists" for observations without a value | <p>There may exist concepts in your database that only define that a patient has a specific symptom without having any values for this concept. This option sets if instead of a value, the specific concept name should be displayed in the cell, or if only an <b>existing</b> text should be shown.</p>  |
| Show the mapped (default) or hive patient id                                 | <p>This option set if the unique but more database bounded hive id should be displayed in the patient id column or if the particular mapped id of the patient should be displayed.</p>  |
| Color numerical columns based on their average value                         | <p>If this feature is enabled numerical cells will be tinted based on the average numerical value in the column. Values near to the average will be tinted green, values far from the average will be tinted red.</p>   |
| Display summary tab (combining all other tabs)                               | <p>If this option is enabled a summary tab will be created combing all information of all other tabs. Keep in mind that this tab tends to be huge.</p>  |
| Reduce the maximal text size in any table cell to 20 characters.             | <p>This option is only used to allow a fast overview of the data. It will simply cut text in cells after they have reached a length of 20 characters.</p>   |

Now, to get additional information about the an previous query just drag and drop a query from the list of **Previous Queries** onto the big region with the text **Drop The Patient Set Here**. After this was done, the retrieval of the information may take a while. When finishing, this tabular overview will be shown, in this example case for a query that have queried all male patients of any age, who are smokers once a day or once a week and have biomaterial left in the freezers.

| Additional Data  |                      |         |          |
|--|----------------------|---------|----------|
| Showing: Age-mal-Onc-Amo@13:23:48 [7-16-2015] [rlodahl] - You can still drop another query here. |                      |         |          |
| Patient Data   | IDRT-CSV-Biomaterial | Summary | Options  |
| Patient ID   | Smoking Habits       | Gender  | Age      |
|  |                      |         |          |
| 15   | Once per Day         | male    | 38.00000 |
| 22   | Once per Day         | male    | 50.00000 |
| 26   | Once per Day         | male    | 29.00000 |
| 28   | Once per Day         | male    | 59.00000 |
| 31   | 1/Week               | male    | 86.00000 |
| 43   | Once per Day         | male    | 55.00000 |
| 48   | Once per Day         | male    | 81.00000 |
| 50   | 1/Week               | male    | 44.00000 |
| 53   | Once per Day         | male    | 33.00000 |
| 58   | 1/Week               | male    | 48.00000 |
| 61   | Once per Day         | male    | 65.00000 |
| 85   | Once per Day         | male    | 42.00000 |
| 94   | 1/Week               | male    | 75.00000 |
| 95   | 1/Week               | male    | 80.00000 |
| 98   | 1/Week               | male    | 26.00000 |
| 100  | 1/Week               | male    | 29.00000 |
| 116  | Once per Day         | male    | 66.00000 |
| 117  | 1/Week               | male    | 62.00000 |
| 122  | Once per Day         | male    | 47.00000 |
| 127  | 1/Week               | male    | 90.00000 |
| 131  | Once per Day         | male    | 54.00000 |
| 132  | 1/Week               | male    | 34.00000 |
| 145  | Once per Day         | male    | 80.00000 |
| 148  | Once per Day         | male    | 41.00000 |

The top row shows three tabs: **Patient Data**, **IDRT-CSV-Biomaterial** and **Summary**. The patient data tab will always display data directly related to the patient. All other tabs will display data related to a modifier which is related to the patient. In this case we have required a biomaterial modifier, namely the Amount Left. It is recognizable, that multiple biomaterials for the same patients were found. As in general, no linkage between multiple modifiers for one patient can be made; all occurrences will be shown independent. The Summary Tab will finally combine all other tabs to one single tabular overview.

| Additional Data  |                      |
|--|----------------------|
| Showing: Age-mal-Onc-Amo@13:23:48 [7-16-2015] [rlodahl] - You can still drop another query here. |                      |
| Patient Data   | IDRT-CSV-Biomaterial |
| Summary  | Options              |
| Patient ID   | Amount Left          |
| 15   | 56ml                 |
| 15   | 72ml                 |
| 15   | 56ml                 |
| 15   | 52ml                 |
| 22   | 28ml                 |
| 22   | 68ml                 |
| 22   | 41ml                 |
| 22   | 55ml                 |
| 22   | 90ml                 |
| 26   | 52ml                 |
| 26   | 34ml                 |
| 26   | 83ml                 |
| 28   | 89ml                 |
| 28   | 72ml                 |
| 28   | 72ml                 |
| 28   | 42ml                 |
| 31   | 27ml                 |
| 31   | 83ml                 |
| 31   | 59ml                 |
| 31   | 75ml                 |
| 31   | 50ml                 |
| 31   | 89ml                 |
| 31   | 88ml                 |
| 43   | 79ml                 |
| 43   | 91ml                 |
| 43   | 20ml                 |

Now, by clicking on one of the table headers, the table can be sorted ascending or descending using this column. Per default the table is sorted by ascending patient ids. The input fields below the table headers can be used to filter the contents of the table using the syntax elucidated earlier. Multiple filters can be active at once.

| Additional Data  |                      |         |          |             |
|--|----------------------|---------|----------|-------------|
| Showing: Age-mal-Onc-Amo@13:23:48 [7-16-2015] [rlodahl] - You can still drop another query here. |                      |         |          |             |
| Patient Data   | IDRT-CSV-Biomaterial | Summary | Options  |             |
| Patient ID   | Smoking Habits       |         |          | Amount Left |
| 15   | Once per Day         | male    | 38.00000 | 56ml        |
| 15   | Once per Day         | male    | 38.00000 | 72ml        |
| 15   | Once per Day         | male    | 38.00000 | 56ml        |
| 15   | Once per Day         | male    | 38.00000 | 52ml        |
| 22   | Once per Day         | male    | 50.00000 | 28ml        |
| 22   | Once per Day         | male    | 50.00000 | 68ml        |
| 22   | Once per Day         | male    | 50.00000 | 41ml        |
| 22   | Once per Day         | male    | 50.00000 | 55ml        |
| 22   | Once per Day         | male    | 50.00000 | 90ml        |
| 26   | Once per Day         | male    | 29.00000 | 52ml        |
| 26   | Once per Day         | male    | 29.00000 | 34ml        |
| 26   | Once per Day         | male    | 29.00000 | 83ml        |
| 28   | Once per Day         | male    | 59.00000 | 89ml        |
| 28   | Once per Day         | male    | 59.00000 | 72ml        |
| 28   | Once per Day         | male    | 59.00000 | 72ml        |
| 28   | Once per Day         | male    | 59.00000 | 42ml        |
| 31   | 1/Week               | male    | 86.00000 | 27ml        |
| 31   | 1/Week               | male    | 86.00000 | 83ml        |
| 31   | 1/Week               | male    | 86.00000 | 59ml        |
| 31   | 1/Week               | male    | 86.00000 | 75ml        |
| 31   | 1/Week               | male    | 86.00000 | 50ml        |
| 31   | 1/Week               | male    | 86.00000 | 89ml        |
| 31   | 1/Week               | male    | 86.00000 | 88ml        |
| 43   | Once per Day         | male    | 55.00000 | 79ml        |
| 43   | Once per Day         | male    | 55.00000 | 91ml        |
| 43   | Once per Day         | male    | 55.00000 | 20ml        |

Furthermore, by clicking on the floppy symbol of the currently active tab or by right clicking on the table a context menu will be shown. This offers the possibility to export the current table as a CSV. If the menu is used on the summary tab, there will also be options to hide or unhide specific modifiers from the summary tab. Additionally, the option exists to unhide all hidden modifiers at once.

Finally, at any time a new query can be loaded by dragging another query from the **Previous Query** list and dropping it on the topmost region saying **You Can Still Drop Another Query Here.**