

Look Up Test Article Workflow Help

Page Navigation (Quick Links):

Function

- 1) Search Test Article(s)
 - a) Searching with CASRN List
 - b) All NTP Test Articles
- 2) Select Test Article(s)
 - a) Select by Available Data
 - b) Select Test Article(s)
- 3) NTP Conclusions & Summaries
 - a) Bioassay
 - b) Genetox
- 4) Search results
- 5) Example Section
 - a) Example 1: Bone Neoplasms, Micronucleus & Ames
 - b) Example 2: Cobalt Bioassay & Non Neoplastic Findings
- 6) Additional Instructions/Information

Function

The Look Up Test Articles Workflow allows users to search conclusions and statistical summaries for all NTP test articles by CASRN. Search results are provided as a single high level table summary table with additional options to drill down to the study details behind the calls.

Once the test article list is selected a workbook will be built by selecting desired bioassay and genetox conclusions and summaries. Available information include NTP levels of carcinogenicity, statistical summaries such as neoplastic and non neoplastic lesion incidence, and genetic toxicology study results.

The following tutorial details how to use the functions available in the Test Article Lookup Workflow.

From the CEBS Homepage (<http://tools.niehs.nih.gov/cebs3/ui/>), click the 'Look Up Test Articles' icon under Workflows. This workflow can also be accessed at this address: <http://tools.niehs.nih.gov/cebs3/ncsw/>. The Test Article Lookup has three steps at which different search criteria can be entered or modified:

- STEP 1: Search test article(s)
- STEP 2: Select test article(s)
- STEP 3: Select NTP Conclusions & Summaries

This help document will describe how to enter criteria for each step.

1) Search Test Article(s)

a) Searching with CASRN List

If you know one or more CAS numbers (CASRN) you would like to search for, follow these instructions. If you do not have a CASRN list skip to [All NTP Test Articles](#).

- Enter known CASRN(s) in the provided space. Each CASRN should be placed on a separate line.
 1. If CASRN is known for all interested test articles, enter and select the 'Next' icon.
 2. If unknown CASRN(s) are desired in addition to known CASRN, enter the known CASRN(s), and then use the [All NTP Test Articles](#) instructions to search for additional test articles below.
- The CASRN(s) selected will appear on the next screen.

b) All NTP Test Articles

Use these instructions if you do not know the CASRN(s), but you do know part or all of the test article name or CASRN.

Note: Test Article Names include only NTP names, and do not include synonyms.

- When the 'All NTP Test Articles' icon is selected the next screen will display a full list of NTP Test Articles. You can scroll through the list of test articles, or use the Filter: box at the top of the list to search and limit the test articles displayed.
- Make selections by clicking on the desired test article row.
- The test article you identify will appear on the right under Selected Test Articles.
Note: Checkboxes are next to each selected test article for de-selection.
- Once the desired test articles have been identified, click 'Next'.

2) Select Test Article(s)

Once you have reached STEP 2, you will see a list of the test articles you selected in STEP 1. At this point you will be able to further select or de-select the test articles for which you

want to obtain results. The page will display a table which lists the CASRN(s), Test Article(s), and Available Data types for each selection.

Note: To search additional CASRN(s) select Back to return to STEP 1.

If no data is available for any of the test articles, this will be indicated in the Available Data column

a) Select by Available Data

Three types of data exist based on the test article:

1. Bioassay (BA)
2. Bioassay (Pre 1982)
3. Genetox (GT)

- You can use these options above the table to select or deselect the test articles for which these types exist.
- If you would like all test articles to appear in results, click the 'Next' icon. If you would like to further filter results by individual test articles proceed to [Select Test Articles](#).

Note: If you deselect a type of data to limit the selected test articles, that data type may still be displayed, depending on your selections in STEP 3.

b) Select Test Article(s)

Select or de-select the test article of interest by clicking the checkbox on the desired row.

Note: Test Article Lookup only contains long term bioassay results.

3) NTP Conclusions & Summaries

In STEP 3, you can select which results, conclusions, and/or summaries you would like to display for your selected test articles.

Note: To modify test article list select Back to return to STEP 2.

a) Bioassay

If you want to display Bioassay information click the Bioassay row to select from the following options:

i) Conclusions

Conclusion results include All NTP studies, including pre- and post-1982 studies.

- Select Level of Evidence & chemical-related site specific neoplasms by clicking the checkbox.

ii) Summaries

Summaries are only available for studies conducted after 1982).

- Select summaries by clicking the checkbox next to the summary of interest.
- Select and de-select all options (e.g. strain, organ) by clicking the checkbox next to the option.
- Neoplastic Incidence
 - **Strain and species:** All available strain and species for the test article list
 - **Significant organs (p values ≤ 0.05):**
 - **All organs:** Results will include all statistically significant neoplasms for all organs.
 - **Select Organs:** Select up to three of the displayed organs.
- Non Neoplastic Incidence
 - **Strain and species:** All available strain and species for the test article list.
 - **Significant organs (p values ≤ 0.05):**
 - **All organs:** Results will include all statistically significant non neoplasms for all organs.
 - **Select Organs:** Select up to three of the displayed organs.

b) Genetox

If you want to display genetic toxicity results, click the Genetox row to select from the following options:

- Bacterial Mutagenicity
- Micronucleus
- Rodent Cytogenetics
- Mammalian Cell Cytogenetics
- Mammalian Cell Mutagenicity and
- Drosophila Germ Cell Mutagenicity

Once you have selected the conclusions and summaries you would like to view/download, click the 'Next' button at the bottom of the page. If you would like to make changes to your test article searches or selections, click the Back button.

4) Search results

The next screen will give results to the previously selected parameters. The first columns will show the test article name, CASRN, and a link to the abstract for the test articles you selected in STEP 1 and 2. Other columns will display the conclusions and summaries you selected in STEP 3.

For some selections, more specific data can be displayed. Additional data is indicated by a “+” in the cell or column header for any given test or result.

- Click on the “+” next to any desired results.
- This will bring you to a new window where the associated data may be viewed or downloaded.
- To download any report, click the download/save icon at the top of the page (also see [Additional Instructions](#)).

The entire list of results can be downloaded by clicking the Download icon at the top of the page. For full Download instructions, see the [Additional Instructions](#) section below.

5) Example Section

In this section, we will detail a few examples of how to use the Test Article Lookup Workflow. These examples should give you an idea of the types of questions that can be answered with the Test Article Lookup Workflow.

a) Example 1: Bone Neoplasms, Micronucleus & Ames

For this example, we will use a list of CASRN’s to search for neoplastic and genotox findings. We are interested in neoplastic findings in the bone or bone marrow, and micronucleus and salmonella genotox results.

- 1) **Search test articles:** For this example, we will use a list of CASRN’s. Enter the following list (or your own list), with each CASRN on a separate line, in the Search test articles box and select ‘Next’.

96-13-9
1271-19-8
67774-32-7
2429-74-5
79-11-8
57-66-9
103-90-2
7681-49-4
10599-90-3

- 2) **Select test articles:** The next page will show what types of data are available for these test articles. We are interested in both bioassay and genotox data. Click the boxes next to any test articles in the list that do not have both types of data. When finished, click the ‘Next’ button.

The follow CASRN(s) would be de-selected in this step:

10599-90-3

96-13-9

Note: 96-13-9 would be de-selected because it only includes Pre 1982 data which will not have neoplastic results.

- 3) **Select NTP Conclusions and Summaries:** Follow these steps to select the appropriate neoplastic and genetox results.
 - a) Click the Bioassay row to show options. We are interested in neoplastic results for specific organs.
 - b) Click the box next to Neoplastic incidences to select these results and more options will appear. Leave all Strains and Species selected.
 - c) Change the specific organs from All organs to Select organs, and a list of the organs with findings will appear.
 - d) Select All Organs, Bone, and Bone Marrow to display any incidences that might relate to the bone.
 - e) Because we are also interested in Genetox information, then click the Genetox row to display options. Your previous selections under Bioassay will remain selected.
 - f) Check Micronucleus and Salmonella.
 - g) Click the 'Next' button to display results.
- 4) **Results:** The results table displays the Test Article, CASRN, and a link to the Abstract for each test article. Then displayed are the desired Conclusions and Summaries, grouped by result type, then species, then sex. You can use the Download button at the top of this page to save this page as an excel file.

Note: For download instructions, see [Additional Instructions](#) at the end of this tutorial.

b) Example 2: Cobalt Bioassay & Non Neoplastic Findings

For this example, we will not start with a list of CASRN's, but will search for all test articles with cobalt in the name. We are interested in bioassay and non neoplastic results for any cobalt test articles. We are also interested if there are sex differences in any non neoplastic lesion incidences.

- 1) **Search test articles:** We will search for these test articles using the All NTP Test Articles button.
 - a) Click the All NTP Test Articles button.
 - b) Type 'cobalt' in the filter box to limit the test articles with cobalt in their names.

- c) Click on each row to add these test articles to the Selected Test Article List.
- d) When finished, click the 'Next' button
- 2) **Select test articles:** The next page will show what types of data are available for these test articles. For some test articles there may be no data available.
 - a) Because we are not interested in Genetox results, click to uncheck the box by the Genetox option at the top. This will remove test articles that only have Genetox data.
 - b) Click the 'Next' button.
- 3) **Select NTP Conclusions and Summaries:** Follow these steps to select the appropriate bioassay conclusions and non neoplastic summary results.
 - a) Click the Bioassay row to show options.
 - b) Check the box next to Level of Evidence and chemical-related site specific neoplasms.
 - c) Click to check the box next to Non neoplastic incidence. Because we are interested in all strains, species, and organs, leave the default options for those fields.
 - d) Click the 'Next' button.
- 4) **Results:** The results table displays the Test Article, CASRN, and a link to the Abstract for each test article. Then displayed are the desired Conclusions and Summaries, grouped by result type, then species, then sex. You can use the Download button at the top of this page to save this page as an excel file.
- 5) **Results cont.:** We are interested in findings for an organ in one sex and not the other. For the B6C3F1 Mouse, notice that the males, and not females, have findings in the spleen for both Cobalt and Cobalt sulfate heptahydrate. To display more information about the non neoplastic incidences in male B6C3F1 mice follow the instructions below:
 - a) Click the '+' next to Male underneath the B6C3F1 Mouse heading. This will open a window that displays the Test Article, Study, Organ, Morphology, Dose, and statistical information these studies.
 - b) Click Download at the top of this page to download an excel file of this table.
 - **Optional: Excel filtering example:**
 - i. Open the downloaded excel file.
 - ii. Select a cell in the header row by clicking on that cell (e.g. the Test Article cell at A5).
 - iii. Navigate to the Data menu/tab in Excel.
 - iv. Select Filter.

- v. Dropdown arrows will appear in each header cell of the table. If you want to limit the displayed results to only results for the spleen, select the Organ header cell dropdown arrow.
- vi. In the Search box, type 'spleen' and press Enter.
- vii. The rows of the table will be filtered to show only the incidence statistics for the spleen.

Note: For full download instructions, see [Additional Instructions](#) at the end of this tutorial.

6) Additional Instructions/Information

- Downloading and displaying data in Excel
 - Select the Download Data Icon
 - The downloaded file will be saved to your computer as an Excel worksheet. Depending on your browser settings, the file may open.
 - If the file does not open, you may need to use the dialog box in your browser, or locate the saved file on your computer and open it using Microsoft Excel.
 - Once the file is open in Excel, choose 'Save As' from the 'File' menu and resave this file as an Excel file type. This will greatly speed up future viewings of this file.
- Flash movie running flex code for CEBS indicates a software platform is being used to create graphics or texts for CEBS
- CEBS data may be cited by navigating to the CEBS Support page, and selecting the [Citing CEBS](#) document under FAQs. Here, instructions can be found on citing NTP Data as well as non-NTP data in CEBS.