**Lungcancer Website Test Report**

06/03/2016

**1. Introduction**

This document is the smoking test report of the “Lungcancer” website updated at 06/03/2016.

**2. Test summary**

1 - 2 functions of each page was tested. No failure was found.

**3. Test Plan**

1. Home page appearance
2. Home page search function candidate suggestion
3. Home page search function
4. Experiments page database connection
5. Datasetsearch page exhibition
6. Datasetsearch page database search graph
7. Microarray page exhibition
8. Microarray page jump
9. CNV page exhibition
10. CNV page jump
11. MUTATION page exhibition
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14. Patient image page exhibition
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16. Gene analysis page jump
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18. Survival analysis page exhibition
19. Survival analysis page exhibition with option
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21. Comparative analysis page exhibition with option
22. Integrated analysis page exhibition
23. Coexpression page exhibition
24. Coexpression page jump
25. Discover page exhibition
26. Genome comparison page exhibition
27. Genome comparison result page exhibition
28. Genome comparison result filter
29. Download genome comparison file
30. Support page exhibition
31. Footer

**4. Test Results**

Test case 1:

Name: Home page appearance

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Close the browser.

Expected result: “The Update List” appears at the right side of the page.

Real result: “The Update List” appears at the right side of the page.

Status: Pass.

Test case 2:

Name: Home page search function candidate suggestion

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Input “a” in the search input column.

Step 3: Close the browser.

Expected result: Appears five candidate names of genes initials with “A”.

Real result: Appears five candidate names of genes initials with “A”.

Status: Pass.

Test case 3:

Name: Home page search function

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Input “a” in the search input column.

Step 3: Choose “A1BG” from the suggested candidates.

Step 4: Press “search” button.

Step 5: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/genesearch.php” and one search result appears with “Symbol” value “A1BG”.

Real result: The page jumps to “http://198.215.54.66/lungcancer/genesearch.php” and one search result appears with “Symbol” value “A1BG”.

Status: Pass.

Test case 4:

Name: Experiments page database connection

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Click on the “EXPERIMENTS” tab.

Step 2: Close the browser.

Expected result: Datasets of microarray show, the first shown item has a value of 440 in “Samples” field.

Real result: Datasets of microarray show, the first shown item has a value of 440 in “Samples” field.

Status: Pass.

Test case 5:

Name: Datasetsearch page exhibition

Scenario:

Step 1: Open “198.215.54.66/lungcancer/experiments.php” in browser.

Step 2: Click on the value of “Dataset” field of the first item in the “Datasets of Microarray” table.

Step 3: Close the browser.

Expected result: The page jumps to the “http://198.215.54.66/lungcancer/datasetsearch.php?datasetid=14” page, and exhibits the information and graph of “Lung\_Shedden\_2008”.

Real result: The page jumps to the “http://198.215.54.66/lungcancer/datasetsearch.php?datasetid=14” page, and exhibits the information and graph of “Lung\_Shedden\_2008”.

Status: Pass.

Test case 6:

Name: Datasetsearch page database search graph

Scenario:

Step 1: Open “198.215.54.66/lungcancer/datasetsearch.php?datasetid=14” in browser.

Step 2: Click on the “Race” button on the right of the summary graph.

Step 3: Close the browser.

Expected result: The graph changes.

Real result: The graph changes.

Status: Pass.

Test case 7:

Name: Microarray page exhibition

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Click on the “MICROARRAY” button of the “EXPERIMENTS” column.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/microarray.php”. Datasets of microarray show, the first shown item has a value of 440 in “Samples” field.

Real result: The page jumps to “http://198.215.54.66/lungcancer/microarray.php”. Datasets of microarray show, the first shown item has a value of 440 in “Samples” field.

Status: Pass.

Test case 8:

Name: Microarray page jump

Scenario:

Step 1: Open “198.215.54.66/lungcancer/microarray.php” in browser.

Step 2: Click on the value of “Dataset” field of the first item in the “Datasets of Microarray” table.

Step 3: Close the browser.

Expected result: The page jumps to the “http://198.215.54.66/lungcancer/datasetsearch.php?datasetid=14” page, and exhibits the information and graph of “Lung\_Shedden\_2008”.

Real result: The page jumps to the “http://198.215.54.66/lungcancer/datasetsearch.php?datasetid=14” page, and exhibits the information and graph of “Lung\_Shedden\_2008”.

Status: Pass.

Test case 9:

Name: CNV page exhibition

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Click on the “CNV” button of the “EXPERIMENTS” column.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/cnv.php”. Datasets of CNV show, the shown item has a value of 201 in “Samples” field.

Real result: The page jumps to “http://198.215.54.66/lungcancer/cnv.php”. Datasets of CNV show, the shown item has a value of 201 in “Samples” field.

Status: Pass.

Test case 10:

Name: CNV page jump

Scenario:

Step 1: Open “198.215.54.66/lungcancer/cnv.php” in browser.

Step 2: Click on the value of “Dataset” field of the first item in the “Datasets of CNV” table.

Step 3: Close the browser.

Expected result: The page jumps to the “http://198.215.54.66/lungcancer/datasetsearch.php?datasetid=101” page, and exhibits the information and graph of “Lung\_Micke\_2011”.

Real result: The page jumps to the “http://198.215.54.66/lungcancer/datasetsearch.php?datasetid=101” page, and exhibits the information and graph of “Lung\_Micke\_2011”.

Status: Pass.

Test case 11:

Name: MUTATION page exhibition

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Click on the “MUTATION” of the “EXPERIMENTS” column.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/mutation.php”.

Real result: The page jumps to “http://198.215.54.66/lungcancer/mutation.php”.

Status: Pass.

Test case 12:

Name: IMAGING page exhibition

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Click on the “IMAGING” of the “EXPERIMENTS” column.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/imaging.php”, and the items of datasets of imaging show.

Real result: The page jumps to “http://198.215.54.66/lungcancer/imaging.php”, and the items of datasets of imaging show.

Status: Pass.

Test case 13:

Name: IMAGING page jump

Scenario:

Step 1: Open “198.215.54.66/lungcancer/imaging.php” in browser.

Step 2: Click on the value “TCGA.LUAD” of the Dataset field.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/patientlist.php?datasetid=106&datasetname=TCGA.LUAD”, and the items of patients inside this dataset show.

Real result: The page jumps to “http://198.215.54.66/lungcancer/patientlist.php?datasetid=106&datasetname=TCGA.LUAD”, and the items of patients inside this dataset show.

Status: Pass.

Test case 14:

Name: Patient image page exhibition

Scenario:

Step 1: Open “198.215.54.66/lungcancer/patientlist.php?datasetid=106&datasetname=TCGA.LUAD” in browser.

Step 2: Click on the value “TCGA-05-4244” in the “Patient ID” field.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/patientimage.php?patientid=DS106\_TCGA-05-4244”, and information and image of ID “TCGA-05-4244” show.

Real result: The page jumps to “http://198.215.54.66/lungcancer/patientimage.php?patientid=DS106\_TCGA-05-4244”, and information and image of ID “TCGA-05-4244” show.

Status: Pass.

Test case 15:

Name: Gene analysis page exhibition

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Click on “GENE ANALYSIS” tab.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/geneanalysis.php”.

Real result: The page jumps to “http://198.215.54.66/lungcancer/geneanalysis.php”.

Status: Pass.

Test case 16:

Name: Gene analysis page jump

Scenario:

Step 1: Open “198.215.54.66/lungcancer/geneanalysis.php” in browser.

Step 2: Input “EGFR” in the search column.

Step 3: Click on the “search” button.

Step 4: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/genesearch.php”, and show the item of the search result.

Real result: The page jumps to “http://198.215.54.66/lungcancer/genesearch.php”, and show the item of the search result.

Status: Pass.

Test case 17:

Name: Gene detail page exhibition

Scenario:

Step 1: Open “198.215.54.66/lungcancer/geneanalysis.php” in browser.

Step 2: Input “EGFR” in the search column.

Step 3: Click on the “search” button.

Step 4: Click on the value “1956” of the “Entrez ID” field.

Step 5: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/genedetails.php?entrezid=1956”, and shows the detail of “EGFR”.

Real result: The page jumps to “http://198.215.54.66/lungcancer/genedetails.php?entrezid=1956”, and shows the detail of “EGFR”.

Status: Pass.

Test case 18:

Name: Survival analysis page exhibition

Scenario:

Step 1: Open “198.215.54.66/lungcancer/genedetails.php?entrezid=1956” in browser.

Step 2: Click on the “Survival Analysis” tab.

Step 3: Click on the “View Results” button.

Step 4: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/survivalresult.php?jobid=56f43a162cfe10.36549987”, and the graphs of the analysis result show.

Real result: The page jumps to “http://198.215.54.66/lungcancer/survivalresult.php?jobid=56f43a162cfe10.36549987”, and the graphs of the analysis result show.

Status: Pass.

Test case 19:

Name: Survival analysis page exhibition with option

Scenario:

Step 1: Open “198.215.54.66/lungcancer/genedetails.php?entrezid=1956” in browser.

Step 2: Click on the “Survival Analysis” tab.

Step 3: Click on the circle in front of “Race”.

Step 4: Click on the choosing column of “Race”.

Step 5: Click on “Asia”.

Step 6: Click on the “View Results” button.

Step 7: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/survivalresult.php?jobid=56ddc3927fb2d9.52441898”, and the graph of the analysis result show.

Real result: The page jumps to “http://198.215.54.66/lungcancer/survivalresult.php?jobid=56ddc3927fb2d9.52441898”, and the graph of the analysis result show.

Status: Pass.

Test case 20:

Name: Comparative analysis page exhibition

Scenario:

Step 1: Open “198.215.54.66/lungcancer/genedetails.php?entrezid=1956” in browser.

Step 2: Click on the “Comparative Analysis” tab.

Step 3: Click on the “View Results” button.

Step 4: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/companalysisresult.php?jobid=5751e4144b4f27.37360468”, and shows the graph.

Real result: The page jumps to “http://198.215.54.66/lungcancer/companalysisresult.php?jobid=5751e4144b4f27.37360468”, and shows the graph.

Status: Pass.

Test case 21:

Name: Comparative analysis page exhibition with option

Scenario:

Step 1: Open “198.215.54.66/lungcancer/genedetails.php?entrezid=1956” in browser.

Step 2: Click on the “Comparative Analysis” tab.

Step 3: Click on the circle in front of “Race” in “Group One” form.

Step 4: Click on the circle in front of “Race” in “Group Two” form.

Step 3: Click on the “View Results” button.

Step 4: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/companalysisresult.php?jobid=57520810bbe016.08900751”, and shows the graph.

Real result: The page jumps to “http://198.215.54.66/lungcancer/companalysisresult.php?jobid=57520810bbe016.08900751”, and shows the graph.

Status: Pass.

Test case 22:

Name: Integrated analysis page exhibition

Scenario:

Step 1: Open “198.215.54.66/lungcancer/genedetails.php?entrezid=1956” in browser.

Step 2: Click on the “Integrated Analysis” tab.

Step 3: Click on the “View Results” button.

Step 4: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/integritedanalysisresult.php?jobid=56ddd5f86daa67.68695211”, and shows the graph.

Real result: The page jumps to “http://198.215.54.66/lungcancer/integritedanalysisresult.php?jobid=56ddd5f86daa67.68695211”, and shows the graph.

Status: Pass.

Test case 23:

Name: Coexpression page exhibition

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Click on the “COEXPRESSION” of the “GENE ANALYSIS” column.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/coexpression.php”.

Real result: The page jumps to “http://198.215.54.66/lungcancer/coexpression.php”.

Status: Pass.

Test case 24:

Name: Coexpression page jump

Scenario:

Step 1: Open “198.215.54.66/lungcancer/coexpression.php” in browser.

Step 2: Input “EGFR” in the “Input the gene names (use comma as separator):” column.

Step 3: Click “Run” button.

Expected result: The page jumps to “198.215.54.66/lungcancer/coexpressionresult.php?onegene=1&uploaderror=0” page.

Real result: The page jumps to “198.215.54.66/lungcancer/coexpressionresult.php?onegene=1&uploaderror=0” page.

Status: Pass.

Test case 25:

Name: Discover page exhibition.

Scenario:

Step 1: Open “198.215.54.66” in browser

Step 2: Click on the “DO A DISCOVERY” tab.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/discovery.php”.

Real result: The page jumps to “http://198.215.54.66/lungcancer/discovery.php”.

Status: Pass.

Test case 26:

Name: Genome comparison page exhibition

Scenario:

Step 1: Open “198.215.54.66/lungcancer/discovery.php” in browser.

Step 2: Click on the “GENOME-LEVEL-COMPARISON ANALYSIS” button.

Step 3: Close the browser.

Expected result: The page jump to “http://198.215.54.66/lungcancer/discover-genomecomparison.php”.

Real result: The page jump to “http://198.215.54.66/lungcancer/discover-genomecomparison.php”.

Status: Pass.

Test case 27:

Name: Genome comparison result page exhibition

Scenario:

Step 1: Open “198.215.54.66/lungcancer/discover-genomecomparison.php” in browser.

Step 2: Click on the “Submit” button.

Step 3: Close the browser.

Expected result: The page jumps to “http://198.215.54.66/lungcancer/discover-genomecomparisonresult.php?jobid=56f57cdfb617e9.64976408”, and exhibits the plot.

Real result: The page jumps to “http://198.215.54.66/lungcancer/discover-genomecomparisonresult.php?jobid=56f57cdfb617e9.64976408”, and exhibits the plot.

Status: Pass.

Test case 28:

Name: Genome comparison result filter

Scenario:

Step 1: Open “198.215.54.66/lungcancer/discover-genomecomparisonresult.php?jobid=56f57cdfb617e9.64976408” in browser.

Step 2: Click on the column of “P-value”.

Step 3: Click on “<0.0001”.

Step 4: Click on the “Filter” button.

Step 5: Close the browser.

Expected result: The page refreshes. The table show 10 of 32 entries.

Real result: The page refreshes. The table show 10 of 32 entries.

Status: Pass.

Test case 29:

Name: Download genome comparison file

Scenario:

Step 1: Open “198.215.54.66/lungcancer/discover-genomecomparisonresult.php?jobid=56f57cdfb617e9.64976408” in browser.

Step 2: Click on the “Download the complete result of genome comparison” button.

Step 3: Close the browser.

Expected result: Download a file named “genomecomparison.csv”.

Real result: Download a file named “genomecomparison.csv”.

Status: Pass.

Test case 30:

Name: Support page exhibition

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Click on “SUPPORT” tab.

Step 3: Close the browser.

Expected result: The page jumps to “198.215.54.66/lungcancer/support.php”.

Real result: The page jumps to “198.215.54.66/lungcancer/support.php”.

Status: Pass.

Test case 31:

Name: Footer

Scenario:

Step 1: Open “198.215.54.66” in browser.

Step 2: Click one the “more” link under the “Group Members” column.

Step 3: Close the browser.

Expected result: The page jumps to “https://qbrc.swmed.edu/members/”.

Real result: The page jumps to “https://qbrc.swmed.edu/members/”.

Status: Pass.