

To create a 2x2 table using BigMouth i2b2 query tool.

Step 1: Login into the BigMouth i2b2 query tool.

Step 2: Choose the variables for your 2x2 table. For example, let's create a 2x2 table to compare the odds of High caries risk between males and females. The variables here are Gender and Diagnosis of High and Low caries risk.

Step 3: Search for the diagnosis of "Caries risk high" in the Navigate Terms section on the left side of the BigMouth tool and drag it to Group 1 of the Query tool.

The screenshot displays the BigMouth i2b2 Query & Analysis Tool interface. On the left, the 'Navigate Terms' panel shows a hierarchical tree of dental terms. The 'Caries risk high' term is selected and dragged into Group 1 of the 'Query Tool' on the right. The 'Query Tool' has three groups, each with a 'Dates' field and an 'Exclude' checkbox. The 'Run Query' button is visible at the bottom of the query tool.

Step 4: Click on Run Query and select the option to display the number and gender breakdown of patients.

The screenshot displays the 'BigMouth Dental Data Repository / I2b2 Query & Analysis Tool' interface. On the left, a 'Navigate Terms' pane shows a hierarchical tree of dental terms, including 'Diagnosis' and 'Caries Risk'. The main workspace is a query builder with a 'Run Query' dialog box open. The dialog box contains the following text:

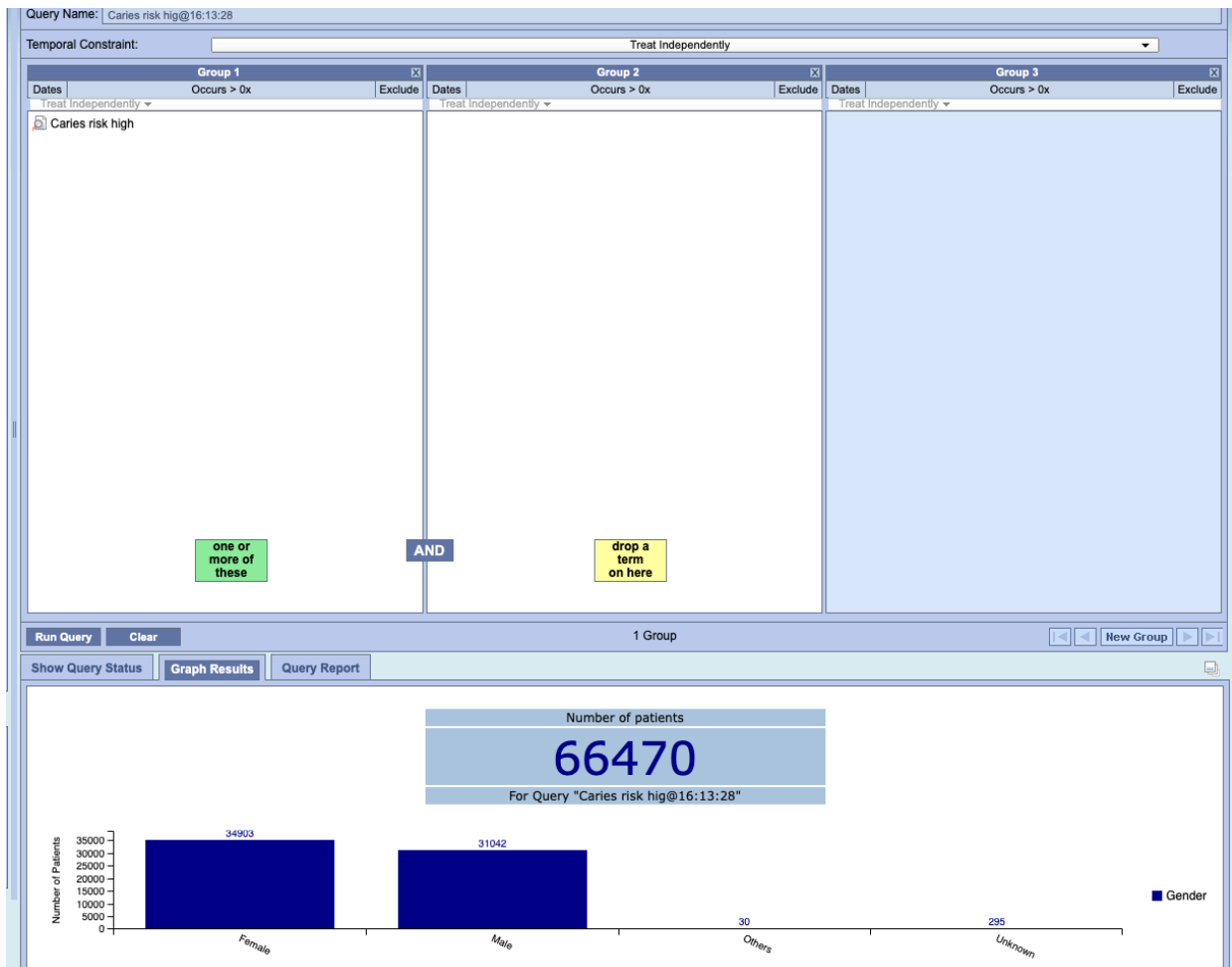
Please type a name for the query:
 Caries risk hg@ 16:13:28

Please check the query result type(s):

- Number of patients
- Gender patient breakdown
- Race patient breakdown

The background shows a query table with columns for 'Dates', 'Occlus = Dx', and 'Exclude'. The table is currently empty, and a 'drop a term on here' instruction is visible. The 'Run Query' dialog box has 'Ok' and 'Cancel' buttons.

Step 5: Review the results in the Query Results section and note the counts of Males and Females in the output.



Step 6: Clear the query results by clicking on "Clear".

Step 7: Repeat steps 3-6 for the diagnosis of "Caries risk low" by dragging it to Group 1 of the Query tool as shown below.

The screenshot shows the 'Query Tool' interface with the following elements:

- Left Panel:** A tree view of dental categories. Under 'Diagnosis', 'Caries risk low' is selected.
- Query Tool Window:**
 - Temporal Constraint:** Treat Independently
 - Groups:** Three groups are visible, each with a 'Dates' field set to 'Occurs > Dx' and an 'Exclude' checkbox.
 - Run Query Dialog:**
 - Query Name: Caries risk low@16:19:29
 - Checked options: Number of patients, Gender patient breakdown.
- Bottom Panel:** A list of 'Previous Queries' including 'Caries risk low@16:19:07' and 'At low risk for@15:09:10'.



Step 8: Use the results from both queries to create a 2x2 table, as illustrated below:

	High Caries Risk	Low Caries Risk	
Males	31042	4365	35407
Females	34903	5329	40232
	65945	9694	75639