

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

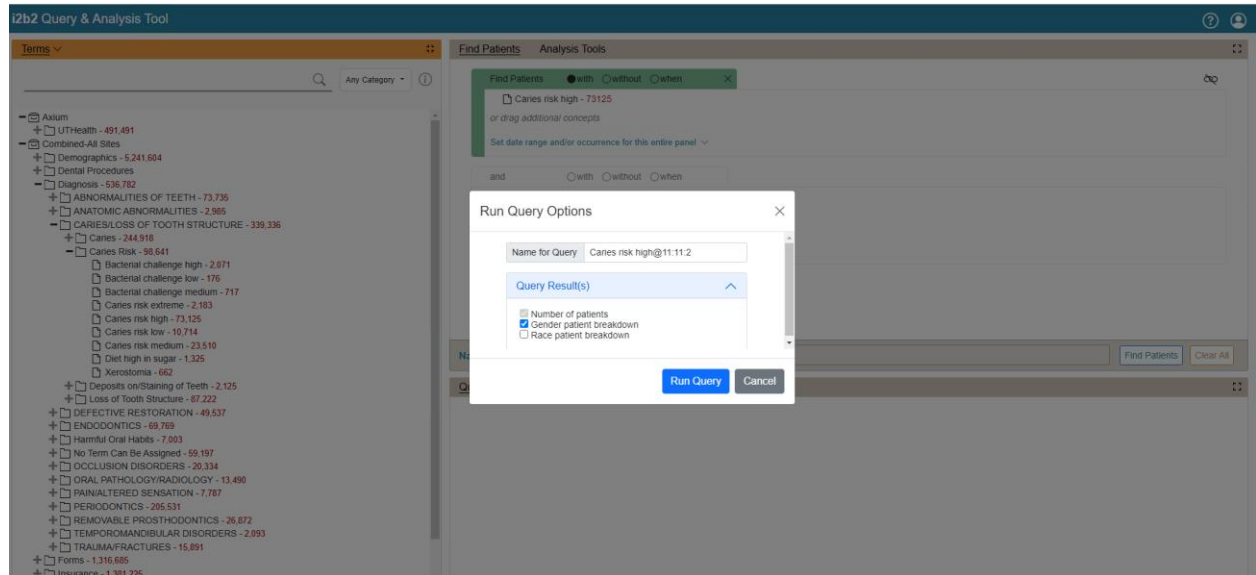
Step 1: Login into the BigMouth i2b2 query tool.

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.

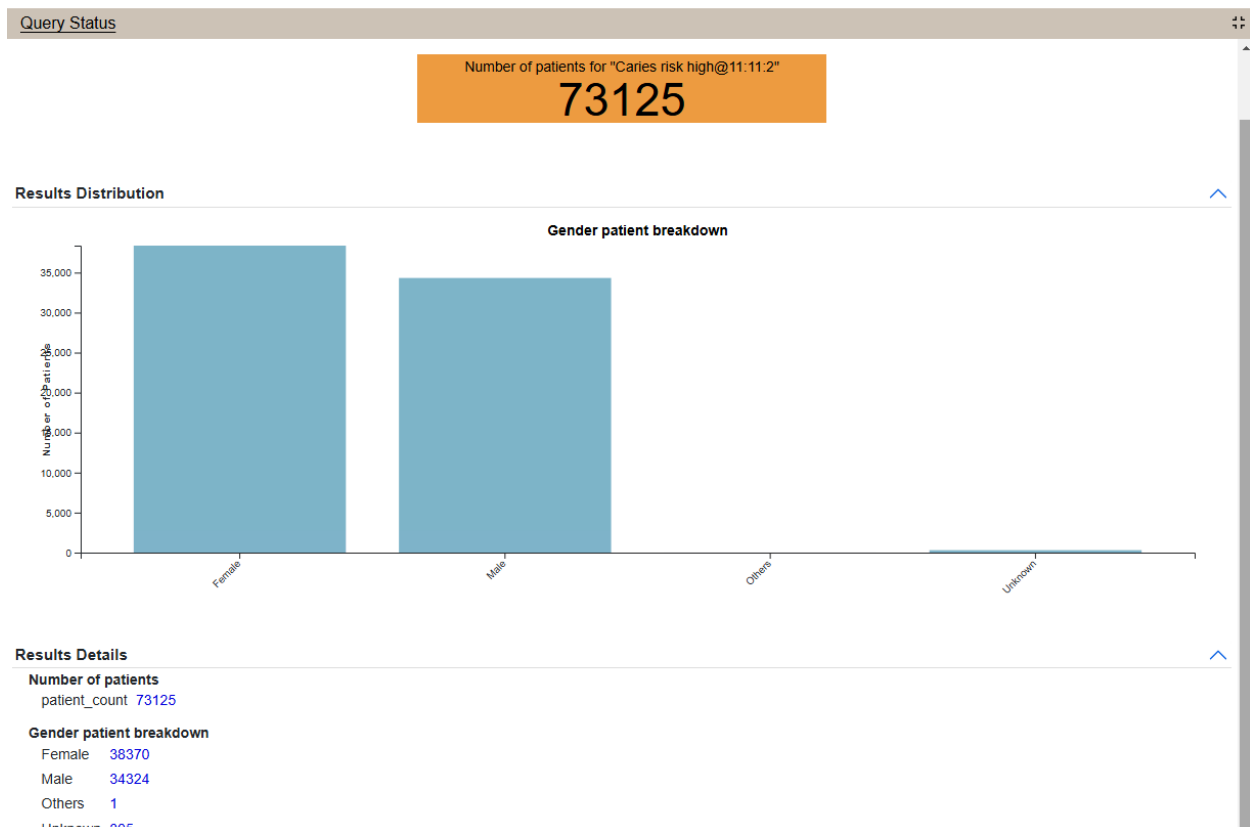
Step 3: Search for the diagnosis of "Caries risk high" in the Terms section on the left side of the BigMouth tool and drag it to Group 1 of the Find Patients/Query tool.

The screenshot displays the '2b2 Query & Analysis Tool' interface. On the left, a hierarchical tree of medical terms is visible, including categories like 'Anatomical Abnormalities', 'Caries', 'Caries Risk', 'Dental Procedures', 'Diagnosis', 'Endodontics', 'Occlusion Disorders', 'Oral Pathology/Radiology', 'Pain/Altered Sensation', 'Periodontics', 'Removable Prosthodontics', 'Temporomandibular Disorders', 'Trauma/Fractures', and 'Insurance'. The 'Caries Risk' category is expanded, showing sub-terms like 'Caries risk high - 73,125', 'Caries risk low - 10,714', and 'Caries risk medium - 23,510'. On the right, the 'Find Patients' panel is active, showing a search bar with 'Caries risk high - 73,125' entered. Below the search bar, there are radio buttons for 'with', 'without', and 'when', and a text input field for 'Set date range and/or occurrence for this entire panel'. A 'Find Patients' button is visible at the bottom of the panel. The 'Query Status' panel at the bottom right shows the query name 'Caries risk high@11:9:2' and a 'Find Patients' button.

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

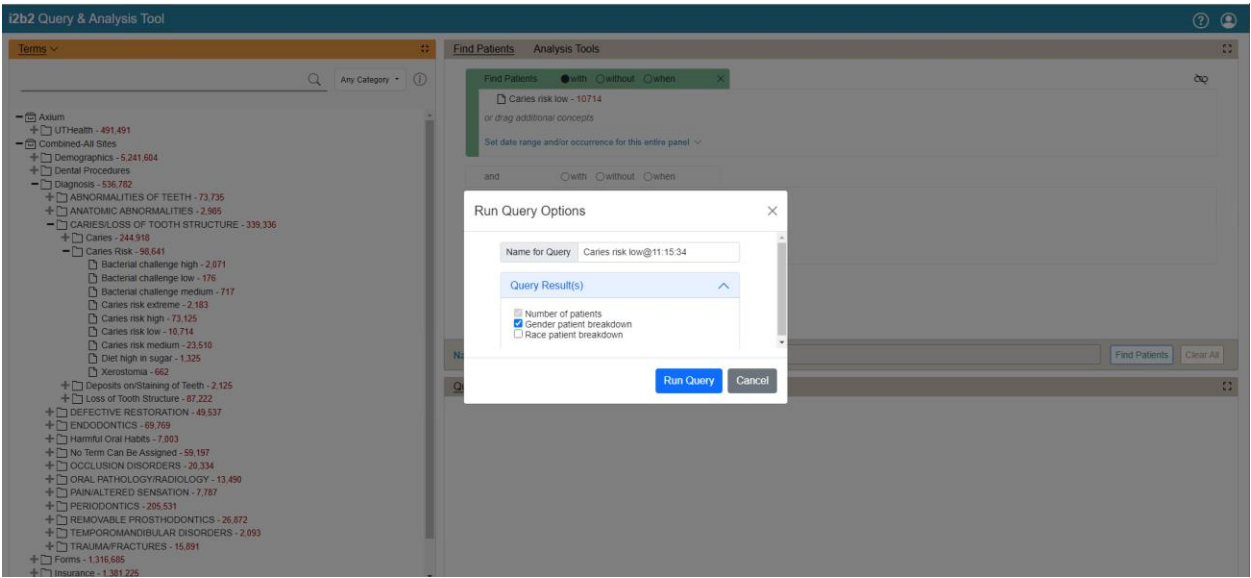


Step 5: Review the results in the Query status section and note the counts of males and females in the output.



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

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.

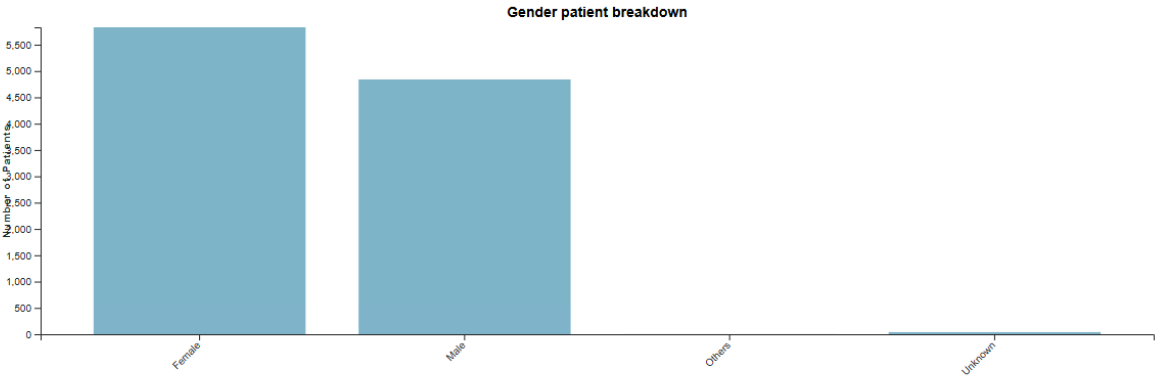


Query Status

Number of patients for "Caries risk low@11:15:34"

10714

Results Distribution



Results Details

Number of patients

patient_count 10714

Gender patient breakdown

Female 5311
Male 4840
Others 1
Unknown 40

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

	High Caries Risk	Low Caries Risk	
Males	34324	4840	39164
Females	38370	5831	44201
	72694	10671	83365