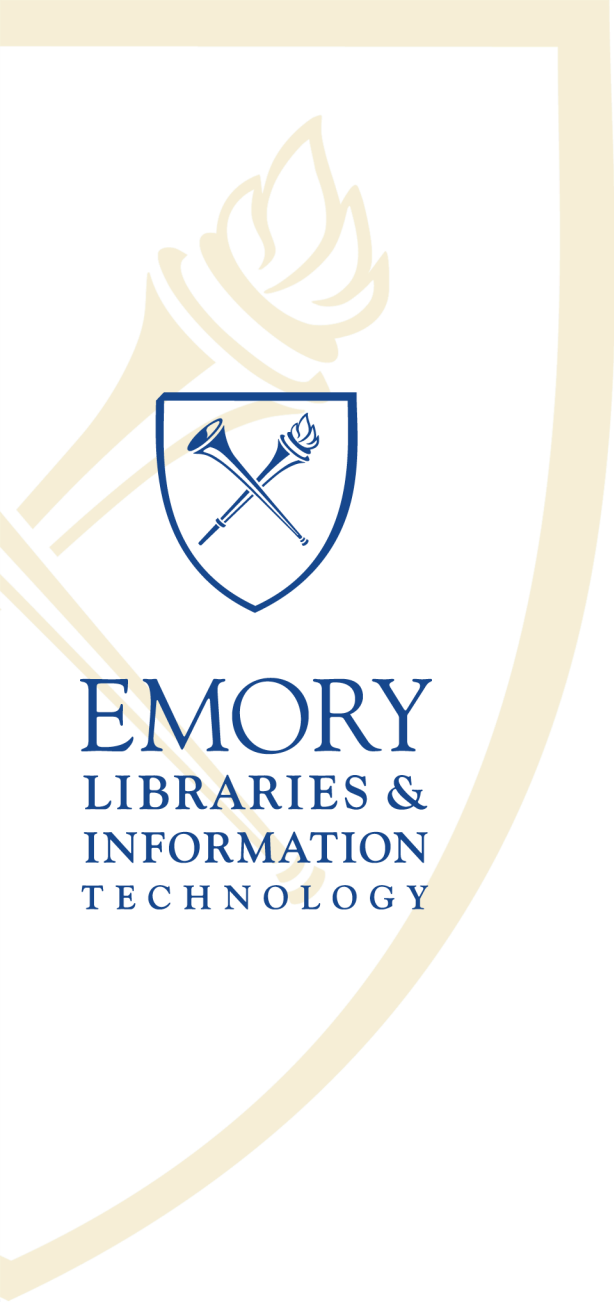


EMORY
LIBRARIES &
INFORMATION
TECHNOLOGY

I2b2 Product Team

Andrew Post
Miao Ai
Blair Boyd
Patrick Maloney

I2b2 Roles and Responsibilities

- Andrew Post – MD, PHD Biomedical Informatics
  - Product Owner: Consult with researchers on building queries and troubleshooting complex queries.
- Miao Ai – MS, Systems Software Engineer
  - Support: Troubleshooting technical and data issues.
- Patrick Maloney - Product Management Manager
  - Product Manager: 1st Tier support, demos, consultations.
- Blair Boyd – Product Manager
  - Product Manager: 1st Tier support, demos, consultations.

What is I2b2?

- Emory i2b2 lets you query Emory Healthcare electronic health record data for patient counts and aggregate information free of charge.
- It is operated and funded by Emory's Clinical and Translational Science Award (CTSA) program in partnership with Library and Information Technology Services (LITS) and the Department of Biomedical Informatics.
- It is an open source technology created by Partners Healthcare and is used by academic medical centers around the world.

What is i2b2 for?

- For determining study feasibility. Have an idea for a study and want to know if there are enough patients to conduct that study.
- Accelerates the pre-research process.
- Getting counts for grants for IRB protocols.
- Way for investigators to interact with the data in the clinical data warehouse in an interactive and self-service fashion.
- Accelerates the use of electronic health record data for use in research.
- To map electronic health record data to standards for data sharing.

i2b2 Data Types and Where They Come From:

- All visits at EUH, EUHM, TEC, EJCH and ESJH from 2011 - present (2 day time lag):*
  - Demographics (age at query, gender, race, ethnicity, vital status)
  - Visit details (age at visit, length of stay, type)
  - ICD-9 and ICD-10 diagnosis codes (type, priority)
  - ICD-9 and ICD-10 procedure codes
  - Medication orders (inpatient vs. ambulatory)
  - 204 selected laboratory tests (laboratory vs. point of care)
  - *Data from the Emory Clinical Data Warehouse

Pricing

- I2b2 accounts and queries are free of charge.
- Product Management and The Informatics Core will work with new users if they have questions about how to build queries and for orientation to the product.
- If you would like a data set, we help your analyst to extract that data set.
- If you do not have an analyst, we will put you in touch with the LITS data solutions team to work with you to extract your data set for a fee.

i2b2 Access

- You may use either your Emory University login or your Emory Healthcare login, if you have both, but i2b2 will keep these accounts and associated information separate. In effect, you will have two accounts.

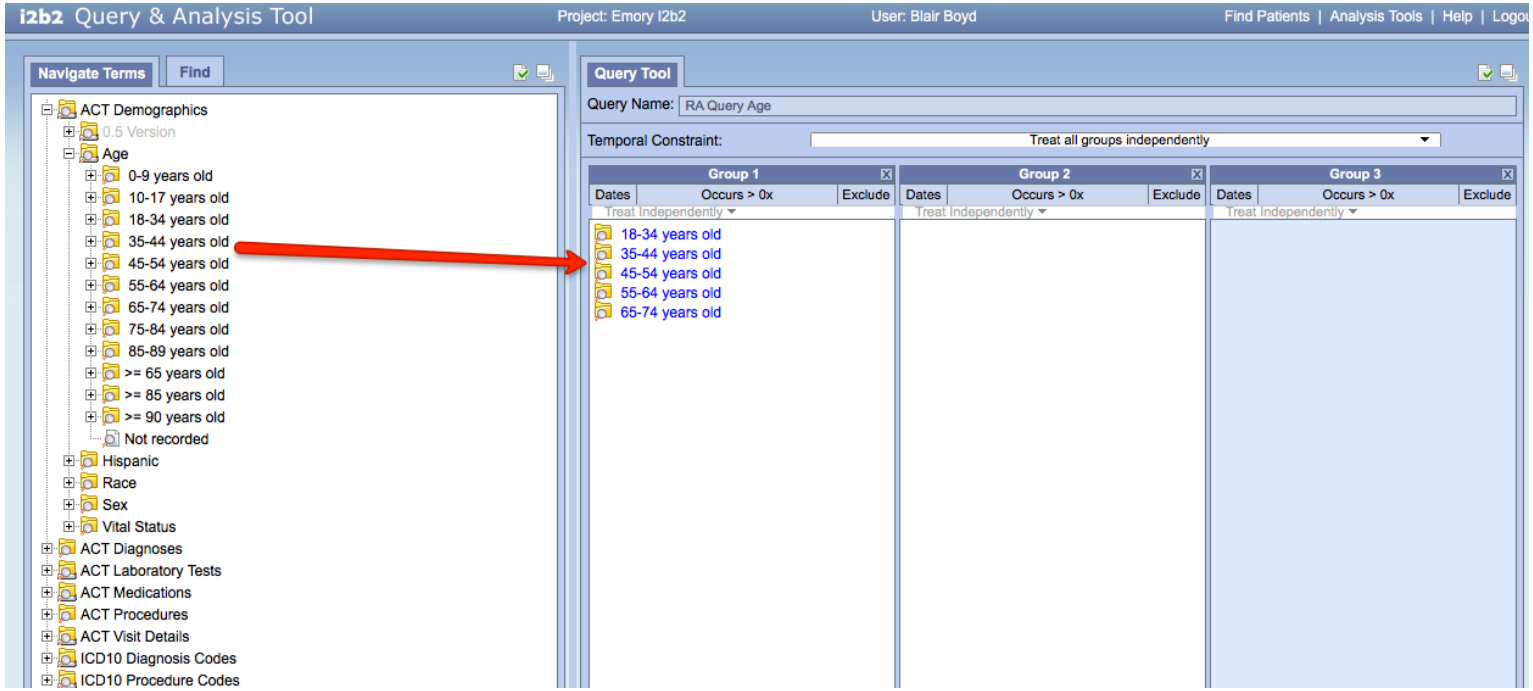
Who can use i2b2?

- Anyone with an Emory NetId or Emory Healthcare login, after agreeing to a User Agreement.
- You can log into i2b2 via:

  https://i2b2.emory.edu
- You may use either your Emory University login or your Emory Healthcare login, if you have both, but i2b2 will keep these accounts and associated information separate. In effect, you will have two accounts.
- Users do not need an IRB Protocol because there is no access to patient level data provided by i2b2 at present.

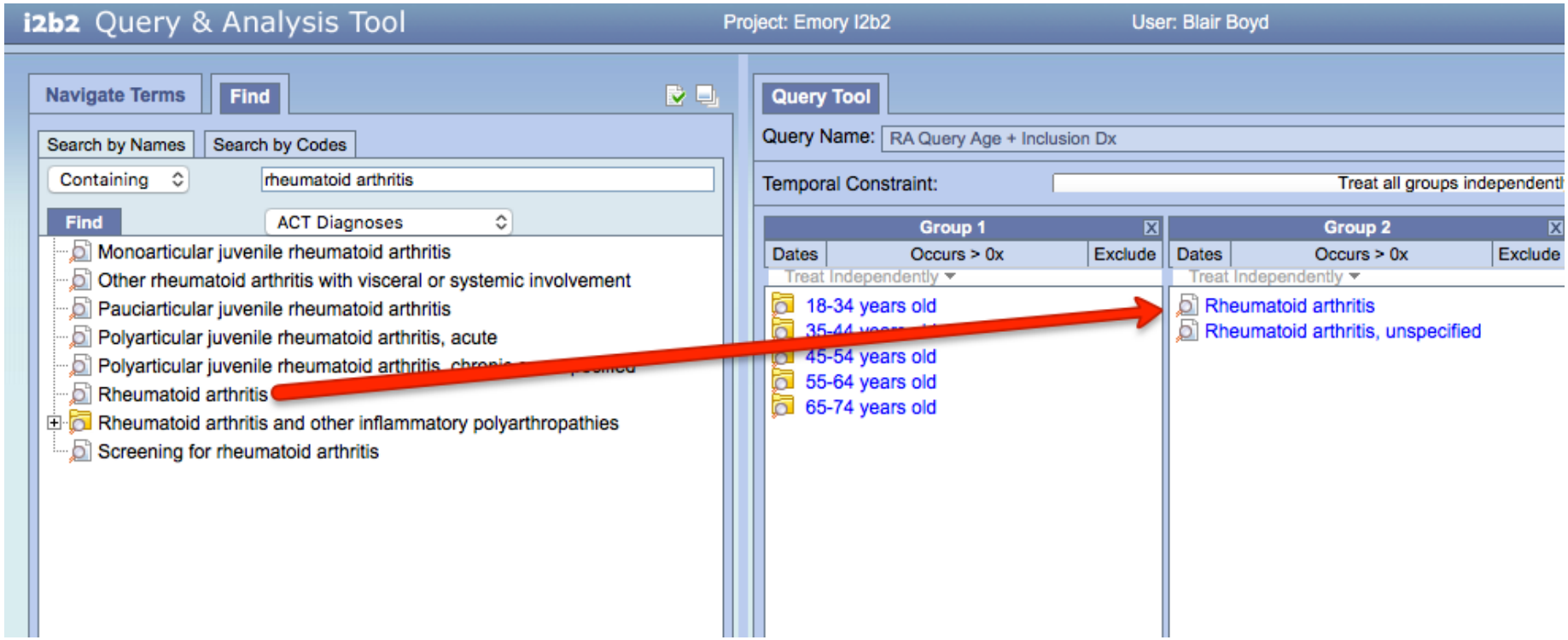
Basic Query:

- Demographics
  - In the Navigation Terms, drag and drop the 18-74 age ranges over to Group 1 and run the query.



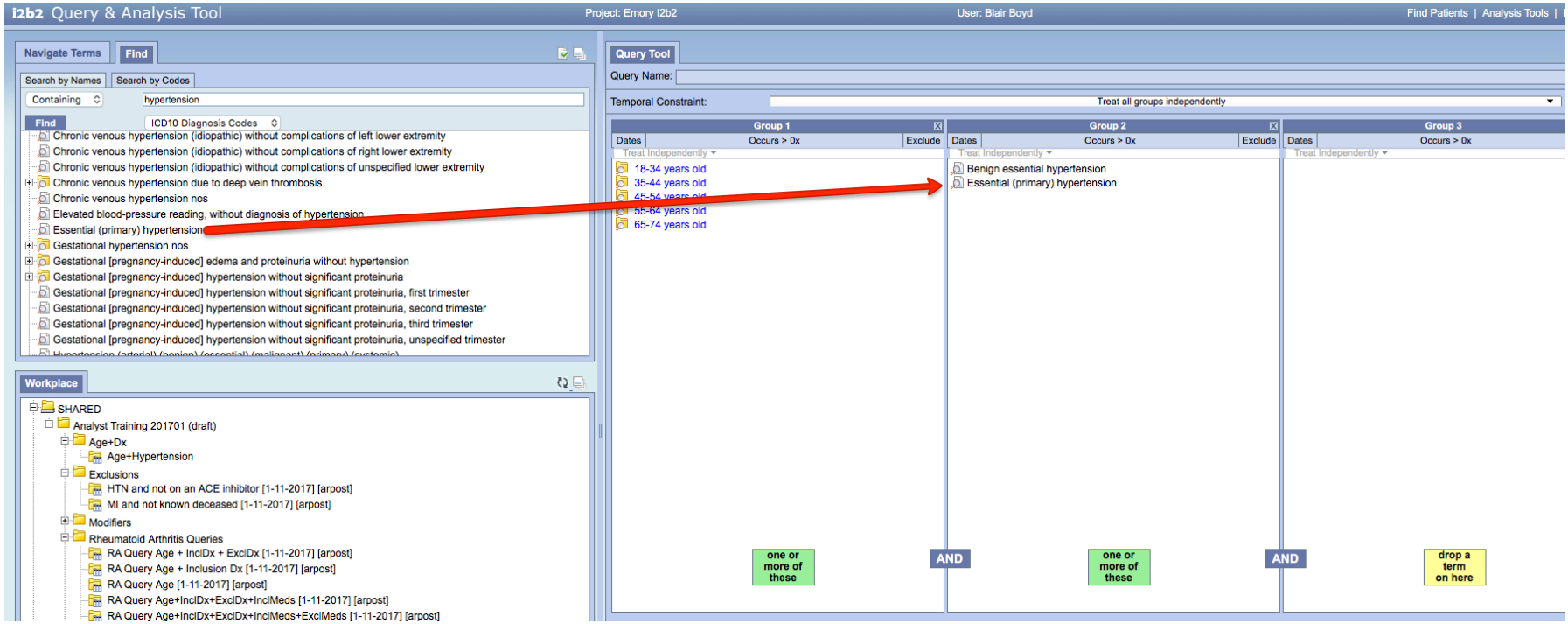
Basic Query:

- Rheumatoid Arthritis query age + Diagnosis



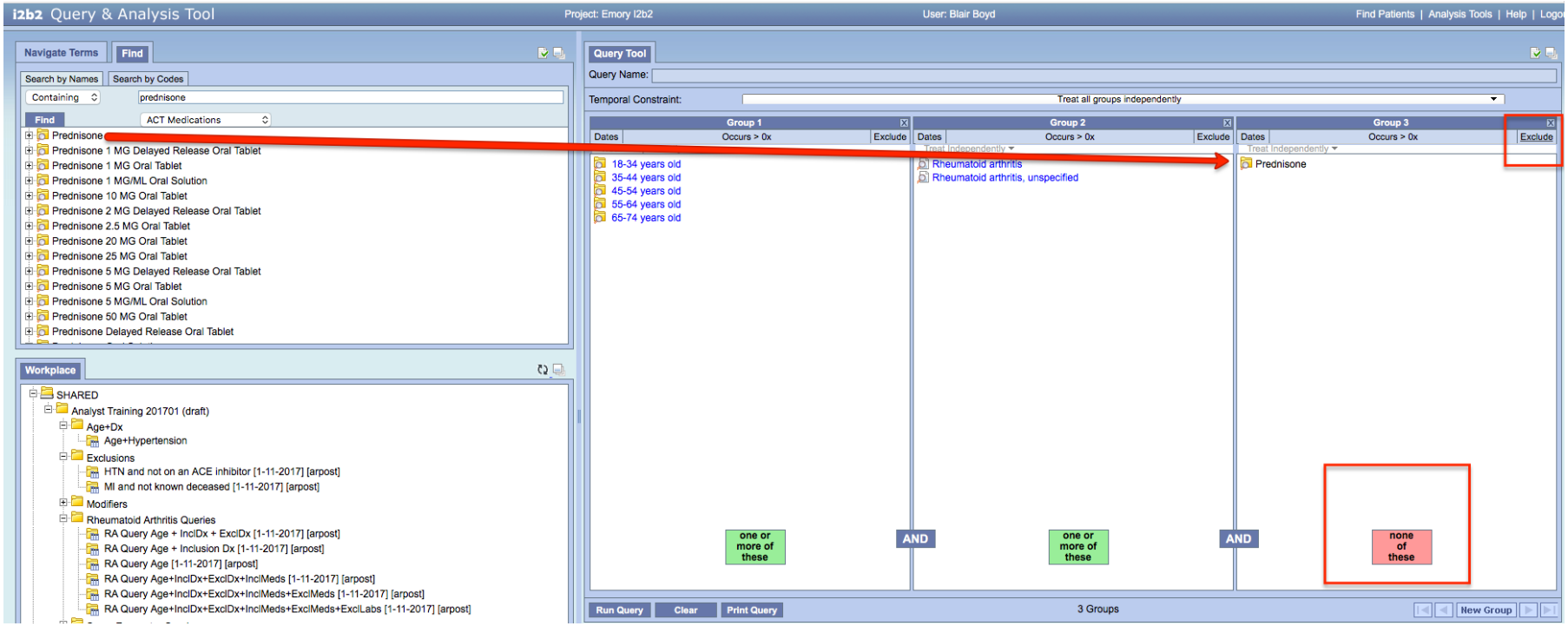
Basic Query (on your own)

- Rheumatoid Arthritis + Hypertension



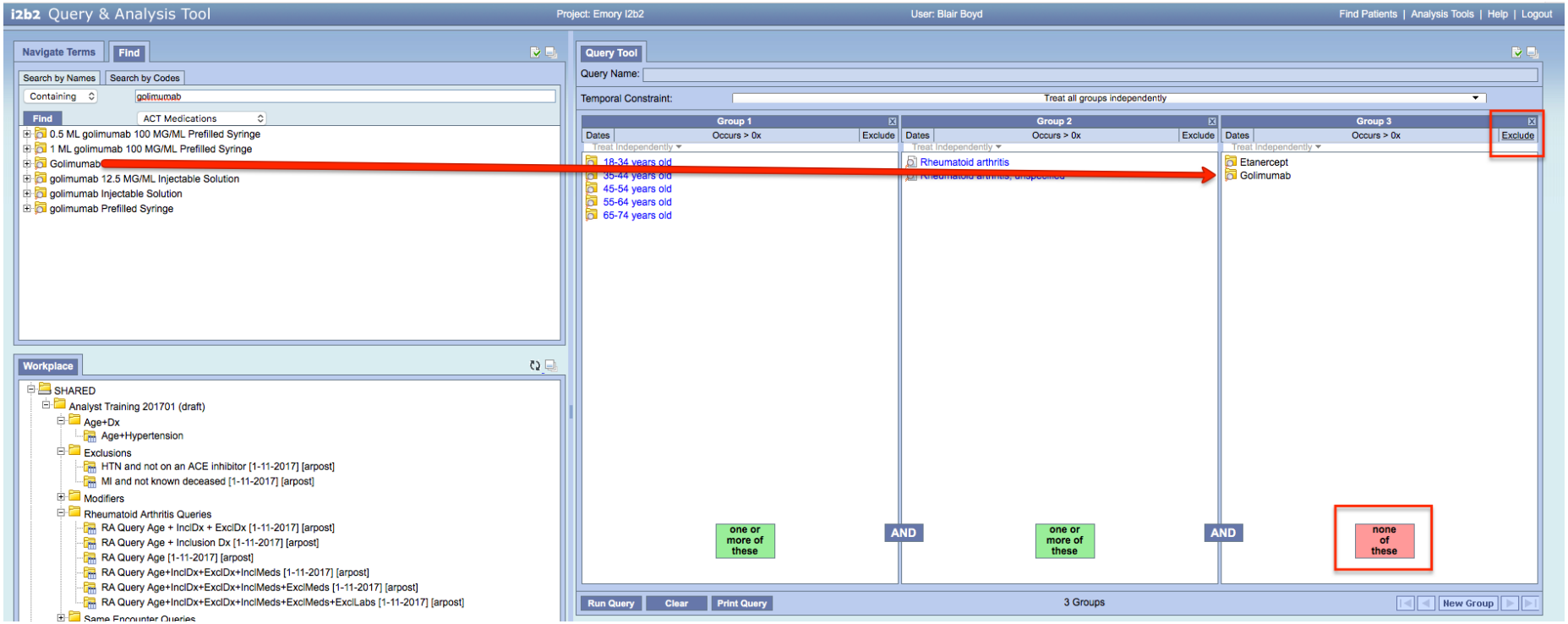
Query with Exclusion

- Exclusions: Age + Inclusion Diagnosis + not Prednisone



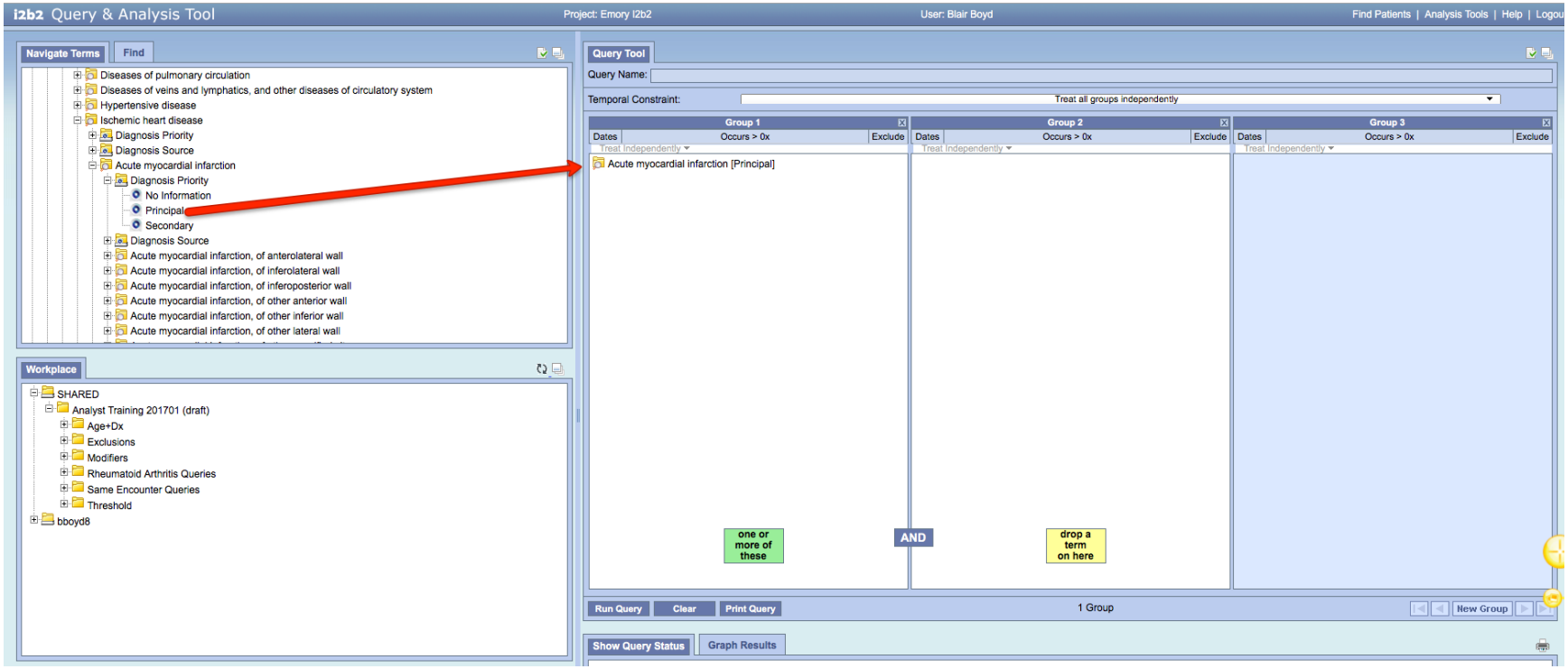
Query with Exclusions (on your own)

- Exclusions: Age + Inclusion Diagnosis + None of the following: etanercept, golimumab



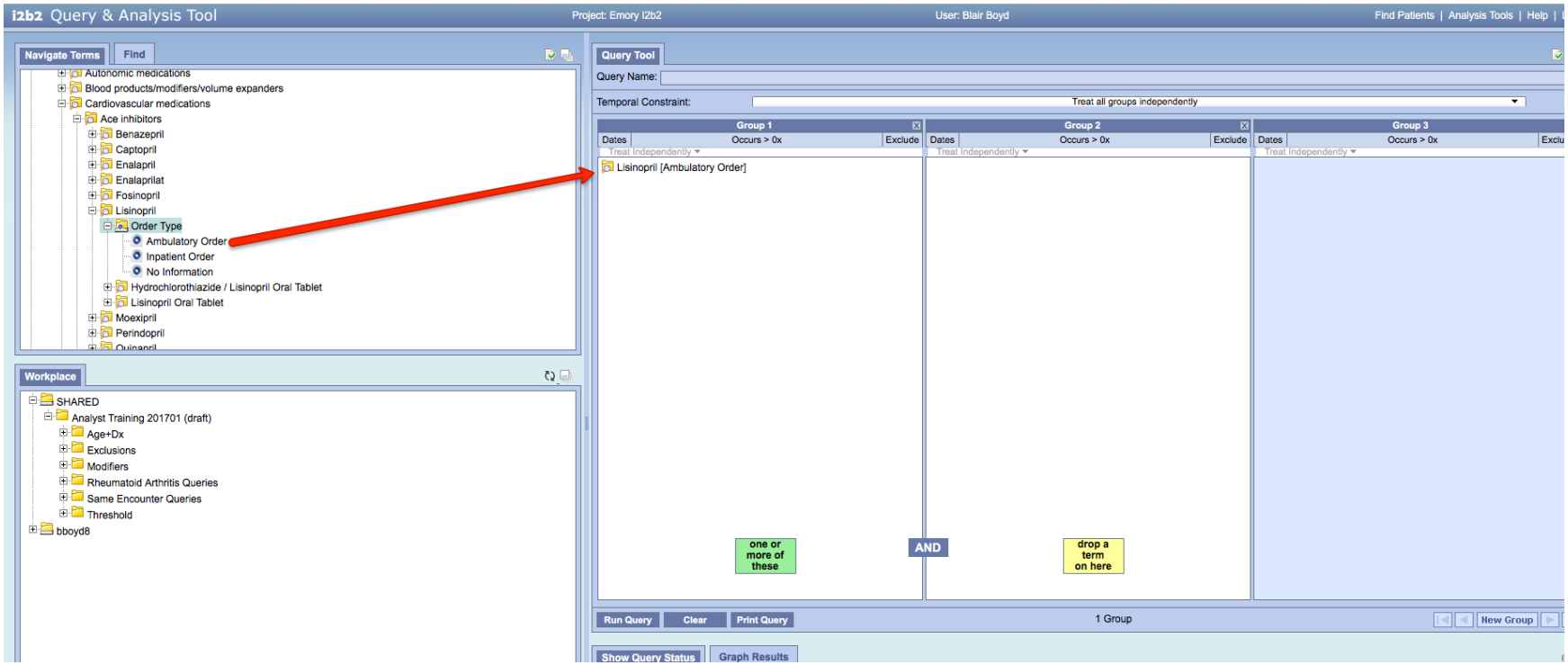
Query with Modifier:

- Principal Diagnosis of Acute Myocardial Infarction.



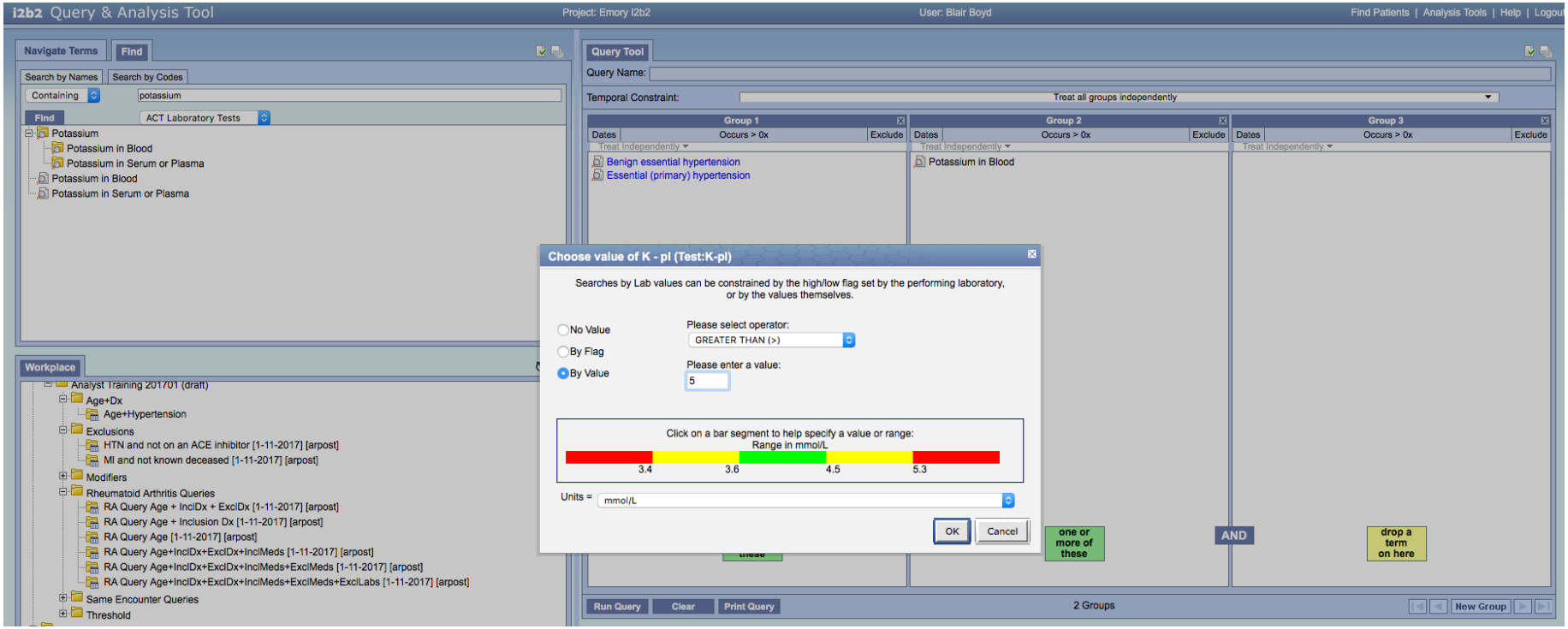
Query with Modifier (on your own):

- Ambulatory Order for Lisinopril

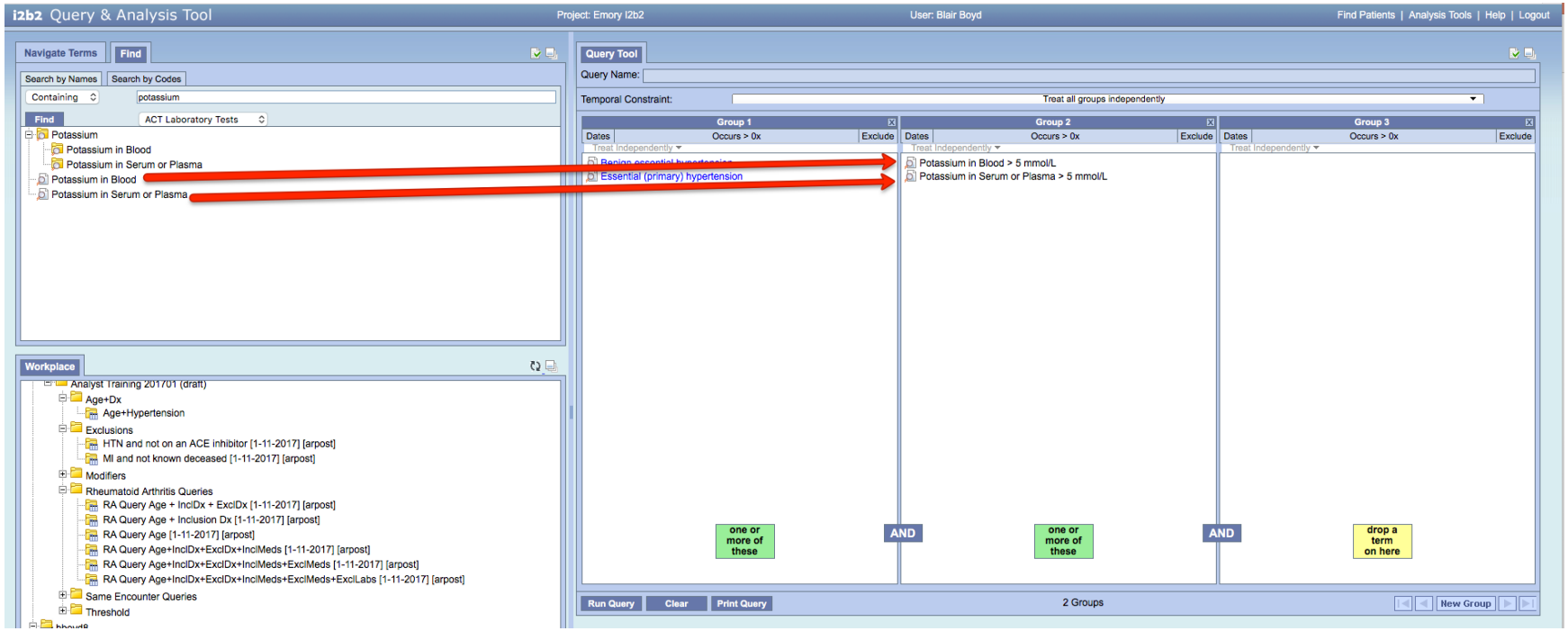


Query with Threshold:

- Threshold: Hypertension + elevated potassium

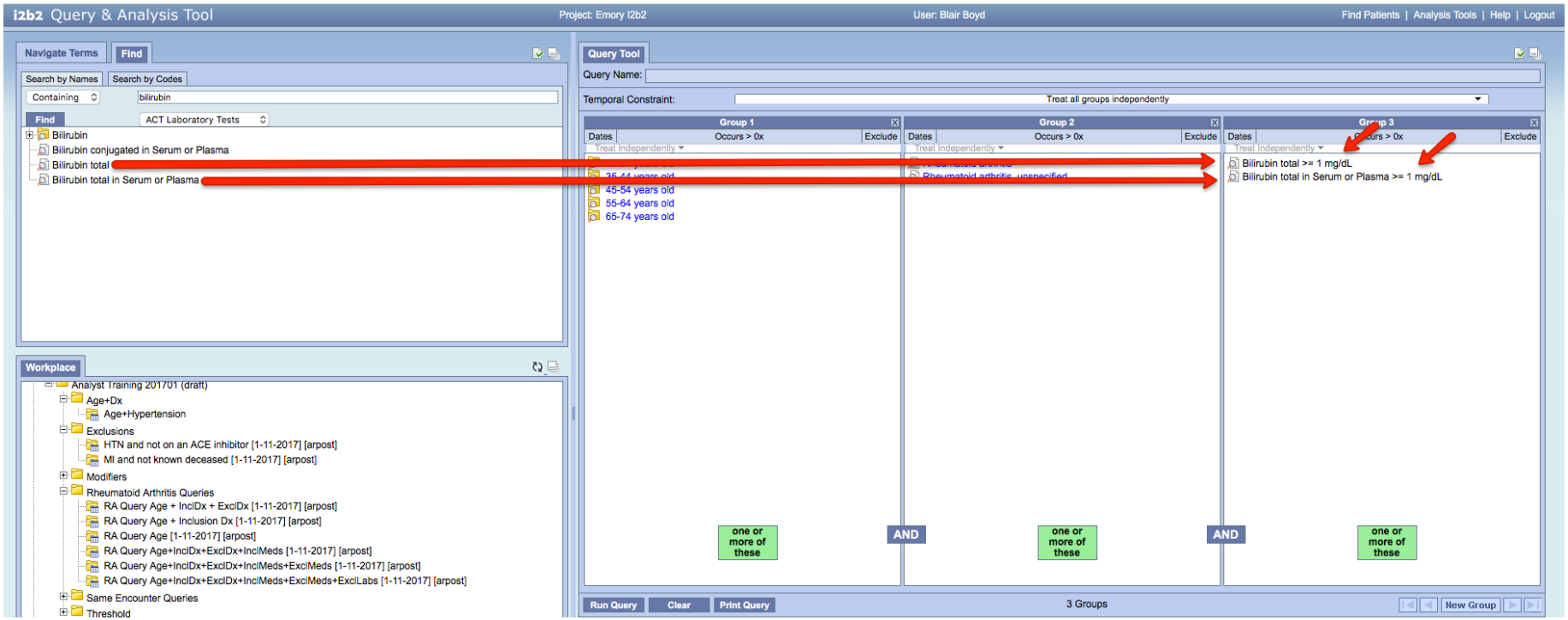


Query with Threshold continued:



Query with Threshold (on your own)

- Threshold: Age + Inclusion Diagnosis + not bilirubin total >= 1 and not billirubin total in serum or plasma >=1



Questions?

For more information on how to use i2b2:

https://i2b2webprod1.cc.emory.edu/i2b2/webclient/help/content.html

If you would like a consultation on running a query please contact us at:

i2b2.help@emory.edu