Empowering The Visual Communication of Data Using Shiny R at KUCC

By Sam Pepper, MS

Senior Data Scientist

KUMC Department Biostatistics & Data Science



"You can have data without information, but you cannot have information without data"

-Daniel Keys Moran



Infrastructure Utilized

- Shinyapps.io (Free, Cloud)
- Shiny Server (Free, On-prem)
- Posit Connect (Paid, On-prem, Auth)



Shinyapps.io Applications

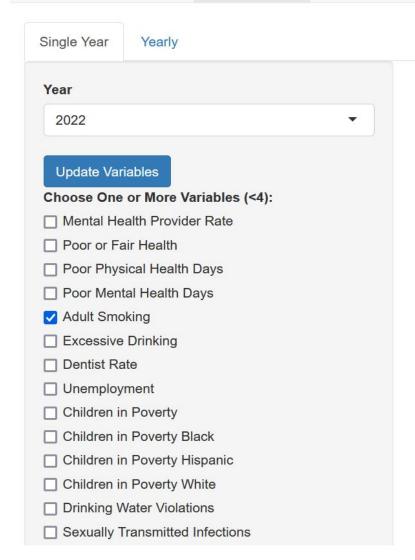
- Use Publicly Available Data
- Applications
 - https://optik.shinyapps.io/OPTIK/
 - https://optik.shinyapps.io/CIF_KUMC/
 - https://optik.shinyapps.io/CIF_Bivar_KUMC/
 - https://optik.shinyapps.io/CIF_Profiles_KUMC/



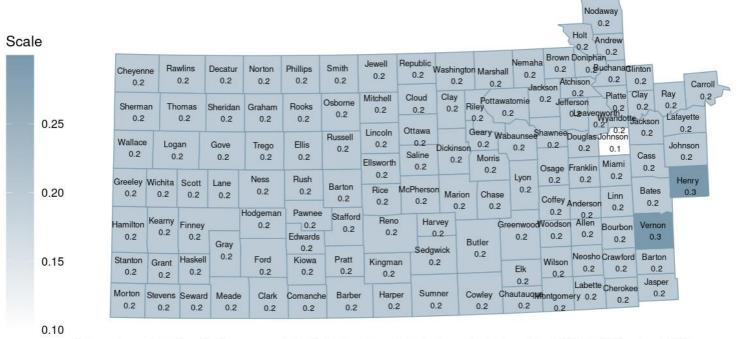
OPTIK Visualization

Demographics

Cancer Mortality Rate



The Heat Map of Adult Smoking in 2022 in KUCC Catchment Area



*Research reported in this publication was supported by the National Cancer Institute Cancer Center Support Grant P30 CA168524 and used BISR core

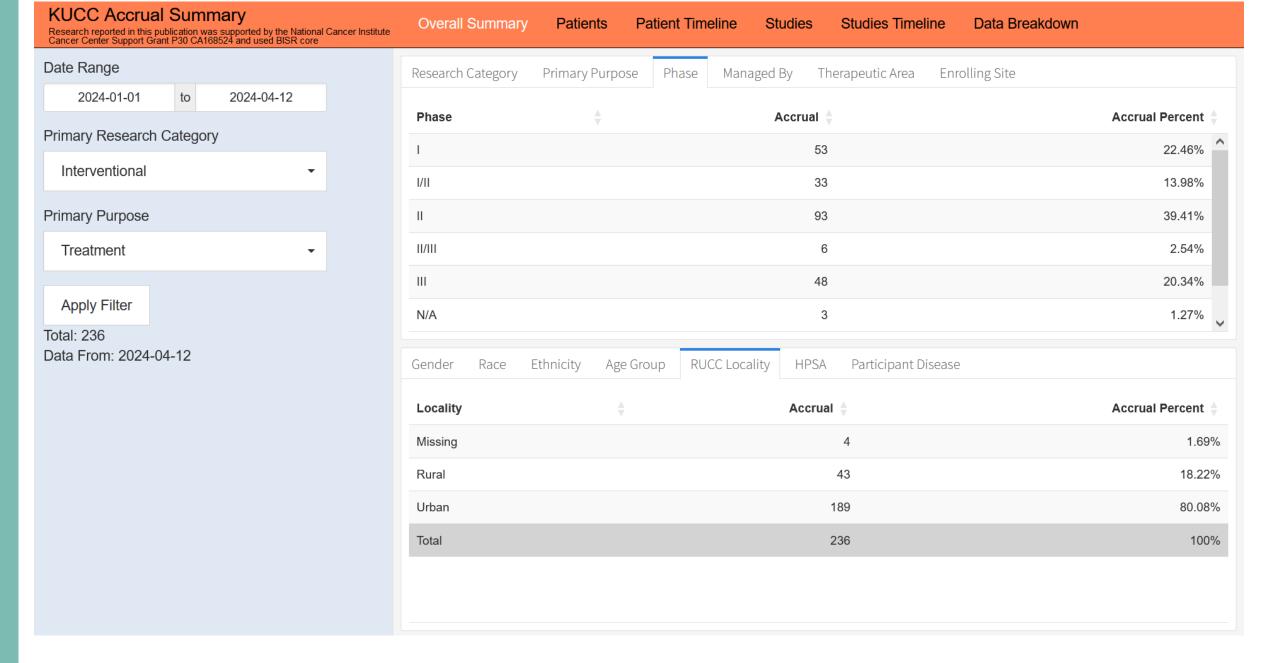
OPTIK Dashboard



Shiny Server/Posit Connect Applications

- Use Data from CTMS system (WCG Velos)
- Applications
 - Accrual
 - Study Startup
 - Data Safety Monitoring Board (DSMB)
 - Resourcing Efforts
 - Finance Reconciliation
 - Accrued Revenue

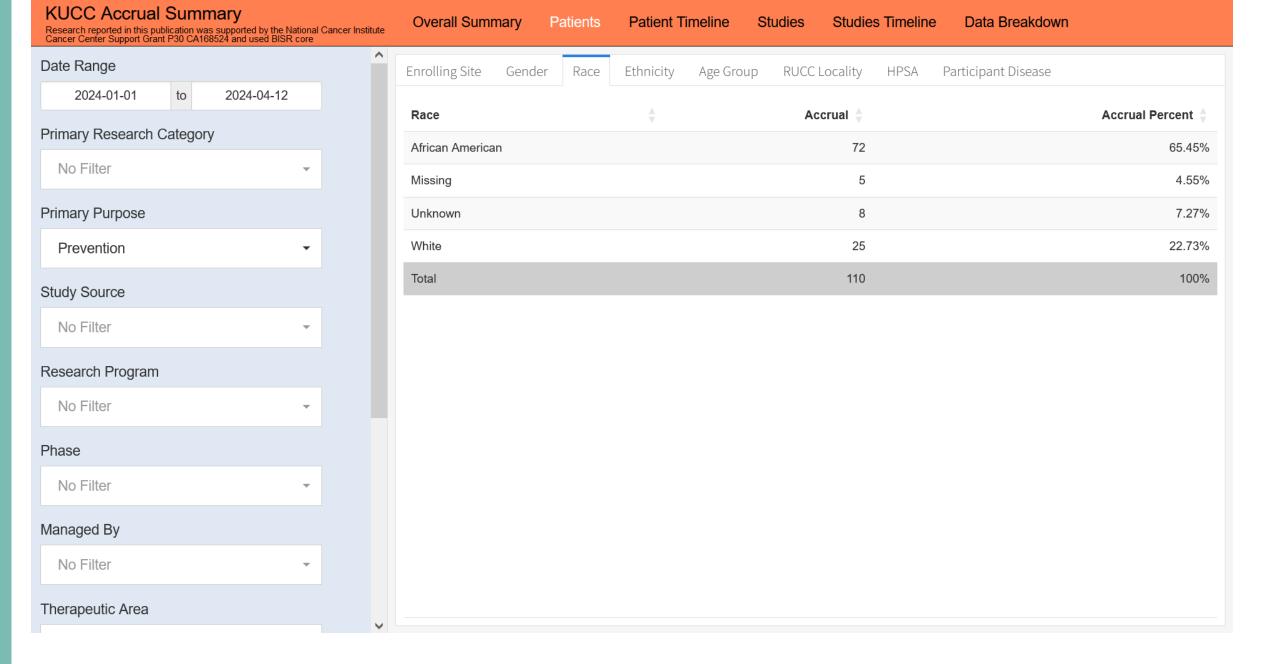






Accrual Dashboard

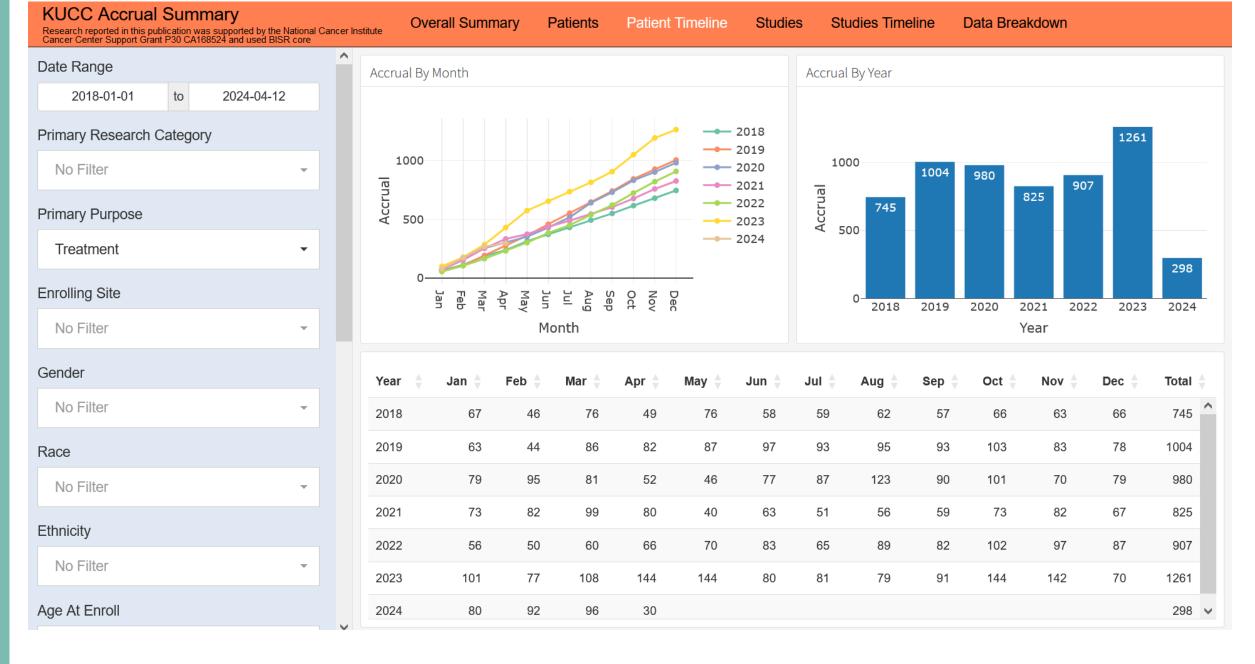








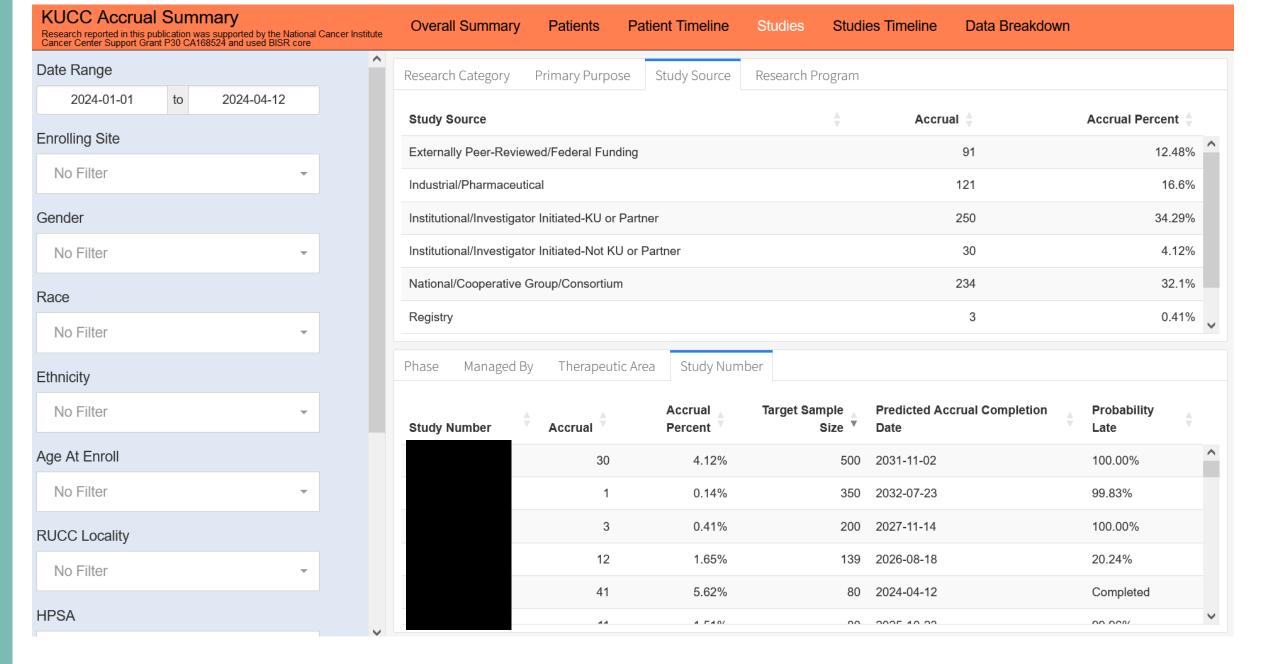






Accrual Dashboard





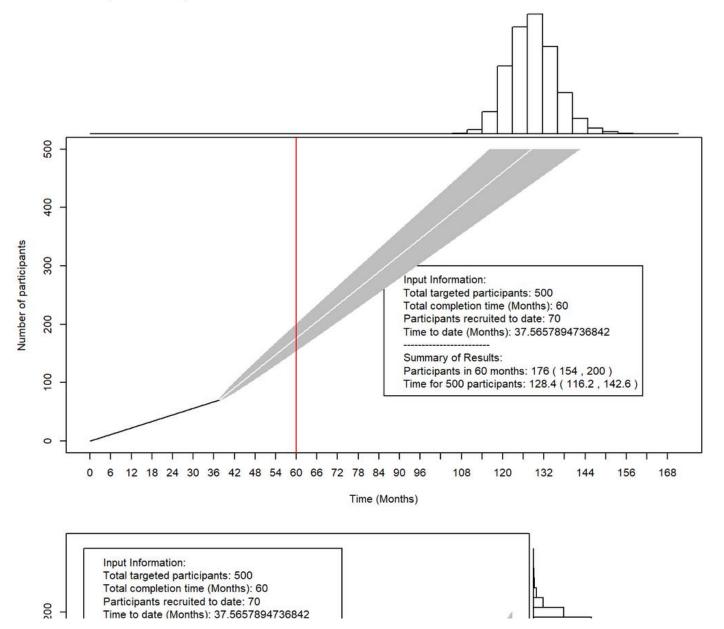


Accrual Dashboard

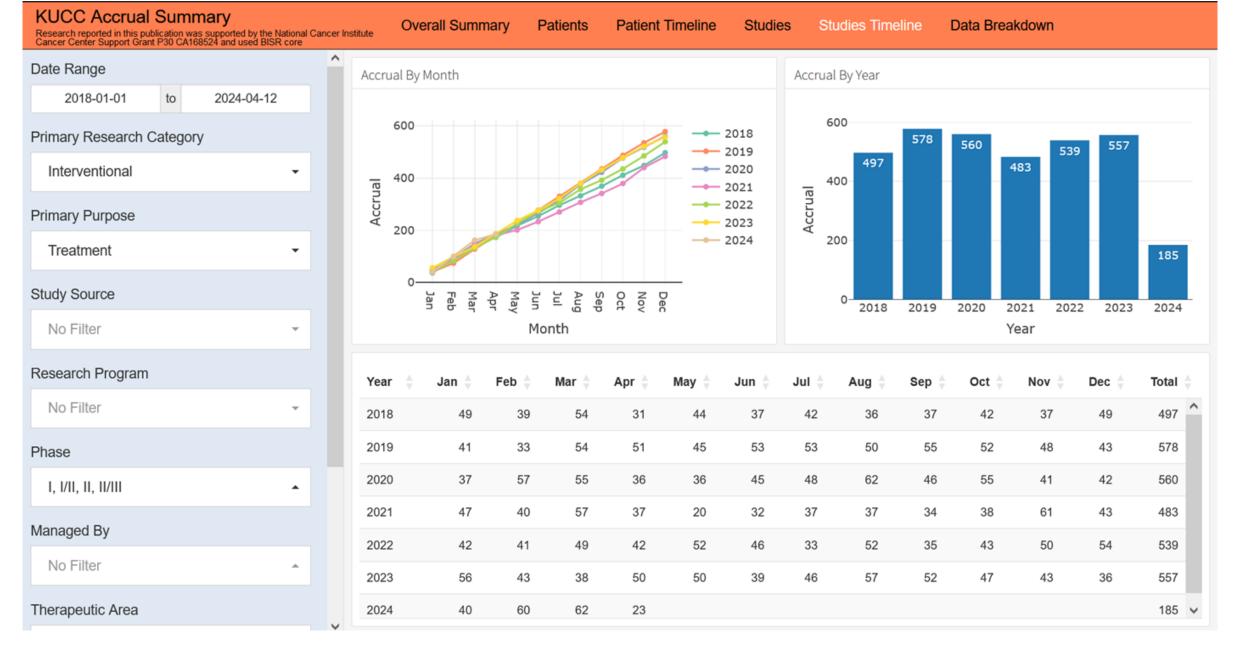


Accrual Prediction Plots

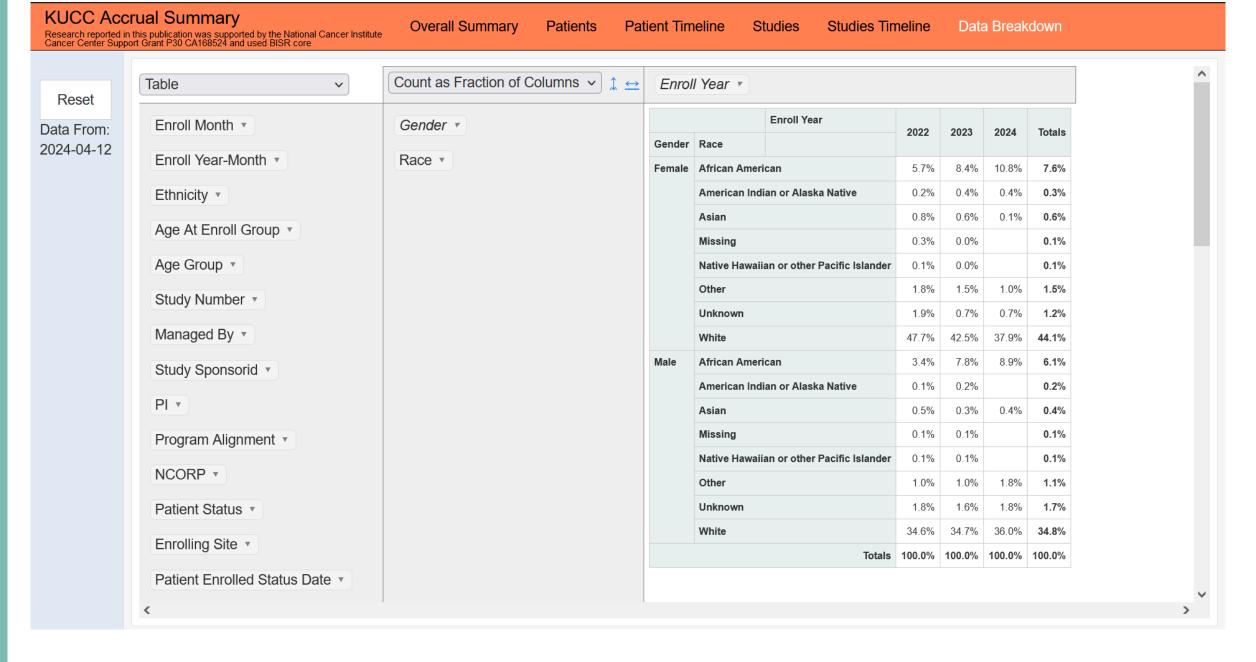
Here are the prediction plots:







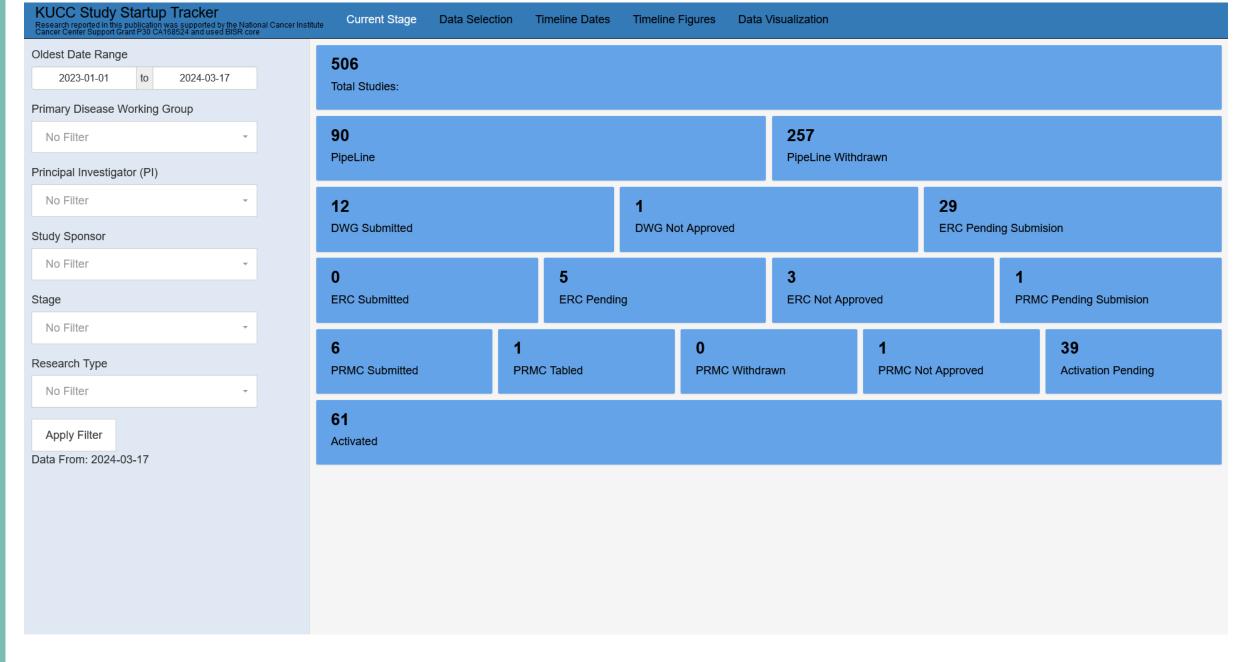








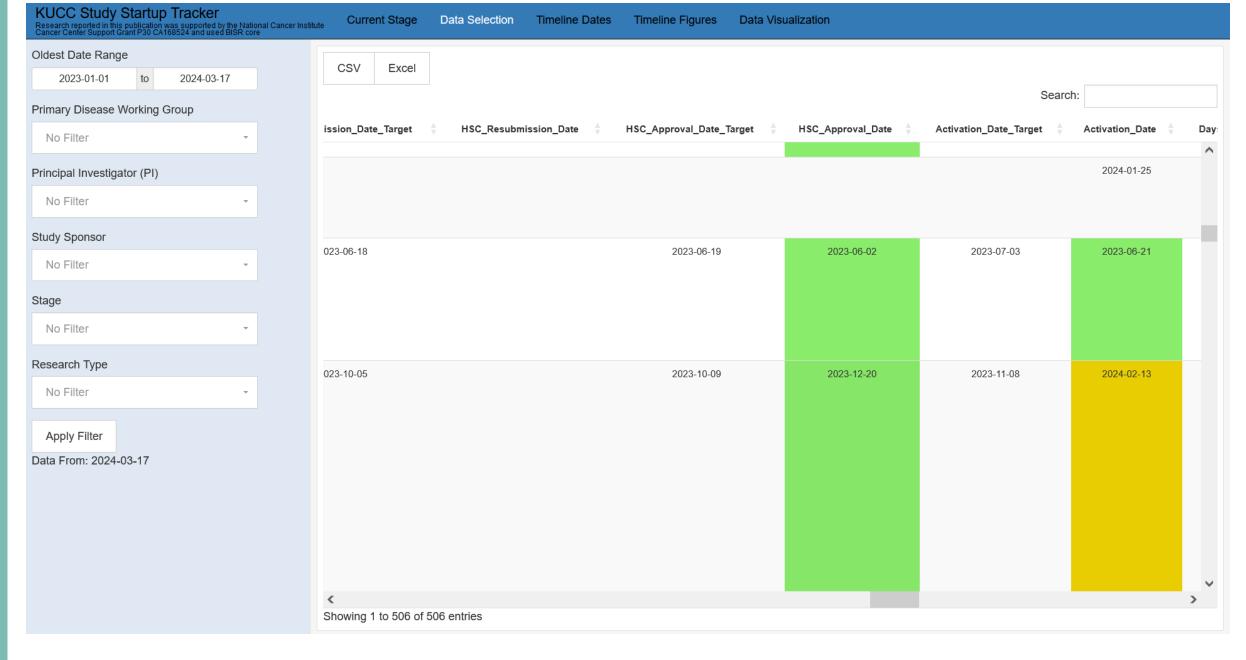














Study Startup Dashboard



Research reported in this publication was supported by the National Cancer Instit Cancer Center Support Grant P30 CA168524 and used BISR core	tute Current Stage Data Selection Timel	line Dates Timeline Figures	Data Visualization	on			
Oldest Date Range 2023-01-01 to 2024-03-17	Days from DWG to Activation Days from DWG to E	ERC Days from ERC to Activation	Days from ERC Re	eady to Activation	Days from ERC Ready to P	PRMC Submission	
Primary Disease Working Group	Research Type	*	Mean ∲	SD ∲	Median ∳	IQR 🛊	Count \$
No Filter +	Industrial/Pharmaceutical		139.54	34.31	137	59	13
Principal Investigator (PI)	National/Cooperative Group/Consortium		61.56	24.62	52	34.25	18
No Filter →	Total:		94.26	48.42	95	74	31
Study Sponsor							
No Filter -							
Stage							
No Filter +							
Research Type							
No Filter -							
Apply Filter							
Data From: 2024-03-17							























Research reported in this publication was supported by the National Cancer Institute Cancer Center Support Grant P30 CA168524 and used BISR core	Study Selection	Accruals by Site	Adverse Events - Free Text	Adverse Events - Dropdown	Deviations			
Study: Drug Relatedness for these tables are pulled from free text	fields entered by th	e study team.						
☐ Missing Attribution Adverse Events (No	Relationship	Expected/Unexpected	Grade Outcome Se	rious Adverse Event				
relatedness/non-relatedness listed for any drugs)	Event			♦ Ex	pected 🔷	Not Assessed 👇	Unexpected 🔷	Total ♦
elated to Drugs (Drugs are considered related	Abdominal pair	n			2	0	0	2
f given the status of Definitely Related, Possibly Related, Probably Related, or Related)	Acute kidney in	jury			1	0	0	1
Romidepsin	Alanine aminot	ransferase increased			0	2	0	2
	Alkaline phosp	hatase increased			3	3	2	8
lot Related to Drugs (Drugs are considered not elated if given the status of Nevertaken, Not	Anemia				50	2	0	52
Related, Discontinued, or Unlikely)	Anorexia				18	0	1	19
No Filter 🕶	Anxiety				1	0	0	1
severity	Arthralgia				6	0	0	6
No Filter •	Aspartate amin	otransferase increased			1	2	0	3
Grade	Back pain				3	0	0	3
No Filter ▼	Bloating				1	1	0	2
	Blood and lymp	phatic system disorders	- Other, specify		0	0	1	1
Start Date Range to	Blurred vision				2	0	0	2
lo l	Bone pain				2	2	0	4
Apply Filter	Colitis				2	0	0	2
	Concentration	impairment			0	1	0	1
	Constination				18	3	0	21







KUCC Clinical Trials Research reported in this publication was supported by the National Cancer Institute Cancer Center Support Grant P30 CA168524 and used BISR core	Study Selection	Accruals by Site	Adverse Events - Free Text	Adverse Events - Dropdown	Deviations	
Study: All recorded deviations are shown below.						
Category						
Deviation		♦		Minor ⊕	Planned $\mbox{$\frac{1}{2}$}$	Total ⊕
Concomitant Therapy				2	0	2
Eligibility Criteria				1	0	1
Schedule of Event				43	3	46
Site Pharmacy				1	0	1
Study Therapy				5	0	5
Total				52	3	55







Related Automated Reports

- -Accrual Missing ZIP Code Report: Bi-Weekly
- -CATCHUP Report: Weekly
- -PRMC Email Notification: Daily
- -All Flows: Study Portfolio Flowchart Generator



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Thank you!

Sam Pepper spepper@kumc.edu



