

# Comprehensive Molecular Profiling in Patients with Advanced Biliary Tract Malignancy in a Latinx rich cohort

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# Disclosure of Conflicts of Interest

Vidit Kapoor, MD, has the following financial relationship to disclose:

- Stock ownership: Pfizer

# Project Collaborators

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# Comprehensive Molecular Profiling in Patients with Advanced Biliary Tract Malignancy in a Latinx rich cohort

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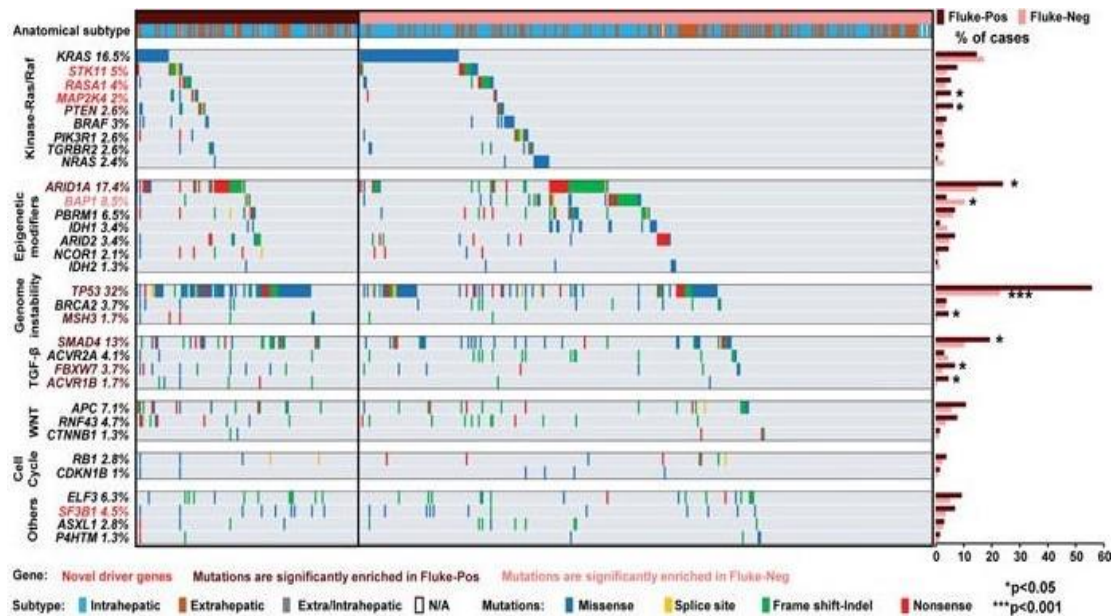
SEER stage	5-year relative survival rate
Localized	24%
Regional	9%
Distant	2%
All SEER stages combined	9%

SEER data 2021

Poor survival

# Background

Genetically diverse



# Objectives and Methods

To analyze comprehensive molecular profiling

Advanced Biliary Tract Cancers

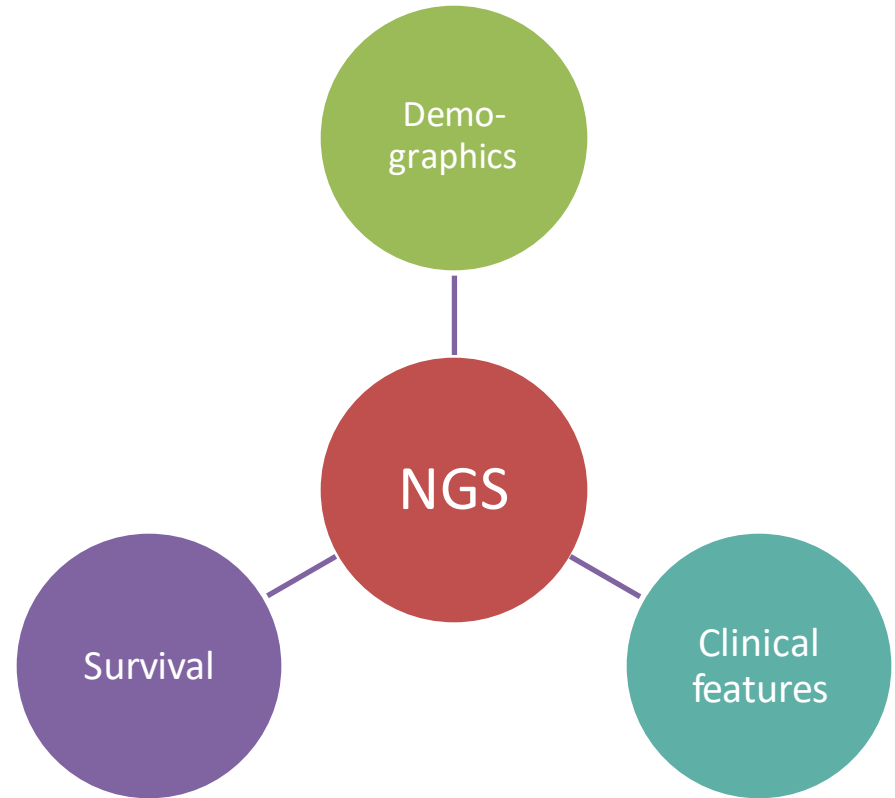
Latinx-rich Cohort

## Inclusion Criteria

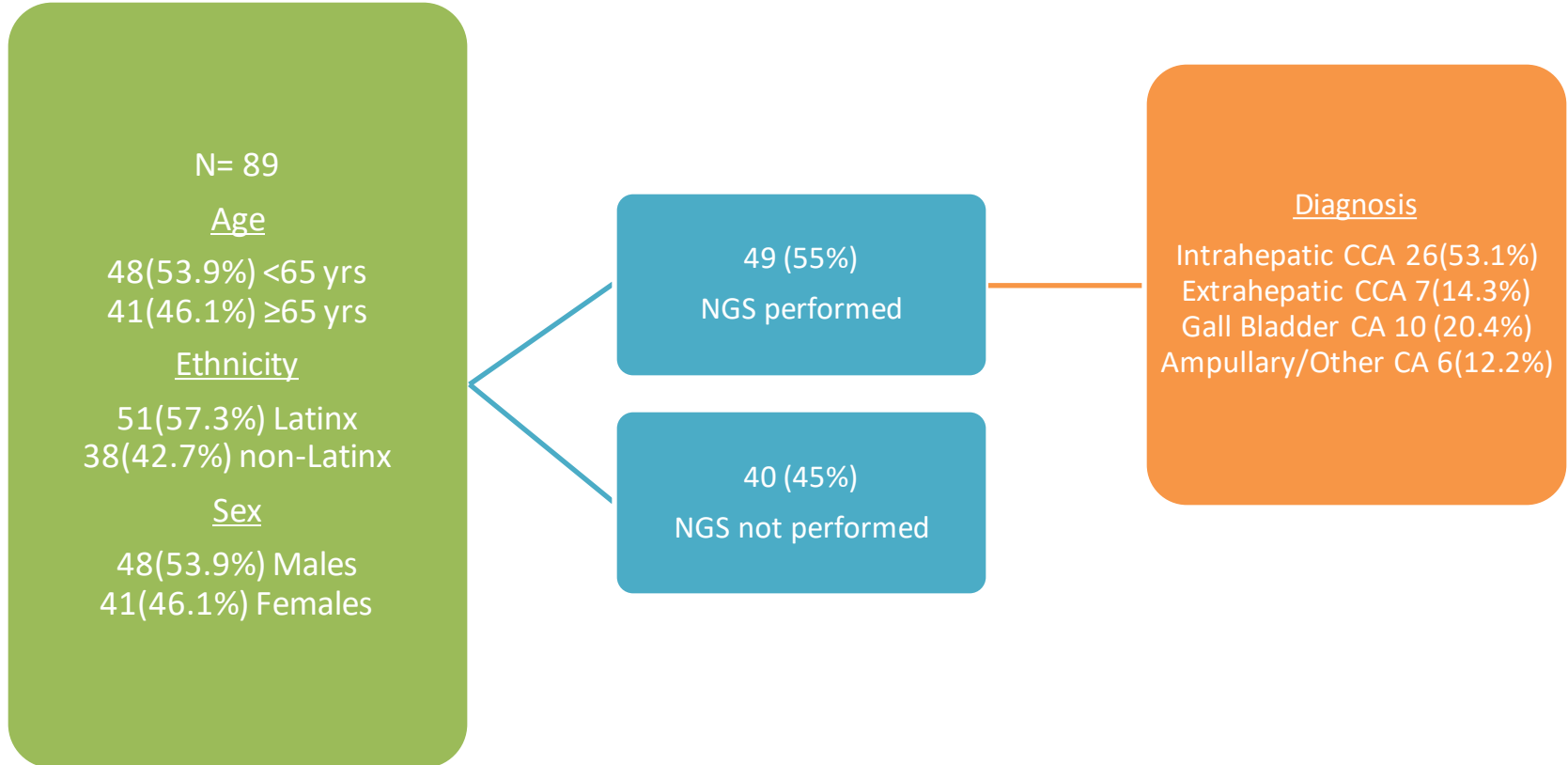
Age >18 years

Unresectable BTC

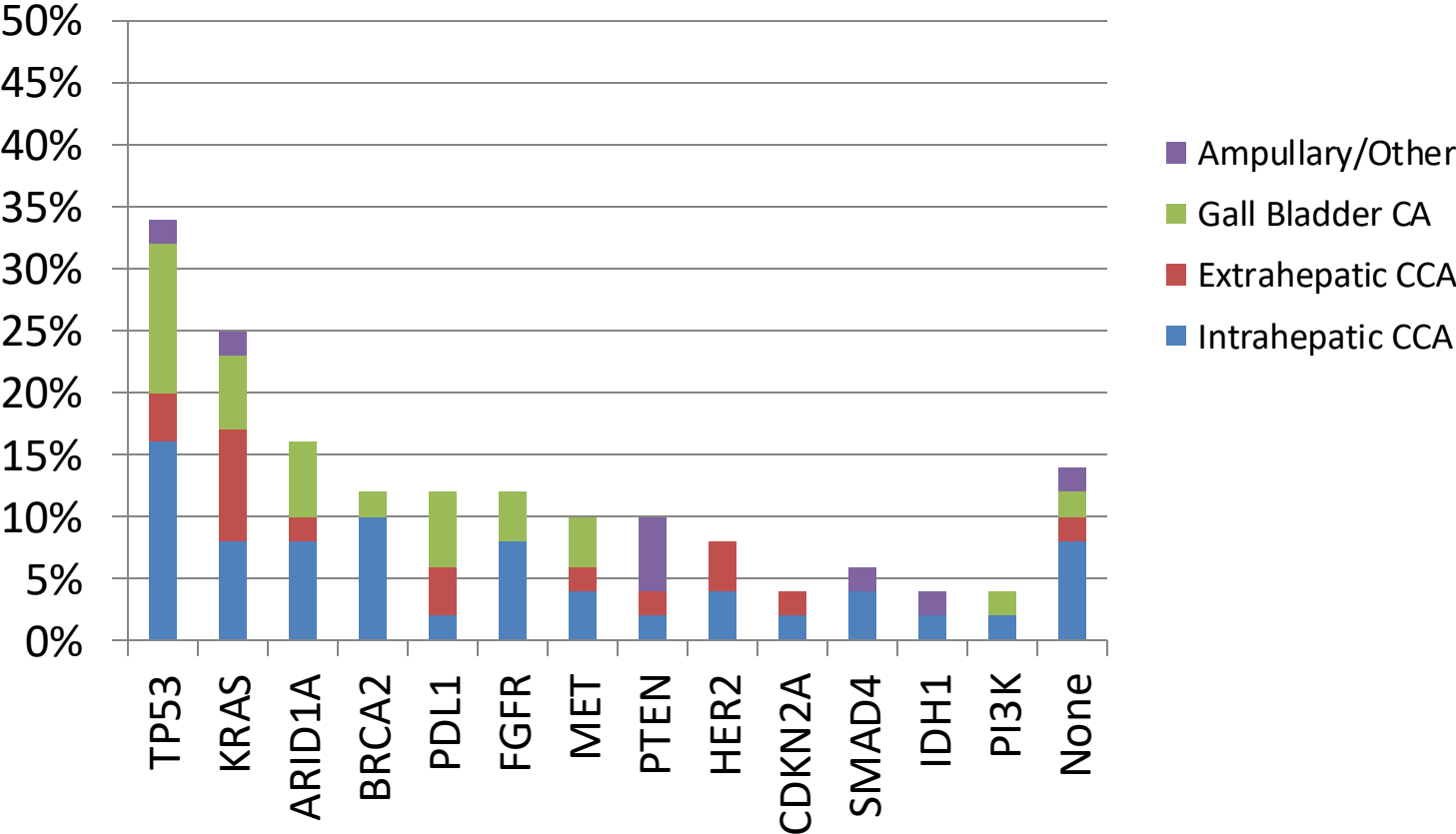
Jan 2018 – Dec 2021



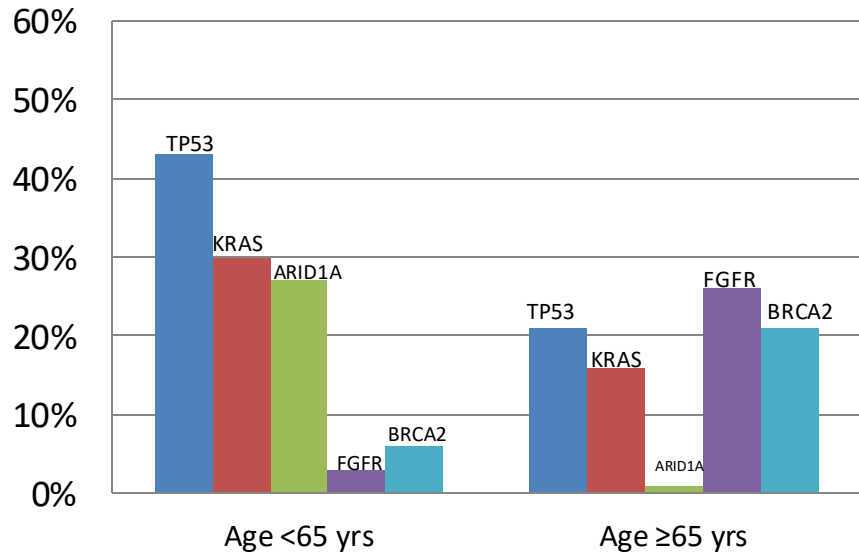
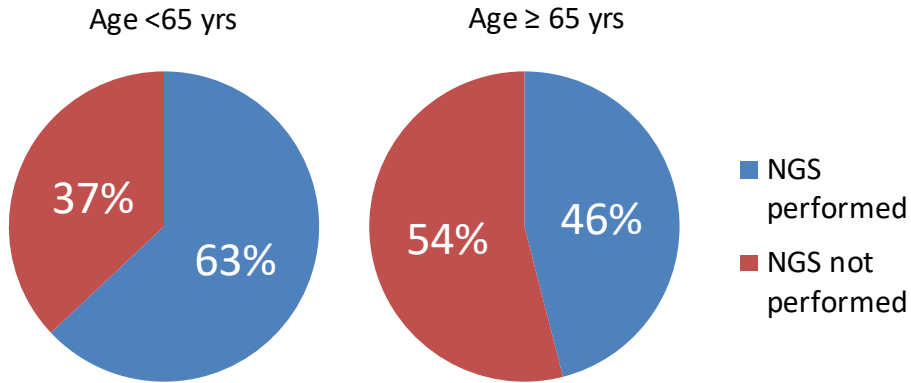
# Results



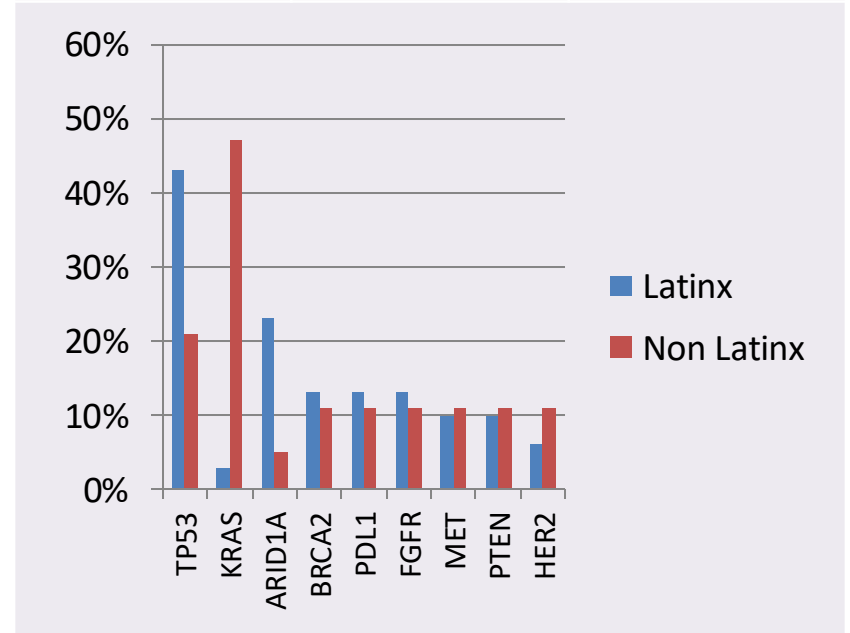
# Pathogenic Mutations



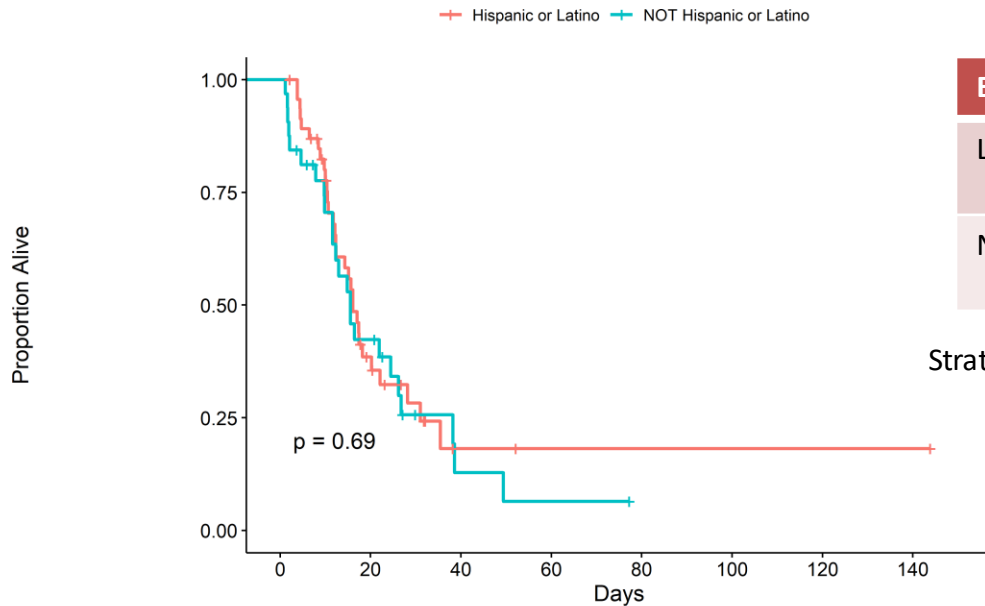




	Latinx (n=51)	Non-Latinx (n=38)
NGS		
• Performed	30 (59%)	19 (50%)
• Not performed	21 (41%)	19 (50%)



# Overall Survival by Ethnicity



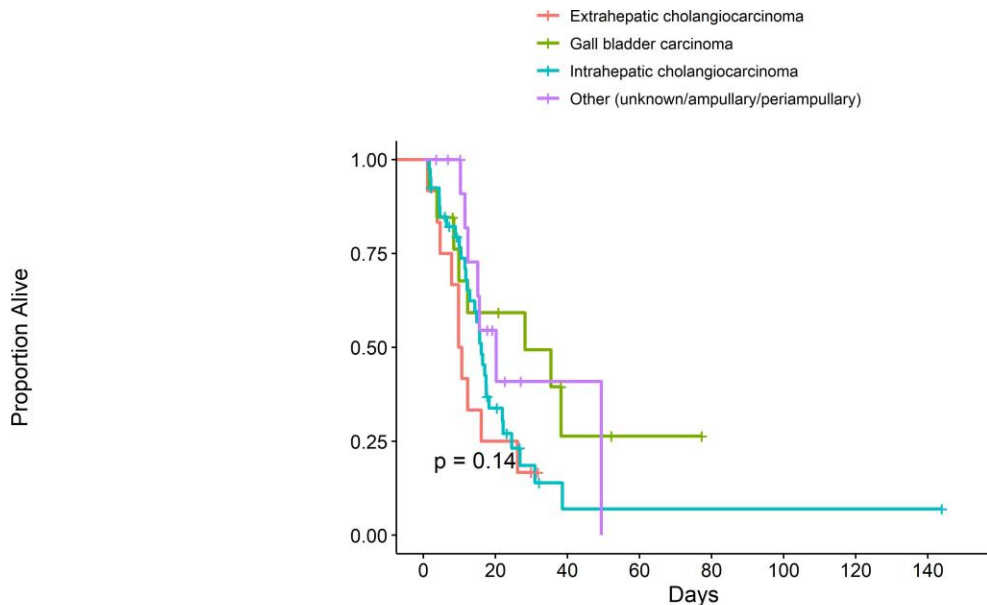
Ethnicity	Median OS (mo)
Latinx	16.1 (12.7-28.3)
Non-Latinx	15.5 (11.6-26.8)

Number at risk

	0	20	40	60	80	100	120	140
Hispanic or Latino	47	13	2	1	1	1	1	1
NOT Hispanic or Latino	32	12	2	1	0	0	0	0

Days

# Overall Survival by Disease Site



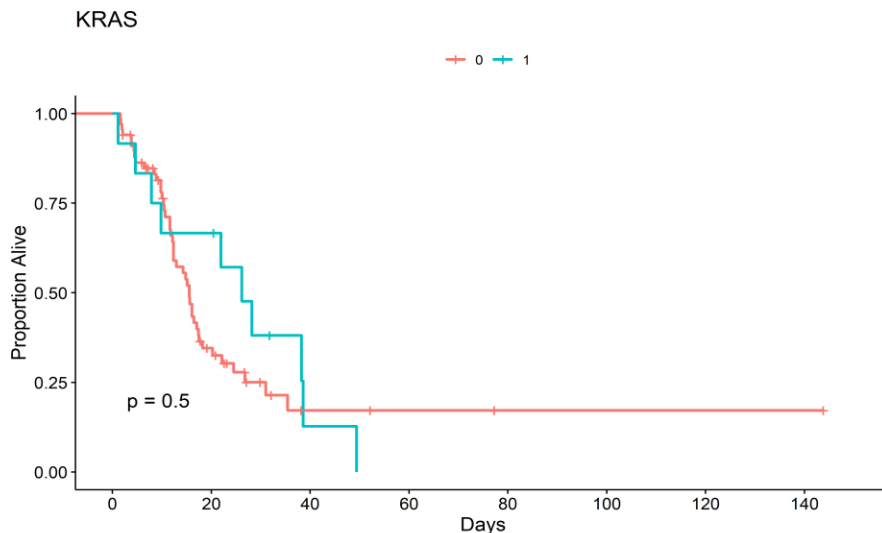
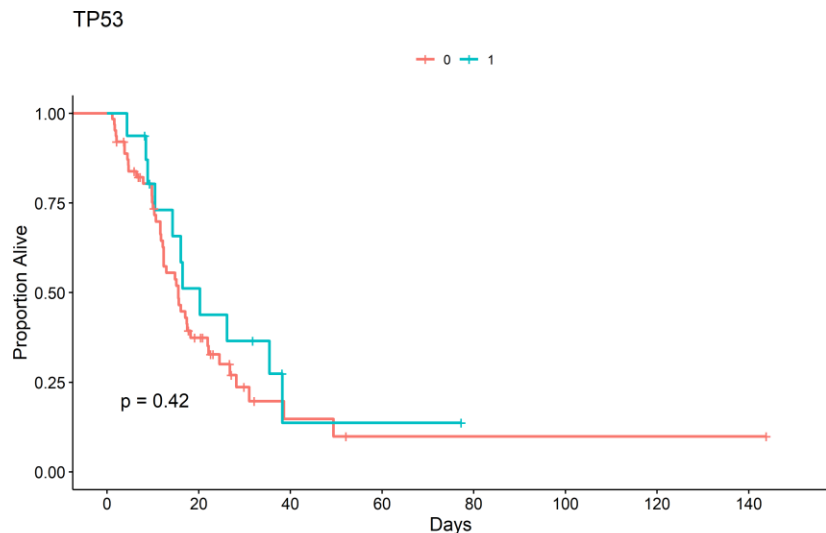
Disease site	Median OS (mo)
Extrahepatic CC	10.21
Gall Bladder Ca	28.2
Intrahepatic CC	16.1
Other	20.2

Number at risk

	0	20	40	60	80	100	120	140
Extrahepatic cholangiocarcinoma	12	3	0	0	0	0	0	0
Gall bladder carcinoma	13	7	2	1	0	0	0	0
Intrahepatic cholangiocarcinoma	40	11	1	1	1	1	1	1
Other (unknown/ampullary/periampullary)	14	4	1	0	0	0	0	0

Days

# Overall Survival by Mutations



**Number at risk**

	0	20	40	60	80	100	120	140
0	63	18	3	1	1	1	1	1
1	16	7	1	1	0	0	0	0

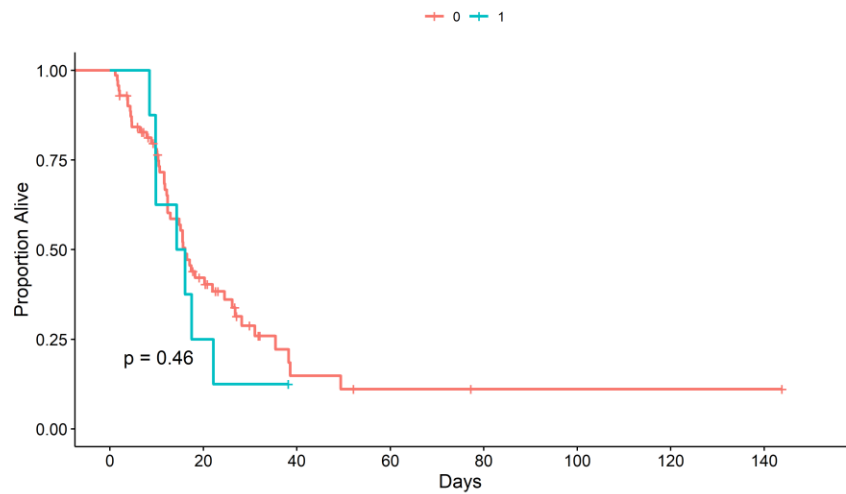
Days

**Number at risk**

	0	20	40	60	80	100	120	140
0	67	17	3	2	1	1	1	1
1	12	8	1	0	0	0	0	0

Days

### ARID1A

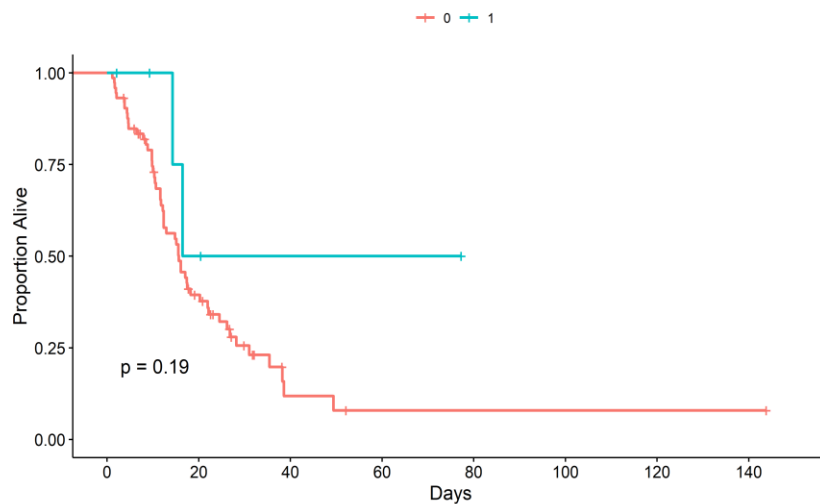


#### Number at risk

	0	20	40	60	80	100	120	140
0	71	23	4	2	1	1	1	1
1	8	2	0	0	0	0	0	0

Days

### BRCA-2



#### Number at risk

	0	20	40	60	80	100	120	140
0	73	23	3	1	1	1	1	1
1	6	2	1	1	0	0	0	0

Days

# Conclusions

- 55% patients with advanced BTC had NGS performed
  - This should be 100%
- Most common mutations were TP53, KRAS and ARID1A
  - Latinx had more TP53 mutations, non Latinx had more KRAS mutations
- 46% of elderly had NGS performed
  - Most common mutations were FGFR and BRCA2
- Latinx and Non-Latinx had similar survival rates
- Survival rate was not different based on type of mutation
- Future directions: Association of mutations with
  - Survival
  - Response to therapy

Thank you!