

# MACQUARIE UNIVERSITY CANCER BIOBANK

MQCB00100A REPORT

14 OCTOBER 2022

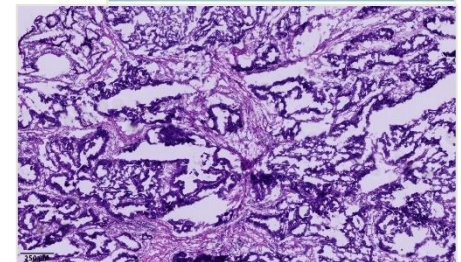
## CLINICAL SUMMARY

**Sex:** Female  
**Age:** 81  
**Pre-operative radiotherapy:** No



## HISTOPATHOLOGY

**Specimen type:** Right Hemicolectomy  
**Tumour site:** Caecum  
**Tumour type:** Adenocarcinoma NOS  
**Tumour stage:** pT3N1b, cMo; Stage IIIB  
**Tumour details:** Mismatch proficient (MLH1, PMSH2, MSH2, MSH6 normal by IHC), BRAFV600E IHC negative



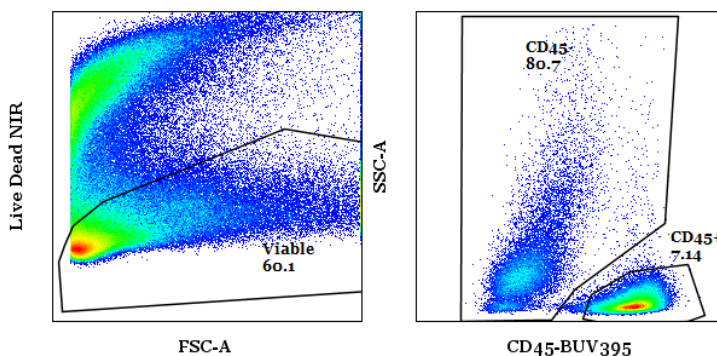
75% Tumour Content

## NEXT GENERATION GENOME/TRANSCRIPTOME DATA

**Provider:** Australian Genome Research Facility - 150bp paired end  
**Data yield:** Germline DNA: 356,936,772 paired end, 107.79 Gbp  
 Tumour DNA: 678,892,717 paired end, 205.03 Gbp  
 Tumour RNA: 52,579,759 paired end, 15.88 Gbp

Top pathogenic somatic mutations			
Gene	Alteration	Allele Frequency	Function
FBXW7	c.1435C>T, p.R479*	52%	Loss
FBXW7	c.1745C>T, p.S582L	24%	Loss
KRAS	c.35G>A, p.G12D	30%	Gain
PIK3CA	c.1633G>A, p.E545K	49%	Gain
TP53	c.743G>A, p.R248Q	19%	Gain
AKT1	c.49G>A, p.E17K	22%	Gain
APC	c.1213C.T, p.R405*	68%	Loss
APC	c.4666dupA, p. T1556fs*3	75%	Loss

## FLOW CYTOMETRY TUMOUR DISSOCIATE ANALYSIS



Cell Type	(%) of subset
Viable cells	60.1
Viable>CD45-	80.7
Viable>CD45+	7.1
Viable>CD45+>B cells	0.5
Viable>CD45+>CD4+/Foxp3-	55.4
Viable>CD45+>Tregs+	10.1
Viable>CD45+>CD8+	5.4
Viable>CD45+>Monocytes/Macrophages	3.9