

3.

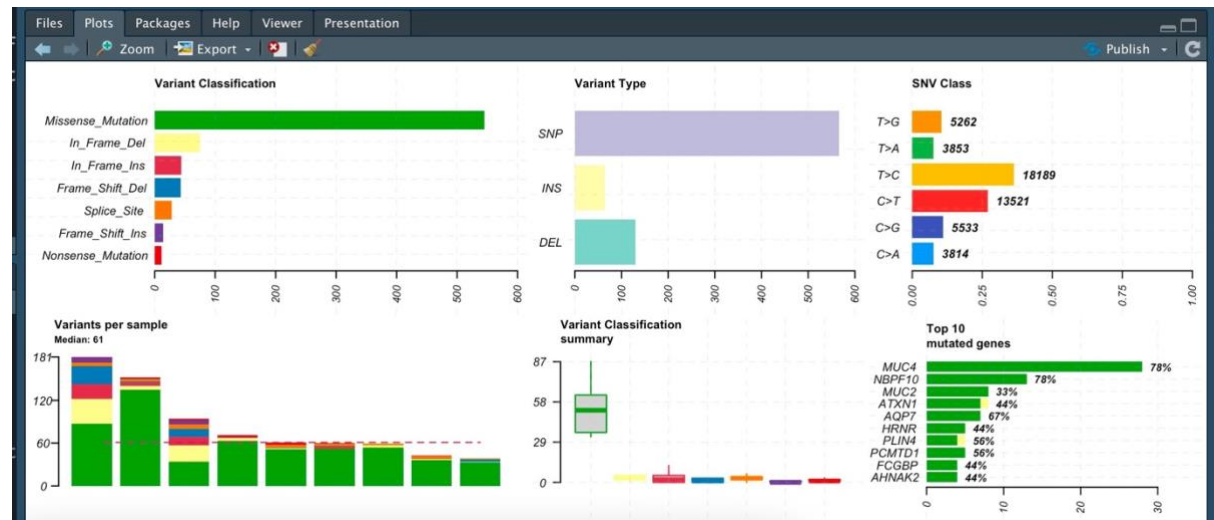
```
> trial
```

An object of class MAF

	ID	summary	Mean	Median
1:	NCBI_Build	hg19	NA	NA
2:	Center	hgsc.bcm.edu	NA	NA
3:	Samples	9	NA	NA
4:	nGenes	483	NA	NA
5:	Frame_Shift_Del	43	4.778	1
6:	Frame_Shift_Ins	14	1.556	0
7:	In_Frame_Del	75	8.333	3
8:	In_Frame_Ins	44	4.889	2
9:	Missense_Mutation	545	60.556	52
10:	Nonsense_Mutation	11	1.222	1
11:	Splice_Site	28	3.111	3
12:	total	760	84.444	61

There are 760 somatic mutations and 483 affected genes.

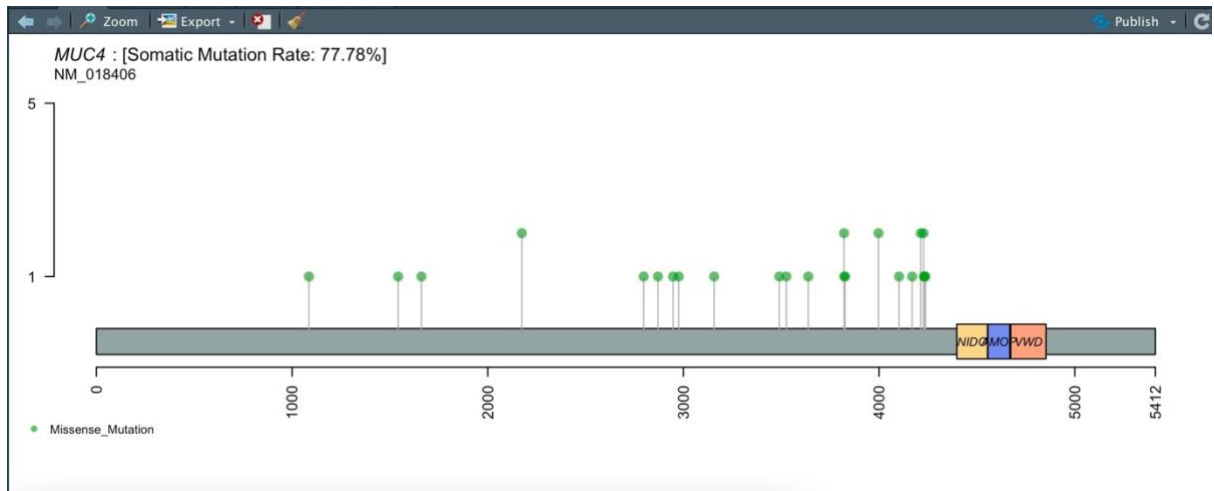
4.



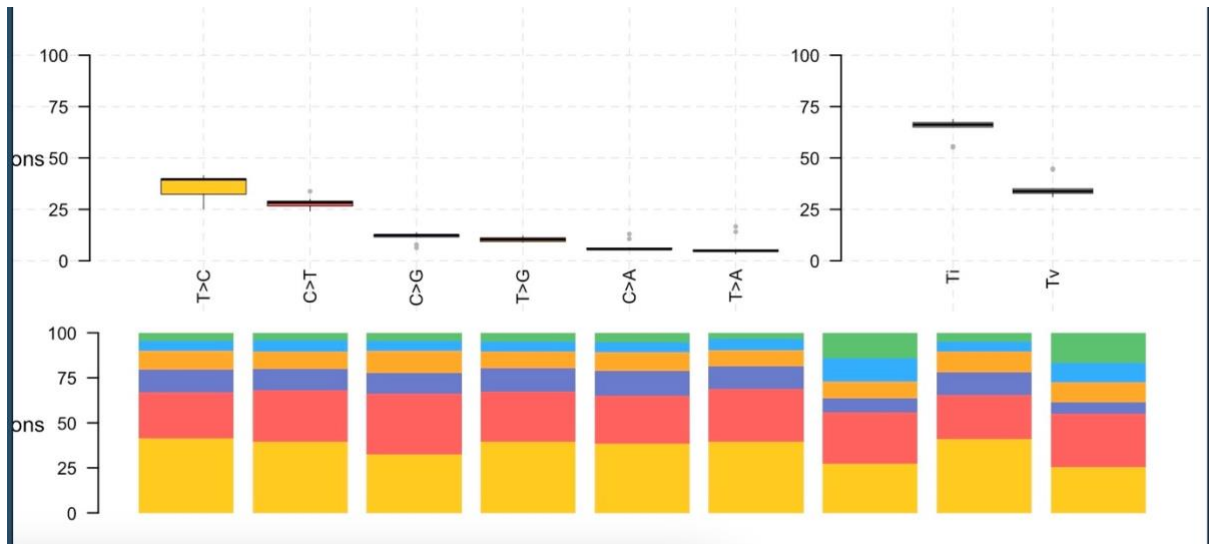
MUC4 is the most mutated gene.

5. Pancreatic cancer is represented by mucin overexpression. MUC4 is the most differentially overexpressed membrane bound mucin. It is important in pancreatic cancer progression and therapy resistance.

6.

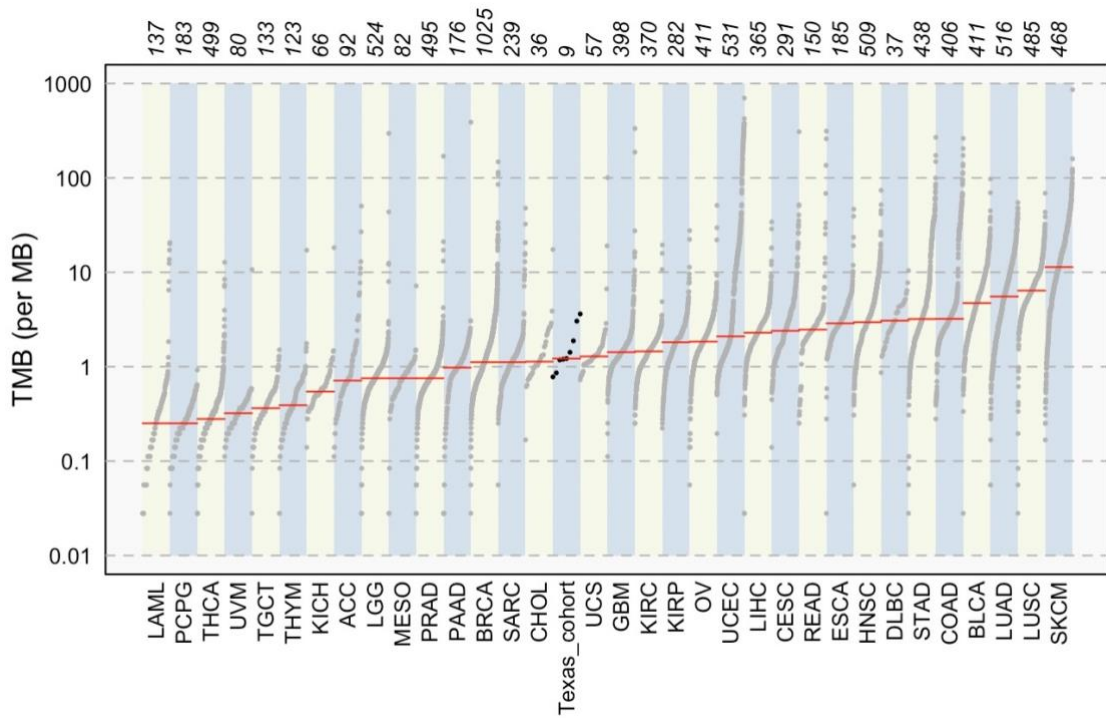


7.



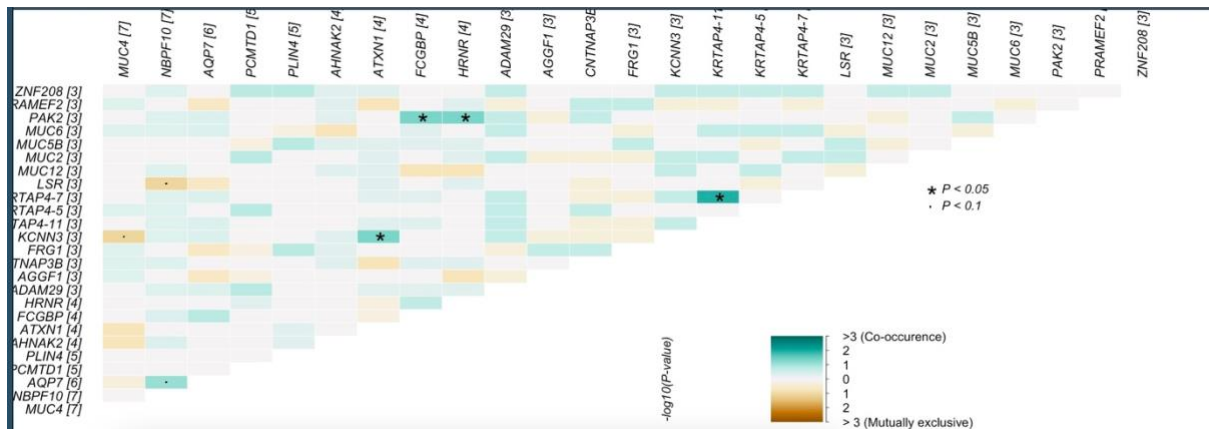
T>C is the most common.

8.



9 samples of Texas\_cohort suffers from just under 1 to over 5 tumour mutation burden per MB.

9.



PAK2 & FCGBP, PAK2 & HRNR, RTAP4-7 & KRTAP4-11, KCNN3 & ATXN1 genes are co-occurred with statistically significant ( $p < 0.05$ ).

10.

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[1] "RANBP2"    "CLTCL1"    "CREBBP"    "HLA-B"     "KRAS"      "MEN1"
[7] "RRAGC"      "VHL"       "ZNF384"    "MST1"      "APOBEC3B"  "ASMTL"
[13] "CDKN2C"     "CHEK2"     "CLTC"      "CPS1"      "HLA-A"     "LARP4B"
[19] "LATS2"      "MAML2"     "MSH3"      "NCOA3"     "NOTCH2"    "PDE4DIP"
[25] "RBM10"      "SFRP1"     "STRN"      "TCL1B"     "TP53"      "USP8"
[31] "WRN"
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There are 31 actionable variants.