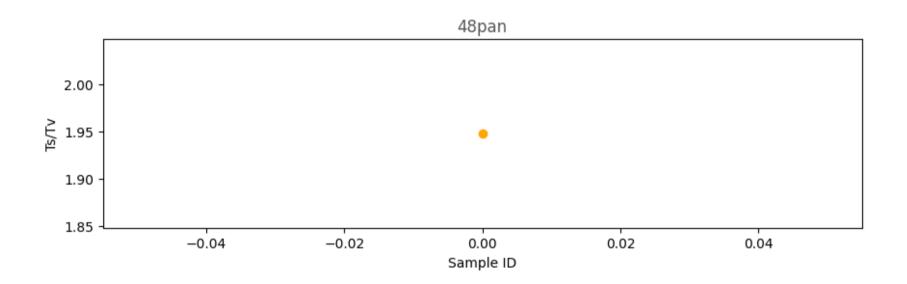
#### **Summary Numbers**

|                                  | SNPs      |       |           | indels  |      | MNPs | others |  |  |
|----------------------------------|-----------|-------|-----------|---------|------|------|--------|--|--|
| Callset                          | n         | ts/tv | (1st ALT) | n       | frm* |      |        |  |  |
| 48pan                            | 4,050,845 | 1.95  | 1.95      | 928,702 | -    | 0    | 0      |  |  |
| * frameshift ratio: out/(out+in) |           |       |           |         |      |      |        |  |  |

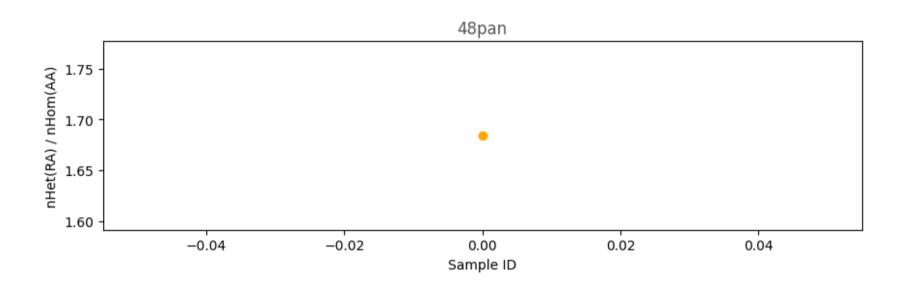
|         | singl | etons (A | multiallelic |        |       |
|---------|-------|----------|--------------|--------|-------|
| Callset | SNPs  | ts/tv    | indels       | sites  | SNPs  |
| 48pan   | 62.8% | 1.93     | 66.7%        | 88,618 | 1,944 |

- 48pan .. /ngc/projects2/gm/data/archive/2022/variants/snv/48pangctf-110301309280-Normal\_B lood\_noinfo-WGS\_v1\_IlluminaDNAPCRFree\_RHGM02189-221102\_A01176\_BH3TYFDSX5-EXT\_LAB KA\_NGCWGS-NGCWGS06039\_snv\_germline\_raw.haplotype\_caller.vcf.gz

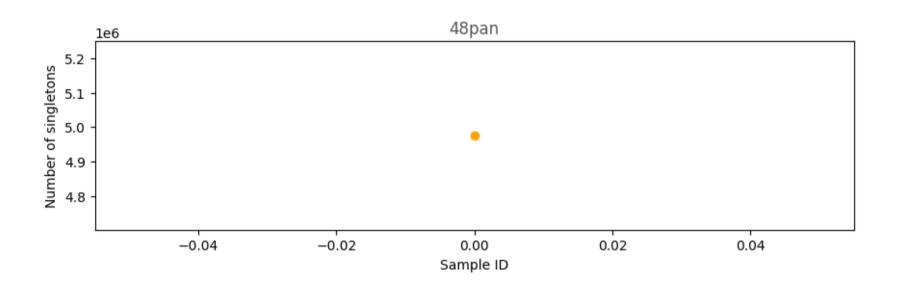
# Ts/Tv by sample



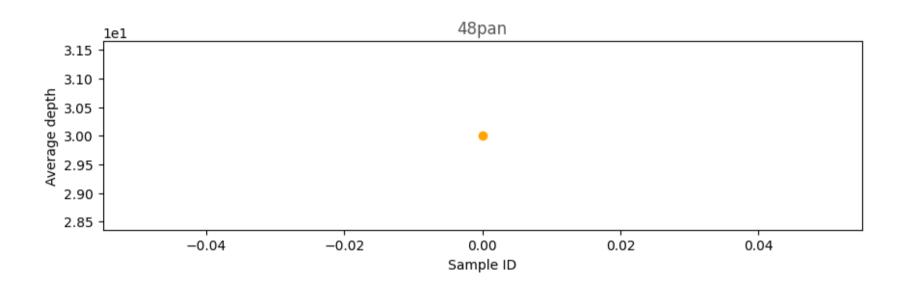
### Hets vs non-ref Homs by sample



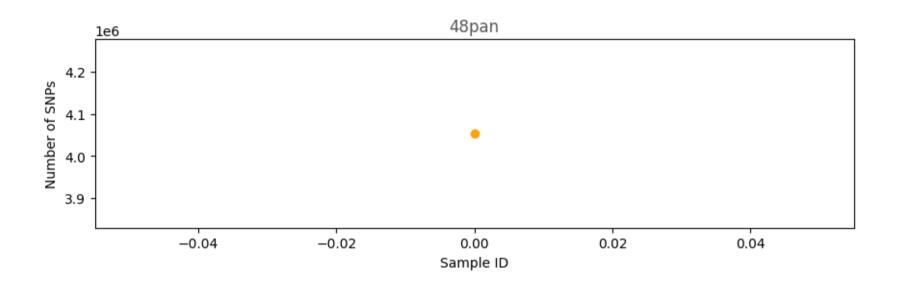
### Singletons by sample (hets and homs)



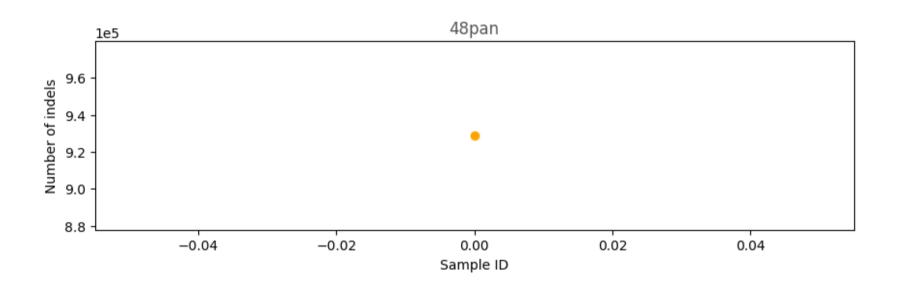
# Average depth by sample



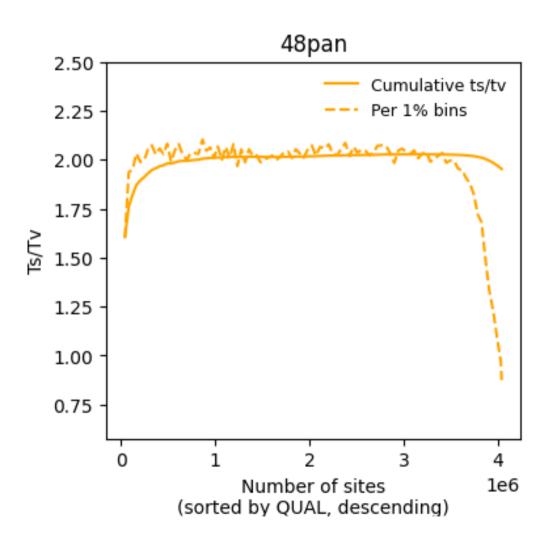
# Number of SNPs by sample



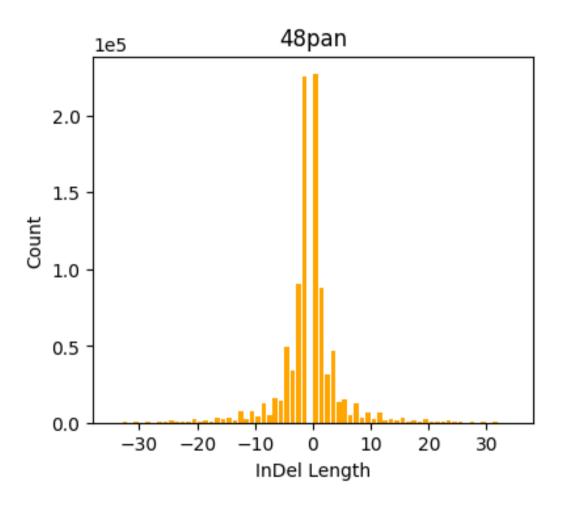
# Number of indels by sample



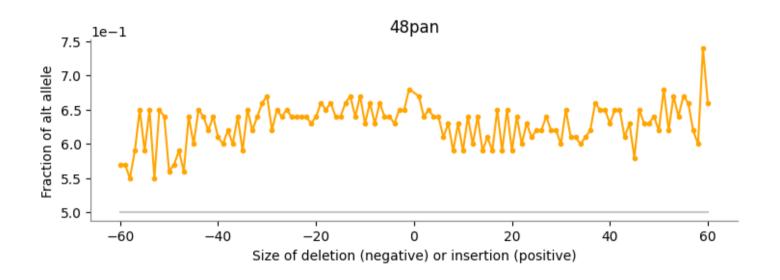
### Ts/Tv stratified by QUAL



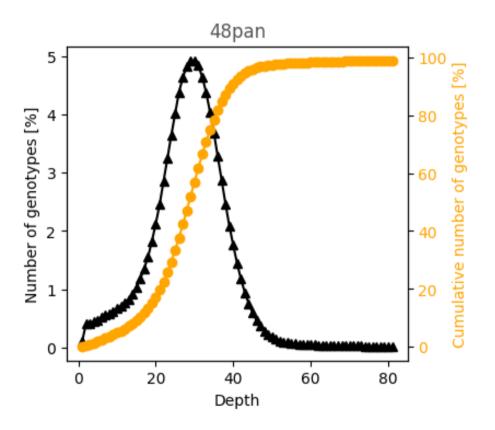
#### Indel distribution



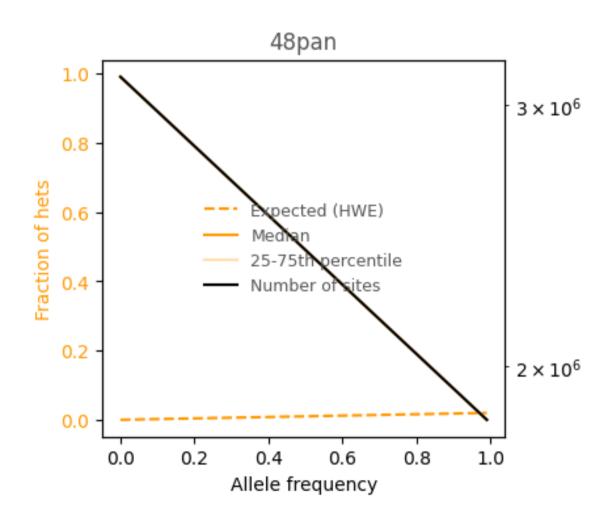
#### Fraction of alternate indel allele



# Depth distribution



#### Number of HETs by AF



#### Substitution types

