

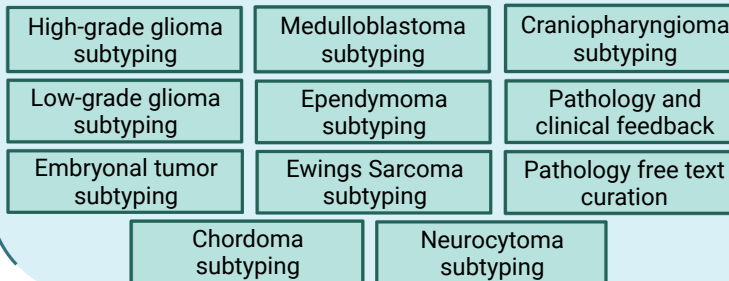


Biospecimen and data
collection



Kids First
PEDIATRIC RESEARCH PROGRAM
Data Resource Center
Genomic sequencing
and harmonization

Clinical metadata updates

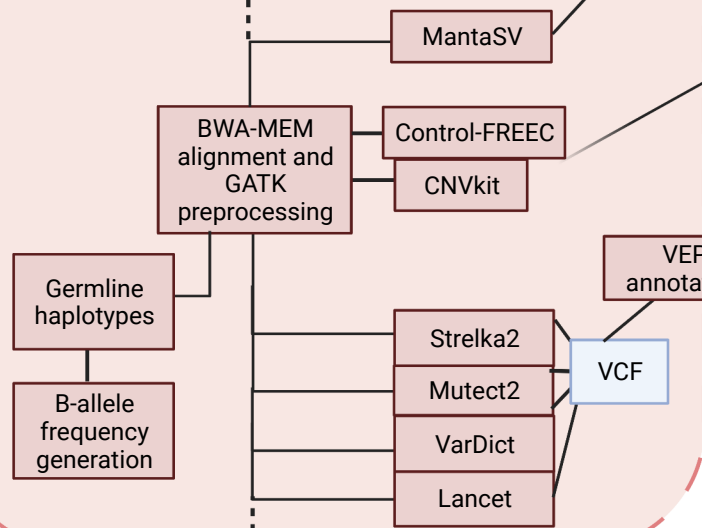


WHO 2016
classification,
integrated
research
diagnosis, &
harmonized
diagnosis

Histology
file

Germline Variant Calling

Somatic Mutation Calling



AnnotSV
annotation

Chromosome
instability and
chromothripsis

Caller-specific
SEG/TSV files

Consensus
calling and
filtering

Focal CNV
calls

Consensus
2 of 3 SEG
file

Gistic

Gistic
output files

Caller-specific
MAFs

Consensus
calling and
filtering

Consensus
3/3 MAF
file

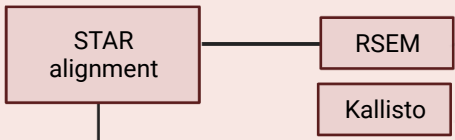
Mutation
co-occurrence

Mutational
Signatures

Compare
pediatric TMB
to adults TMB

QualityControl Check DNA
Tumor-Normal and Tumor RNA
match with NGSCheckmate

Gene expression



expected counts

Telomerase
activity
prediction

Single sample
geneset
analysis

Immune
Deconvolution

TP53 oncogenic
classification

FPKM

TPM

annoFuse
Fusion filtering

Putative
oncogenic
fusions and
summary

RNA Fusion calling



KFDR pipeline



OpenPBTA analysis



Output files