

Classificatie van CNS tumoren m.b.v. Nanopore sequencing



Voor de (intra-operatieve) classificatie van CNS tumoren, middels methylatie-analyse door Nanopore sequencing, wordt gebruikt gemaakt van het 'Sturgeon' algoritme (zie ook PMID: 37821699). 'Sturgeon' is getraind op het herkennen van specifieke CNS tumor entiteiten. Hieronder staat aangegeven welke entiteiten, door welke versie van 'Sturgeon' herkend kunnen worden.

Classificatie van CNS tumoren m.b.v. Nanopore sequencing is geen onderdeel van de ISO15189 accreditatie van M-325

Sturgeon v1.0

IDH glioma, subclass astrocytoma
IDH glioma, subclass high grade astrocytoma
anaplastic pilocytic astrocytoma
atypical teratoid/rhabdoid tumor, subclass MYC
atypical teratoid/rhabdoid tumor, subclass SHH
atypical teratoid/rhabdoid tumor, subclass TYR
chordoid glioma of the third ventricle
chordoma
central neurocytoma
CNS neuroblastoma with FOXR2 activation
control tissue, pituitary gland anterior lobe
control tissue, cerebellar hemisphere
control tissue, hemispheric cortex
control tissue, hypothalamus
control tissue, inflammatory tumor microenvironment
control tissue, pineal gland
control tissue, pons
control tissue, reactive tumor microenvironment
control tissue, white matter
craniopharyngioma, adamantinomatous
craniopharyngioma, papillary
diffuse leptomeningeal glioneuronal tumor
diffuse midline glioma H3 K27M mutant
CNS Ewing sarcoma family tumor with CIC alteration
esthesioneuroblastoma, subclass A
esthesioneuroblastoma, subclass B
ependymoma, myxopapillary
ependymoma, posterior fossa group A
ependymoma, posterior fossa group B
ependymoma, RELA fusion
ependymoma, spinal
ependymoma, YAP fusion
embryonal tumor with multilayered rosettes
Ewing sarcoma
glioblastoma, IDH wildtype, H3.3 G34 mutant
glioblastoma, IDH wildtype, subclass mesenchymal
glioblastoma, IDH wildtype, subclass midline
glioblastoma, IDH wildtype, subclass MYCN

glioblastoma, IDH wildtype, subclass RTK I
glioblastoma, IDH wildtype, subclass RTK II
glioblastoma, IDH wildtype, subclass RTK III
CNS high grade neuroepithelial tumor with BCOR alteration
CNS high grade neuroepithelial tumor with MN1 alteration
hemangioblastoma
infantile hemispheric glioma
low grade glioma, desmoplastic infantile astrocytoma / ganglioglioma
low grade glioma, dysembryoplastic neuroepithelial tumor
low grade glioma, ganglioglioma
low grade glioma, MYB/MYBL1
low grade glioma, subclass hemispheric pilocytic astrocytoma and ganglioglioma
low grade glioma, subclass pilocytic astrocytoma
low grade glioma, rosette forming glioneuronal tumor
low grade glioma, subependymal giant cell astrocytoma
cerebellar liponeurocytoma
lymphoma
medulloblastoma, subclass group 3
medulloblastoma, subclass group 4
medulloblastoma, subclass SHH, Ch/Ad/Inf
medulloblastoma, WNT
melanoma
melanocytoma meningioma
family Atypical teratoid/rhabdoid tumor
family Esthesioneuroblastoma non CIMP
family Glioblastoma, IDH wildtype
family Glioma, IDH mutant
family Medulloblastoma group 3 and 4
family Medulloblastoma, SHH
family Pilocytic astrocytoma
family Plexus Tumor
IDH glioma, subclass 1p/19q codeleted oligodendroglioma
paraganglioma, spinal non-CIMP
pineoblastoma group A / intracranial retinoblastoma
pineoblastoma group B
pineal parenchymal tumor
pituitary adenoma, ACTH
pituitary adenoma, FSH/LH
pituitary adenoma, prolactin
pituitary adenoma, STH densely granulated, group A
pituitary adenoma, STH densely granulated, group B
pituitary adenoma, STH sparsely granulated
pituitary adenoma, TSH
pituicytoma / granular cell tumor / spindle cell oncocytoma plasmacytoma
plexus tumor, subclass adult
plexus tumor, subclass pediatric A
plexus tumor, subclass pediatric B
papillary tumor of the pineal region group A
papillary tumor of the pineal region group B
(anaplastic) pleomorphic xanthoastrocytoma
retinoblastoma
schwannoma melanotic schwannoma
solitary fibrous tumor / hemangiopericytoma
subependymoma, all