

Source:

@ARTICLE{Pomeroy2002,

author = {Scott L Pomeroy and Pablo Tamayo and Michelle Gaasenbeek and Lisa M Sturla and Michael Angelo and Margaret E McLaughlin and John Y H Kim and Liliana C Goumnerova and Peter M Black and Ching Lau and Jeffrey C Allen and David Zagzag and James M Olson and Tom Curran and Cynthia Wetmore and Jaclyn A Biegel and Tomaso Poggio and Shayan Mukherjee and Ryan Rifkin and Andrea Califano and Gustavo Stolovitzky and David N Louis and Jill P Mesirov and Eric S Lander and Todd R Golub},

title = {Prediction of central nervous system embryonal tumour outcome based on gene expression.},

journal = {Nature},

year = {2002},

volume = {415},

pages = {436--442},

number = {6870},

month = {Jan},

doi = {10.1038/415436a},

url = {http://dx.doi.org/10.1038/415436a}

}

Original data: <http://www.broad.mit.edu/mpr/CNS/>

Description: Embryonal tumours of the central nervous system (CNS) represent a heterogeneous group of tumours about which little is known biologically, and whose diagnosis, on the basis of morphologic appearance alone, is controversial. medulloblastomas (MD), for example, are the most common malignant brain tumour of childhood, but their pathogenesis is unknown, their relationship to other embryonal CNS tumours is debated, and patients' response to therapy is difficult to predict. The authors approached these problems by developing a classification system based on DNA microarray gene expression data derived from 99 patient samples. They demonstrate that medulloblastomas are molecularly distinct from other brain tumours including primitive neuroectodermal tumours (PNETs), atypical teratoid/rhabdoid tumours (Rhab) and malignant gliomas (Mglio). Within the class of medulloblastomas (MD), they also studied the heterogeneity of classic (C) desmoplastic (D) ones. In the analysis, normal tissues were also considered (Ncer).

- **Pomeroy-V1:** 25 CMD and 9 DMD.
- **Pomeroy-V2:** 10 MD, 10 Mglio, 10 Rhab, 4 Ncer and 8 PNET.