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| ID | Accession | Microarray Platform (No. of Genes) | Number of control/disease subjects | Demographics /sample | INcluded | Linked publications | Soft file link |
| 1 | GDS4477[ACCN] | GPL570: [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 27-Diseased GBM | Pediatric glioblastoma brain tumors: histone H3.3 mutations | y | Schwartzentruber J, Korshunov A, Liu XY, Jones DT et al. Driver mutations in histone H3.3 and chromatin remodelling genes in paediatric glioblastoma. Nature 2012 Jan 29;482(7384):226-31. PMID: 22286061 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4477/soft/GDS4477\_full.soft.gz |
| Pediatric glioblastoma brain tumors: histone H3.3 mutations |
| 2 | GSE34824 (Same as above | GPL570 Expression profiling by array | RNA from 27 primary tumor samples |  | y |  | http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE34824 |
| [Methylation data from glioblastoma tumor samples](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE36278) |
| 3 | GSE36278 | GPL13534 Illumina 450k methylation array. | subset of childhood (n=59) and adult GBMs (n=77) 6 controls (non-neoplastic brain tissue)=142 | Gender, age at diagnosis | **y** |   | http://www.ncbi.nlm.nih.gov/geo/download/?acc=GSE36278 |
| Glioblastoma brain tumors |
| 4 | GSE36245 | GPL570[HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 46 glioblastoma samples Mutations in H3F3A and IDH1 | **Various ages** | y | Sturm D, Witt H, Hovestadt V, Khuong-Quang DA et al. Hotspot mutations in H3F3A and IDH1 define distinct epigenetic and biological subgroups of glioblastoma. Cancer Cell 2012 Oct 16;22(4):425-37. PMID: 23079654 | [http://www.ncbi.nlm.nih.gov/geoprofiles/?term=GDS4470[ACCN]-](http://www.ncbi.nlm.nih.gov/geoprofiles/?term=GDS4470%5bACCN%5d-) Geo profiles of all 46 samples  |
| 5 | GSE12163 | GPL570 | Pediatric high-grade gliomas (pHGGs)- 22 |  | n |  | http://www.ncbi.nlm.nih.gov/geo/download/?acc=GSE22162 |
| The histone H3.3K27M mutation in pediatric glioma reprograms H3K27 methylation and gene expression |
| 5 | GSE61586 | GPL11154  | 16 Samples |  | n |  | http://www.ncbi.nlm.nih.gov/geo/download/?acc=GSE61586 |
| 6 | GSE31545 | GPL570: [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 14 primary neurosphere cultures of glioblastoma (GBM) |  | y | Ng FS, Toh TB, Ting EH, Koh GR et al. Progenitor-like traits contribute to patient survival and prognosis in oligodendroglial tumors. Clin Cancer Res 2012 Aug 1;18(15):4122-35. PMID: 22675171 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4473/soft/GDS4473\_full.soft.gz |
| Medulloblastomas in children |
| 7 | GDS4471 | GPL570: [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 76 | Gender given | n | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4471/soft/GDS4471\_full.soft.gz | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4471/soft/GDS4471\_full.soft.gz |
| 8 | Primary and secondary brain tumors: glioblastomas, astrocytomas and oligodendrogliomas  (IDH1 mutations) |
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| GDS4467 |

 | [GPL570](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL570): [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Arra | 35 MNK1 kinase upregulation observed in primary GBM brain tumors |  | y | * Grzmil M, Morin P Jr, Lino MM, Merlo A et al. MAP kinase-interacting kinase 1 regulates SMAD2-dependent TGF-β signaling pathway in human glioblastoma. *Cancer Res* 2011 Mar 15;71(6):2392-402. PMID: [21406405](http://www.ncbi.nlm.nih.gov/pubmed/21406405)
 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4467/soft/GDS4467\_full.soft.gz |
| 9 | High grade astrocytoma patient survival: brain tumor |
|  | [GSE33331](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE33331) | [GPL570](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL570): [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 26 | Survival time | * y
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| * Donson AM, Birks DK, Schittone SA, Kleinschmidt-DeMasters BK et al. Increased immune gene expression and immune cell infiltration in high-grade astrocytoma distinguish long-term from short-term survivors. *J Immunol* 2012 Aug 15;189(4):1920-7. PMID: [22802421](http://www.ncbi.nlm.nih.gov/pubmed/22802421)
 |

 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4465/soft/GDS4465\_full.soft.gz |
|  Primary central nervous system lymphoma patients: brain tumor |
| 10 | [GSE34771](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE34771) |

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| GPL570: [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array |

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 | Gender age agent(Drugs), Survival | * n
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| * Kawaguchi A, Iwadate Y, Komohara Y, Sano M et al. Gene expression signature-based prognostic risk score in patients with primary central nervous system lymphoma. *Clin Cancer Res* 2012 Oct 15;18(20):5672-81. PMID: [22908096](http://www.ncbi.nlm.nih.gov/pubmed/22908096)
 |

 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS4nnn/GDS4464/soft/GDS4464\_full.soft.gz |
|  |  Breast cancer patients: peripheral blood mononuclear cells |
| 11 | GSE27567 | [GPL570](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL570): [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 162 |  | n | LaBreche HG, Nevins JR, Huang E. Integrating factor analysis and a transgenic mouse model to reveal a peripheral blood predictor of breast tumors. *BMC Med Genomics* 2011 Jul 22;4:61. PMID: [21781289](http://www.ncbi.nlm.nih.gov/pubmed/21781289) | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3952/soft/GDS3952\_full.soft.gz |
| 11 | Various brain tumors (Analysis of 12 primary brain tumor biopsies) |
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| [GSE8692](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE8692) |

 | [GPL96](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL96): [HG-U133A] Affymetrix Human Genome U133A Array | 12  | Disease state | * n
 | * Liu T, Papagiannakopoulos T, Puskar K, Qi S et al. Detection of a microRNA signal in an in vivo expression set of mRNAs. *PLoS One* 2007 Aug 29;2(8):e804. PMID: [17726534](http://www.ncbi.nlm.nih.gov/pubmed/17726534)
 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS3nnn/GDS3069/soft/GDS3069\_full.soft.gz |
| 12 | Comparison of low and high grade astrocytoma brain tumors. |
|  | [GSE3185](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE3185) | [GPL8300](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL8300): [HG\_U95Av2] Affymetrix Human Genome U95 Version 2 Array | 16 | Type of sample | * y/n
 | * Khatua S, Peterson KM, Brown KM, Lawlor C et al. Overexpression of the EGFR/FKBP12/HIF-2alpha pathway identified in childhood astrocytomas by angiogenesis gene profiling. *Cancer Res* 2003 Apr 15;63(8):1865-70. PMID: [12702575](http://www.ncbi.nlm.nih.gov/pubmed/12702575)
 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS2nnn/GDS2853/soft/GDS2853\_full.soft.gz |
| 13 | Gliomas of grades III and IV (HG-U133B) |
|  | GSE4412 | [GPL97](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL97): [HG-U133B] Affymetrix Human Genome U133B Arra |

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 | No patient description | y |

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| * Freije WA, Castro-Vargas FE, Fang Z,

Horvath S et al. Gene expression profiling of gliomas strongly predicts survival. Cancer Res 2004 Sep 15;64(18):6503-10. PMID: 15374961 |

 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1976/soft/GDS1976\_full.soft.gz |
| 14 | Gliomas of grades III and IV (HG-U133A |
|  | GSE4412 | [GPL96](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL96): [HG-U133A] Affymetrix Human Genome U133A Array | 85 |  | y | Freije WA, Castro-Vargas FE, Fang Z, Horvath S et al. Gene expression profiling of gliomas strongly predicts survival. *Cancer Res* 2004 Sep 15;64(18):6503-10. PMID: [15374961](http://www.ncbi.nlm.nih.gov/pubmed/15374961) | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1975/soft/GDS1975\_full.soft.gz |
| 15 | Glioma-derived stem cell factor effect on angiogenesis in the brain |
|  | GDS1962[ACCN] | [GPL570](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL570): [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 180 | Disease state and tissue | n | Sun L, Hui AM, Su Q, Vortmeyer A et al. Neuronal and glioma-derived stem cell factor induces angiogenesis within the brain. Cancer Cell2006 Apr;9(4):287-300. PMID: 16616334 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1962/soft/GDS1962\_full.soft.gz |
| 16 | High-grade gliomas (HG-U133B |
|  | GDS1816[ACCN] | [GPL97](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL97): [HG-U133B] Affymetrix Human Genome U133B Array | 100 | Survival time | * y
 | * Phillips HS, Kharbanda S, Chen R, Forrest WF et al. Molecular subclasses of high-grade glioma predict prognosis, delineate a pattern of disease progression, and resemble stages in neurogenesis. *Cancer Cell* 2006 Mar;9(3):157-73. PMID: [16530701](http://www.ncbi.nlm.nih.gov/pubmed/16530701)
* Costa BM, Smith JS, Chen Y, Chen J et al. Reversing HOXA9 oncogene activation by PI3K inhibition: epigenetic mechanism and prognostic significance in human glioblastoma. *Cancer Res* 2010 Jan 15;70(2):453-62. PMID: [20068170](http://www.ncbi.nlm.nih.gov/pubmed/20068170)
 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1816/soft/GDS1816\_full.soft.gz |
| 17 | High-grade gliomas (HG-U133A) |
|  | GDS1815[ACCN] | [GPL96](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL96): [HG-U133A] Affymetrix Human Genome U133A Arra | 100 | Disease state | * y
 | * Phillips HS, Kharbanda S, Chen R, Forrest WF et al. Molecular subclasses of high-grade glioma predict prognosis, delineate a pattern of disease progression, and resemble stages in neurogenesis. *Cancer Cell* 2006 Mar;9(3):157-73. PMID: [16530701](http://www.ncbi.nlm.nih.gov/pubmed/16530701)
* Costa BM, Smith JS, Chen Y, Chen J et al. Reversing HOXA9 oncogene activation by PI3K inhibition: epigenetic mechanism and prognostic significance in human glioblastoma. *Cancer Res* 2010 Jan 15;70(2):453-62. PMID: [20068170](http://www.ncbi.nlm.nih.gov/pubmed/20068170)
 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1815/soft/GDS1815\_full.soft.gz |
| 18 | **Pituitary adenoma subtypes** |
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| [GSE2175](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE2175) |

 | [GPL96](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL96): [HG-U133A] Affymetrix Human Genome U133A Array |

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 | Disease state | * y
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| * Morris DG, Musat M, Czirják S, Hanzély Z et al. Differential gene expression in pituitary adenomas by oligonucleotide array analysis. *Eur J Endocrinol* 2005 Jul;153(1):143-51. PMID: [15994756](http://www.ncbi.nlm.nih.gov/pubmed/15994756)
 |

 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1253/soft/GDS1253\_full.soft.gz |
| 19 | Autocrine platelet-derived growth factor inhibition effect on malignant gliomas |
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|  | GSE1923 | [GPL8300](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL8300): [HG\_U95Av2] Affymetrix Human Genome U95 Version 2 Arra | 15 |  | n | Ma D, Nutt CL, Shanehsaz P, Peng X et al. Autocrine platelet-derived growth factor-dependent gene expression in glioblastoma cells is mediated largely by activation of the transcription factor sterol regulatory element binding protein and is associated with altered genotype and patient survival in human brain tumors. *Cancer Res* 2005 Jul 1;65(13):5523-34. PMID: [15994924](http://www.ncbi.nlm.nih.gov/pubmed/15994924) | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDS1nnn/GDS1730/soft/GDS1730\_full.soft.gz |
| 20 | Medulloblastoma metastasis |
|  | GDS232[ACCN] |

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| [GPL74](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL74): [HC\_G110] Affymetrix Human Cancer Array |

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| * MacDonald TJ, Brown KM, LaFleur B, Peterson K et al. Expression profiling of medulloblastoma: PDGFRA and the RAS/MAPK pathway as therapeutic targets for metastatic disease. *Nat Genet* 2001 Oct;29(2):143-52. PMID: [11544480](http://www.ncbi.nlm.nih.gov/pubmed/11544480)
 |

 | ftp://ftp.ncbi.nlm.nih.gov/geo/datasets/GDSnnn/GDS232/soft/GDS232\_full.soft.gz |
| 21 | Expression data from glioma patients |
|  | GSE43378 | GPL570 [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 50 gliomas |  | * n
 |  | http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE43378 |
| 22 | ST3GAL1-Associated Transcriptomic Program in Glioblastoma Tumor Growth, Invasion, and Prognosis |
|  | GSE51411 | GPL14186 Illumina HumanRef-8 v2 Expression Beadchip 1699538181 | 4 patients |  | * n
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| * Chong YK, Sandanaraj E, Koh LW, Thangaveloo M et al. ST3GAL1-Associated Transcriptomic Program in Glioblastoma Tumor Growth, Invasion, and Prognosis.*J Natl Cancer Inst* 2016 Feb;108(2). PMID: [26547933](http://www.ncbi.nlm.nih.gov/pubmed/26547933)
 |

 | <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE51411> |
| 23 | Gene expression data of GBM146 and GBM157 at day0, 7, 30 after serum exposure |
|  | GSE74304 | http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE43378 | unidentifiablle |  | * y
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| * Ouchi R, Okabe S, Migita T, Nakano I et al. Senescence from glioma stem cell differentiation promotes tumor growth. *Biochem Biophys Res Commun* 2016 Jan 14. PMID: [26775840](http://www.ncbi.nlm.nih.gov/pubmed/26775840)
 |

 | http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE74304 |
| 24 | Differential expression and prognostic significant of SOX genes in pediatric medulloblastoma and ependymoma identified by microarray analysis |
|  | GSE74195 | GPL570 [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 51 |  | * y
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| * de Bont JM, Kros JM, Passier MM, Reddingius RE et al. Differential expression and prognostic significance of SOX genes in pediatric medulloblastoma and ependymoma identified by microarray analysis. *Neuro Oncol* 2008 Oct;10(5):648-60. PMID: [18577562](http://www.ncbi.nlm.nih.gov/pubmed/18577562)
 |

 | <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE74195> |
| 25 | Enriching glioma stem cells by intracranial implantation and developing clinically relevant model for therapeutic intervention |
|  | GSE54660 |

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|  |  | [GPL570](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL570)[HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array |

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 |  | <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE54660> |
| 26 | Cytomegalovirus promotes maintenance and growth of glioblastoma stem cells [Human gene expression] |
|  | GSE56715 |  GPL6244 [HuGene-1\_0-st] Affymetrix Human Gene 1.0 ST Array [transcript (gene) version] | 4 |  | * y
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| * Soroceanu L, Matlaf L, Khan S, Akhavan A et al. Cytomegalovirus Immediate-Early Proteins Promote Stemness Properties in Glioblastoma. *Cancer Res* 2015 Aug 1;75(15):3065-76. PMID: [26239477](http://www.ncbi.nlm.nih.gov/pubmed/26239477)
 |

 | <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE56715> |
| 27 | Cytomegalovirus promotes maintenance and growth of glioblastoma stem cells [HCMV gene expression] |
|  | GSE56750 | GPL15366 PHRI-UMNDJ Human cytomegalovirus 1.5K CAG\_HCMV [gene-level] | 2 |  | * y
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| * Soroceanu L, Matlaf L, Khan S, Akhavan A et al. Cytomegalovirus Immediate-Early Proteins Promote Stemness Properties in Glioblastoma. *Cancer Res* 2015 Aug 1;75(15):3065-76. PMID: [26239477](http://www.ncbi.nlm.nih.gov/pubmed/26239477)
 |

 | http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE56750 |
| 28 | Identification of targets for rational pharmacological therapy in childhood craniopharyngioma |
|  | GSE68015 | [GPL570](http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GPL570)[HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 112 |  | n | Gump JM, Donson AM, Birks DK, Amani VM et al. Identification of targets for rational pharmacological therapy in childhood craniopharyngioma. *Acta Neuropathol Commun* 2015 May 21;3:30. PMID: [25990246](http://www.ncbi.nlm.nih.gov/pubmed/25990246) | <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE68015> |
| 29 | BAC aCGH profiling of 64 GBM (primary & recurrent) |
|  | GSE60507 | Genomic DNA from the 64 samples and synthetic normal reference DNA were labelled with Cy3 and Cy5 respectively and hybridised to HumArray3 and HumArray2 chips. The unified platform HumArray3.1 is used for annotation purposes | 64 | Age gender | * y/n
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| * Kurscheid S, Bady P, Sciuscio D, Samarzija I et al. Chromosome 7 gain and DNA hypermethylation at the HOXA10 locus are associated with expression of a stem cell related HOX-signature in glioblastoma. *Genome Biol* 2015 Jan 27;16:16. PMID: [25622821](http://www.ncbi.nlm.nih.gov/pubmed/25622821)
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