

Tumor Type

(Neo)Adjuvant

1L

2L+

Brain & spinal tumors
(of which ~50-70% gliomas)

Focal brain radiation + chemo (TMZ) ⁽¹⁾ (NCT00006353) 	Chemo (TMZ)⁽¹⁾ + TTFields (Optune) (EF-14) 	Bevacizumab & biosimilars (AVF3708g, NCI06-C-0064E, EORTC 26101) 
Neoadjuvant Pembrolizumab (NCT05235737) 	Tovorafenib (FIREFLY-2) RAF  Ped.	TTFields monotherapy (EF-11) 
Post-adjuvant TMZ	Pembrolizumab + TTFields (2-THE-TOP) 	Post-radiation & chemo
	High-Dose TTFields (EF-33) 	
	Radiation + Pembro + TMZ +/- Prophage (NCT03018288) 	Tovorafenib (FIREFLY-1) ✓ RAF  Ped.
	DCVax(R)-L (NCT00045968) 	Vorasidenib + pembrolizumab (NCT05484622) IDH1/2 
	Vorasidenib (INDIGO) IDH1/2 	Some patients are 1L
Post radiotherapy	Durvalumab + radiation / bevacizumab (NCT02336165) 	
	DNX-2401 (NCT00805376)  Ped.	
	Paxalisib⁽²⁾ (NCT03522298) 	DNX-2401 + Pembrolizumab (CAPTIVE / KEYNOTE-192) 
	ONC201 (ACTION) H3 K27M 	BDTX-1535 +/- TMZ (NCT05256290) EGFR 
	Selinexor + SoC (NCT04421378) 	Mirdametinib (SJ901) MEK1/2  Ped.
	Nab-sirolimus + SoC (NCT03463265) 	Pembrolizumab (KEYNOTE-028) 
	CAN008 + TMZ (NCT05447195) 	Pembrolizumab + Lenvatinib (LEAP-005) 
	Noteworthy failures: Avastin in AVAglio and RTOG-0825	Noteworthy failures: - VB-111 in GLOBE - Nivolumab in CheckMate-143, CheckMate-498 and CheckMate-548 - Omburtamab rejected by FDA & EMA

(1) TMZ (temozolomide) is the most used alkylating chemotherapy; other options include carmustine, lomustine, procarbazine, carboplatin and 5-FU
(2) Also in several IIS trials such as NCT03765983 (Dana Farber), NCT03696355 (St. Judes), NCT04192981 (MSK), NCT03970447 (GCAR), NCT03994796 (Alliance for CT in Onc)
Note: Ped = pediatric patients enrolled; bottom left = targeted mutation; top right checkmark = trial successful (rolling NDA);