

**Table 1** PLGG with KIAA1549-BRAF fusion: patient characteristics, response, and toxicity with trametinib

Cases	Age at diagnosis (years); sex	Histologic diagnosis; tumor location	Prior surgery	Prior therapy	Age on treatment onset (years)	Time on treatment (months)	Best overall response	Functional response	Side effects
Case 1	1.5; F	PA; medulla oblongata with leptomeningeal dissemination	Biopsy	CPT 11-CDDP; VBL	5.8	20	PR	Stable	Skin (grade II) Abdominal pain (grade II) Cheilitis (grade I) CPK and AP increased (grade I)
Case 2	0.5; M	PMA; hypothalamic- chiasmatic PA; intramedullary	Biopsy, PR	VCR-CBCDA; 5 DR-BEV	1	18	SD	Stable	Skin (grade I) Cheilitis (grade I)
Case 3	0.9; F	PA; intramedullary	Biopsy	VCR-CBCDA; CPT 11-CDDP	12	15	SD	Improvement of brachial hemiparesis, resolution of paresthesia in hands and torticollis	Skin (grade II) Skin (grade II) Alopecia (grade I) Vasculitis (grade III) CPK and ALT increased (grade I)
Case 4	1; M	PMA; hypothalamic- chiasmatic	Biopsy	CPT 11-CDDP; VBL; BEV-CDDP; BEV	7.5	5	SD	Stable	Skin (grade II) Cheilitis (grade I) Mucositis oral (grade I) Abdominal pain (grade I) Fatigue and anorexia (grade II)
Case 5	4.4; F	PA; hypothalamic- chiasmatic	Biopsy, PR	CPT 11-CDDP; VBL; BEV-CDDP	12.5	8	PD	Visual deterioration	CPK increased (grade I) Skin (grade II) Alopecia (grade II) Cheilitis (grade III) Mucositis oral (grade II) Fatigue and anorexia (grade II)
Case 6	5.8; F	PA; intramedullary	Biopsy, PR	CPT 11-CDDP; VBL; BEV-CDDP	12.3	15	SD	Resolution of paresthesia in hands	Skin (grade I) Alopecia (grade I) Mucositis oral (grade I) CPK and LDH increased (grade I)
Case 7	0.8; F	PMA; hypothalamic- chiasmatic	Biopsy	VCR-CBCDA; BEV	2.8	6	PD	Stable	Skin (grade II) Alopecia (grade I)
Case 8	1.8; M	PA; hypothalamic- chiasmatic	Biopsy	VCR-CBCDA; VBL	2.9	6	PD	Increased hemiparesis and cranial nerve abnormalities	Abdominal pain (grade I) CPK increased (grade II) AST and LDH increased (grade I)
Case 9	3.9; M	PA; hypothalamic- chiasmatic with leptomeningeal dissemination	PR	CPT 11-CDDP	9.6	14 (continue)	SD	Stable	Skin (grade II) Abdominal pain (grade II) CPK increased (grade II) AST and LDH increased (grade I)
Case 10	0.4; M	PMA; hypothalamic- chiasmatic	Biopsy, PR	VCR-CBCDA; VBL-BEV	1.8	14 (continue)	SD	Diencephalic syndrome improvement	Vomiting (grade I)
Case 11	1.1; F	GG; intramedullary	Biopsy, PR	CPT 11-CDDP; VBL; VCR-CBCDA; BEV-CPT 11	10.8	12 (continue)	SD	Stable	Cystitis (grade II) Lymph gland infection (grade III) LDH increased (grade I)