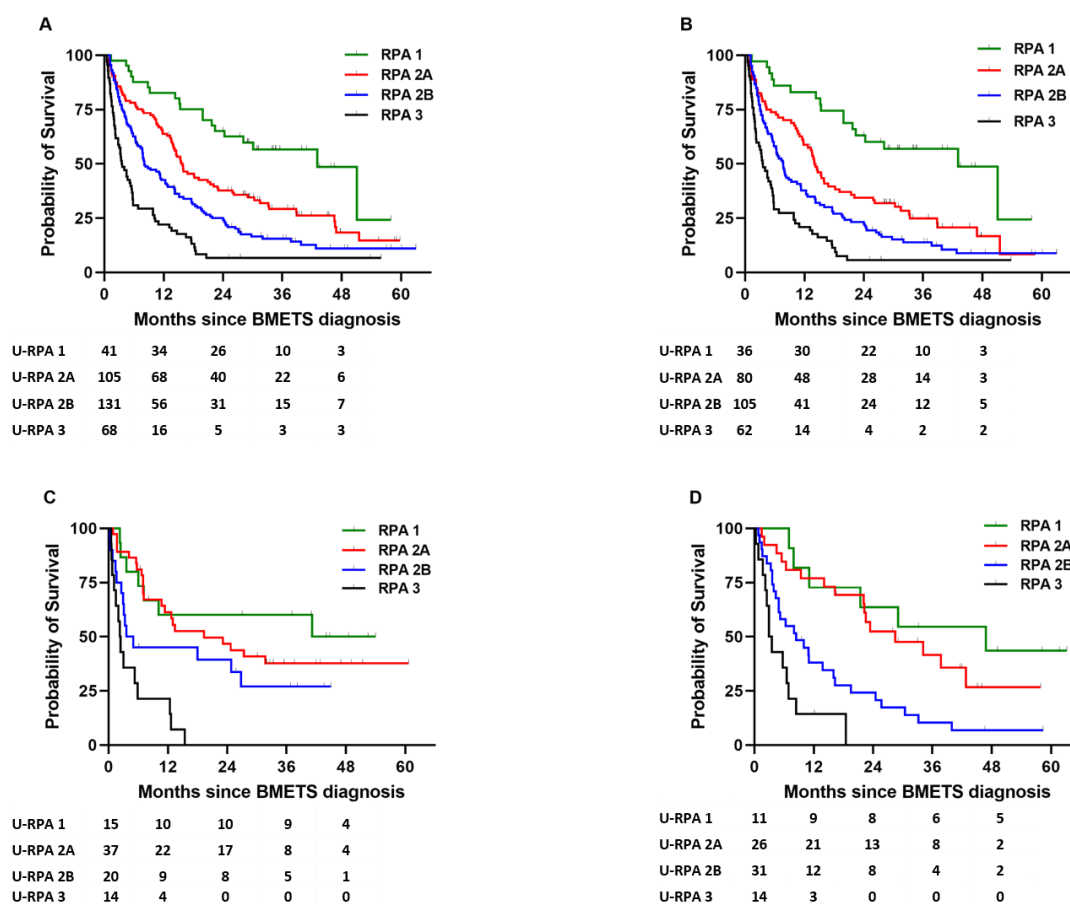


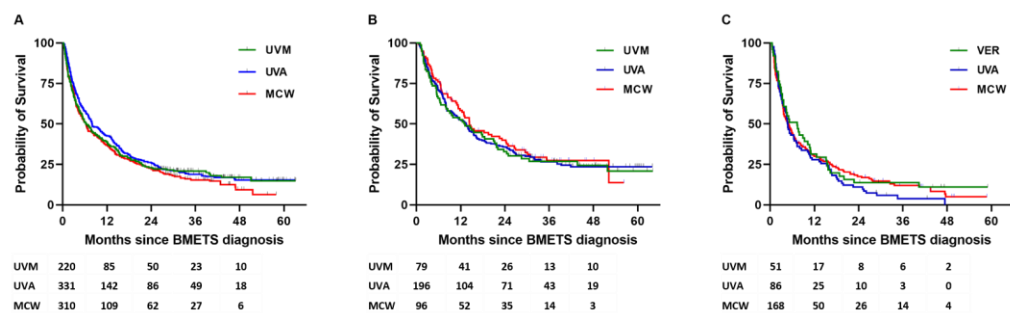
**Table S1.** Median survival of patients according to treatment and U-RPA.

Class	U-RPA				
	BDT N=752	SRS N=371	WBRT N=305	SMT N=76	Surgery* N=120
1	28.1	29.1	22.4	Undefined	25.4
2A	14.7	16	9.6	30.9	21.6
2B	7.6	10.9	4.9	6.2	8.4
3	3.3	4	2.9	3.1	5.7

U-RPA: Updated-RPA; BDT: brain-directed therapy SRS: stereotactic radiosurgery; WBRT: whole-brain radiation therapy; SMT: systemic medical therapy\* Surgery followed by SRS, WBRT or SMT.



**Figure S1.** Kaplan-Meier survival curves by primary cancer A) NSCLC, B) NSCLC without genomic alterations, C) melanoma, and D) breast cancer.



**Figure S2.** Kaplan Meier survival curves by academic center A) all patients receiving BDT B) patients receiving WBRT and C) patients receiving SRS.