Supplementary Table S1. Outcomes of *KIT/PDGFRA* WT patients

Patient	Treatment arm	Genomic alterations	PFS (months)	Maximum change of target lesions (percentage)
1	Ripretinib 150 mg QD	*SDHC/TP53*	23.0	−10.10
2	Placebo	*SDHA/TP53*	10.1	−6.15
3	Ripretinib 150 mg QD	*SDHA/ATRX*	2.0	6.21
4	Ripretinib 150 mg QD	*KRAS*	10.2	2.38
5	Ripretinib 150 mg QD	*NF1*	6.0	−17.96
6	Placebo	*NF1*	2.1	12.54
7	Ripretinib 150 mg QD	None	5.7	−6.09
8	Ripretinib 150 mg QD	None	2.6	−0.65
9	Ripretinib 150 mg QD	*MCL1* amplification	2.0	−13.58
10	Placebo	*CDKN2A/CDKN2B/PTEN*	0.9	−2.56

KIT/PDGFRA WT status determined only via tissue biopsy.
ATRX, alpha thalassemia mental retardation; CDKN, cyclin-dependent kinase inhibitor; KRAS, Kristen rat sarcoma; MCL1, myeloid cell leukemia 1; NF1, neurofibromatosis type-1; PFS, progression-free survival; PTEN, phosphatase and tensin homolog; QD, once daily; SDH, succinate dehydrogenase deficiency; TP53, tumor protein 53; WT, wild-type.