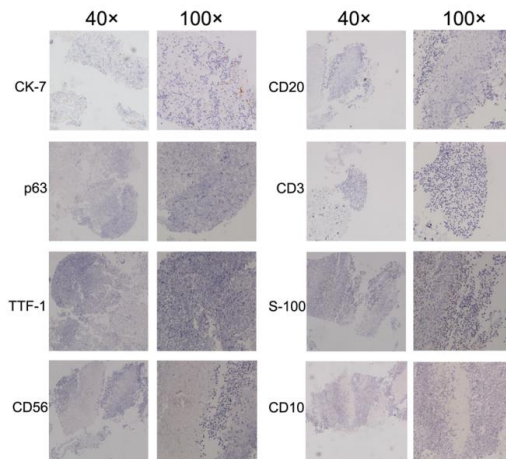


## Benefit of Sunitinib in the treatment of pulmonary primitive neuroectodermal tumors: a case report and literature review

### Supplemental Information



**Figure S1:**

Histologic features of the primary pulmonary PNET. The images for the immunohistochemistry staining of cytokeratin 7 (CK7), p63, thyroid transcription factor 1 (TTF-1), CD56, CD20, CD3, CD10 and protein S-100 (S-100).

**Table S1:**

All genomic alteration types, including base substitutions, insertions and deletions, copy number alterations and rearrangements on a panel of 390 genes commonly associated with cancers were detected for the pulmonary PNET patient.

<b>Gene mutation</b>												
<b>ABL1</b>	BCL2L2	CDK4	DDR2	FAS	GATA4	INPP4B	MAGI2	NF2	PIK3CG	RBM10	SOX9	TSC2
<b>ABL2</b>	BCL6	CDK6	DICER1	FAT1	GATA6	IRF2	MAP2K1	NFE2L2	PIK3R1	RET	SPEN	TSHR
<b>ACVR1B</b>	BCOR	CDK8	DNMT3A	FBXW7	GID4	IRF4	MAP2K2	NFKBLA	PIK3R2	RICTOR	SPOP	TYK2
<b>ACVR2A</b>	BCORL1	CDKN1A	DOTIL	FGF10	GLI1	IRS2	MAP2K4	NKX2-1	PKD2	RNF43	SPTA1	U2AF1
<b>ADAM29</b>	BIRC5	CDKN1B	EGF	FGF14	GLI2	ITK	MAP3K1	NOTCH1	PLA2G1B	ROCK1	SRC	VEGFA
<b>AKT1</b>	BLK	CDKN2A	EGFR	FGF19	GLI3	JAK1	MAP4K5	NOTCH2	PLCG2	ROCK2	SRMS	VHL
<b>AKT2</b>	BLM	CDKN2B	EP300	FGF23	GNA11	JAK2	MCL1	NOTCH3	PMS2	ROS1	STAG2	WEE1
<b>AKT3</b>	BMX	CDKN2C	EPHA2	FGF3	GNA13	JAK3	MDM2	NPM1	POLD1	RPTOR	STAT3	WEE2
<b>ALK</b>	BRAF	CEBPA	EPHA3	FGF4	GNAQ	JUN	MDM4	NRAS	POLE	RUNX1	STAT4	WISP3
<b>AMER1</b>	BRCA1	CHD2	EPHA5	FGF6	GNAS	KAT6A	MED12	NRG1	PPP2R1A	RUNX1T1	STK11	WT1
<b>APC</b>	BRCA2	CHD4	EPHA7	FGFR1	GPR124	KDM5A	MEF2B	NRG3	PRDM1	RXRA	STK24	XIAP
<b>AR</b>	BRD4	CHEK1	EPHB1	FGFR2	GRIN2A	KDM5C	MEN1	NSD1	PREX2	SDHA	SUFU	XPO1
<b>ARAF</b>	BRIP1	CHEK2	ERBB2	FGFR3	GRM3	KDM6A	MET	NTRK1	PRKAR1A	SDHB	SYK	YES1
<b>ARFRP1</b>	BTG1	CIC	ERBB3	FGFR4	GSK3B	KDR	MITF	NTRK2	PRKCI	SDHC	TAF1	ZBTB2
<b>ARID1A</b>	BTK	CRBN	ERBB4	FGR	H3F3A	KEAP1	MLH1	NTRK3	PRKDC	SDHD	TBX3	ZNF217
<b>ARID1B</b>	C11orf30	CREBBP	ERCC1	FH	HCK	KEL	MPL	NUP93	PRSS8	SETD2	TCF7L2	ZNF703
<b>ARID2</b>	CARD11	CRKL	ERG	FLCN	HGF	KIT	MRE11A	PAK3	PTCH1	SF3B1	TEK	ZNF750
<b>ASXL1</b>	CBFB	CRLF2	ERRFI1	FLT1	HNF1A	KLHL6	MS4A1	PALB2	PTEN	SIK1	TET2	

<b>ATM</b>	CBL	CSF1R	ESR1	FLT3	HRAS	KMT2A	MSH2	PARK2	PTK2	SLIT2	TGFBR1	
<b>ATR</b>	CCND1	CSK	EZH2	FLT4	HSD3B1	KMT2C	MSH6	PAX5	PTK6	SMAD2	TGFBR2	
<b>ATRX</b>	CCND2	CSNK1A1	FAM135B	FOXL2	HSP90AA1	KMT2D	MST1R	PBRM1	PTPN11	SMAD3	TIE1	
<b>AURKA</b>	CCND3	CTCF	FAM46C	FOXP1	IDH1	KRAS	MTOR	PDCD1LG2	QKI	SMAD4	TNFAIP3	
<b>AURKB</b>	CCNE1	CTNNA1	FANCA	FRS2	IDH2	LCK	MUTYH	PDGFRA	RAC1	SMARCA4	TNFRSF14	
<b>AXIN1</b>	CD274	CTNNA1	FANCC	FUBP1	IGF1R	LIMK1	MYC	PDGFRB	RAD50	SMARCB1	TNFSF11	
<b>AXL</b>	CD79A	CUL3	FANCD2	FYN	IGF2	LMO1	MYCL	PDK1	RAD51	SMO	TNK2	
<b>BAP1</b>	CD79B	CXCR4	FANCE	GABRA6	IKBKE	LRP1	MYCN	PIK3C2B	RAF1	SNCAIP	TOP1	
<b>BARD1</b>	CDC73	CYLD	FANCF	GATA1	IKZF1	LRP1B	MYD88	PIK3CA	RANBP2	SOCS1	TOP2A	
<b>BCL2</b>	CDH1	DAXX	FANCG	GATA2	IL7R	LYN	NEK11	PIK3CB	RARA	SOX10	TP53	
<b>BCL2L1</b>	CDK12	DDR1	FANCL	GATA3	INHBA	LZTR1	NF1	PIK3CD	RB1	SOX2	TSC1	

<b>Fusion Gene</b>												
<b>ALK</b>	BCR	BRAF	BRCA1	BRCA2	BRD4	ETV1	ETV4	ETV5	ETV6	FGFR1	FGFR2	FGFR3
<b>MYB</b>	NOTCH2	NTRK1	NTRK2	PDGFRA	RAF1	RARA	RET	ROS1	TMPRSS 2	MET	DDR2	

**Table S2. Primary Pulmonary Primitive Neuroectodermal Tumor Patients Reported in the Literatures**

<b>Year</b>	<b>Age</b>	<b>Gender</b>	<b>Treatment</b>	<b>Follow-up</b>	<b>Reference</b>
2015	26	M	R/ad CRT	DOD at 3M	7
2015	16	M	R/ad CRT	DOD at 5M	4
2014	31	F	CT	DOD at 1M	8
2013	75	M	CT	A&W at 17M	9
2013	31		R/ad CRT	DOD at 36M	10
2012	22	M	R only	NK	11
	27	M	R/ad CRT	DOD at 24M	
	29	F	R/ad CT	DOD at 36M	
	31	M	R/ad CT	DOD at 54M	
	29	M	R only	NK	
	56	F	Neoad CT/R/ad CT	A&W at 11M	
2010	44	M	R/ad CT	DOD at 5M	12
2009	22	F	Neoad CT/R/ad CRT	A&W at 32M	13
	28	F	R/ad CT	A&W at 18M	
	22	M	R/ad CT	DOD at 18M	
	47	M	Neoad CT/R/ad CT	A&W at 34M	
2007	8	M	R/ad CT	A&W at 9M	14
2001	17	M	R/ad CRT	DOD at 9M	15
2001	18	M	R only	DOD at 24M	16

2001	26	F	Neoad CT/R/ad CRT	DOD at 18M	17
2000	30	F	Neoad CT/R/ad CT	A&W at 16M	18
	41	M	Neoad CT/R	A&W at 22M	19
1998	25	F	R only	DOD at 24M	
	15	M	R only	A&W at 24M	