

Supplementary Table 1. Progressive or recurrent cases during or after cessation of treatment with crizotinib

Reference	Age (y)	Sex	Tumor site	ALK or fusion status	Treatment	Duration of treatment/without treatment	Response	Follow-up time/outcome
Gaudichon et al. ²⁵	16	F	Extremity	ALK positivity (IHC) EML4-ALK translocation (FISH)	NSAID, steroids, vinblastine, combination chemotherapy ^a	45 months	PD	CR on crizotinib 3 years after starting treatment
					Palliative external beam radiotherapy		SD	
					Crizotinib (2 × 250 mg/day)	Few weeks	PR	
					Discontinuation of crizotinib	2 months	PD	
					treatment + arm/shoulder amputation (R1)		(New lesions; liver, adrenal gland)	
					Readministration of Crizotinib (2 × 250 mg/day)	6 months	PD	(New CNS lesion on crizotinib)
					Surgical resection of CNS lesion (R0)	18 months	New CNS lesion	
Kiratli et al. ²⁶	7	F	Orbita	ALK positivity (IHC)	resection) + focal radiotherapy on crizotinib			
					Local radiotherapy on crizotinib			
					Crizotinib (2×125 mg/day)	12 months	CR	14 months/NED without treatment
					Discontinuation of crizotinib	3 months	PD	
					treatment			

^a Alternating vincristine/actinomycin-D/cyclophosphamide and vinorelbine/methotrexate
ALK, Anaplastic lymphoma kinase; AWD, alive with disease; CNS, central nervous system; CR, complete remission; DOD, dead of disease; EIMS, epithelioid inflammatory myofibroblastic sarcoma; F, female; FISH, Fluorescence In Situ Hybridization; IHC, Immunohistochemistry; M, male; NED, no evidence of disease; n.n., not noted; PCR, polymerase chain reaction; PR, partial remission; SD, stable disease.

Supplementary Table 1. Continued.

Reference	Age (y)	Sex	Tumor site	ALK or fusion status	Treatment	Duration of treatment/without treatment	Response	Follow-up time/outcome
Sarmiento et al. ²⁷	71	M	Multifocal: Lung, pleura	EIMS 2p23 ALK gene rearrangement (IHC, FISH)	Readministration of Crizotinib (2x250 mg/day)	6 months	CR	
					Surgical resection (incomplete)	1 month	PD	n.n./AWD
					Crizotinib (dose n.n.)	2 months	PD	
Butrynski et al. ³⁴	44	M	Multifocal: Abdomen, ascites, peritoneum	EIMS ALK positivity (FISH) RANBP2-ALK rearrangement (RT-PCR)	Second-generation ALK inhibitor (n.n.)	9 months	Near-CR	
					Debulking operation, HPP, doxorubicin + ifosfamide, imatinib	8 months	PD (New omental tumor nodules)	n.n./NED
					Crizotinib (2 × 200 mg/day)	7 months	PD (New lesions on liver, pancreas, rectum)	
	21	M	Abdomen	ALK negativity (IHC, FISH)	Debulking operation + crizotinib	33 months	CR	
					(2 × 250 mg/day)			
					Debulking operation, prednisone, ibuprofen	4 months	PD	n.n.

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Mansfield et al. ²⁹	32	M	Multifocal: Lung, chest wall, thigh, gluteal muscle, omentum	ALK positivity (IHC) Chromoplectic TPM3-ALK rearrangement (PCR)	Crizotinib (2 × 250 mg/day)	1 months	Treatment was interrupted due to the increased level of total bilirubin	n.n./AWD
					Prednisone	n.n.		
					Crizotinib (dose n.n.)	8 months	PD	
					Celecoxib	1 month	PD	
					Ceritinib (dose 750 mg/day with dose reduction to 600 mg/day)	6 months	PR	
Michels et al. ³⁰	36	F	Lung	ALK ^{G1269A} mutation, DTCN1-ALK fusion (Sanger sequencing)	Surgical resection of residual lung/gluteal lesion + ceritinib (600 mg/day)	18 months	PD New pleural lesion	
					Left pneumonectomy (R0)	18 months	Recurrence	n.n./DOD
					Crizotinib (dose n.n.)	29 months	PD after PR	
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Reference	Age (y)	Sex	Tumor site	ALK or fusion status	Treatment	Duration of treatment/without treatment	Response	Follow-up time/outcome
Yuan et al. ³¹	18	F	Lung, brain metastasis	ALK positivity (IHC) <i>ALK-1</i> gene rearrangement followed by second craniotomy, gamma knife radiosurgery (FISH)	Certinib (750 mg daily)	5 months	PD	2.5 years/AWD
					Neurosurgical excision			
					crizotinib (2 × 250 mg/day)	2 months	PR	
					Thoracotomy/lobectomy	1 month	PD at CNS	
					Certinib (750 mg daily)	8 months	PD	
Schöffski et al. ³³	n.n.	n.n.	Visceral genitourinary	ALK negativity (IHC, FISH)	Gamma knife radiosurgery			1 year/AWD
					Alectinib (2x600 mg/day)	8 months	PD	
					Lorlatinib(100 mg daily)		SD	

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Trahair et al. ²⁸	14.7	M	Pelvis	EIMS	Complete resection of the tumor			
				ALK rearrangement (FISH)				
				RANBP2-ALK rearrangement				
					Celecoxib	2 months	Recurrence	
					Crizotinib (280 mg/m ² /dose twice a day)	4 months	Recurrence after dose reduction due to neutropenia	
	9.1	M	Multifocal: Abdomen, mesenteric		Resection of hepatic lesions	17 months	SD	
					Crizotinib (280 mg/m ² /dose twice a day)			
					Ceritinib (dose n.n.)	42 months	CR	n.n./NED
				EIMS	Crizotinib (280 mg/m ² /dose twice a day)	11 months	CR	
				ALK rearrangement (FISH)				
				RANBP2-ALK rearrangement				
				ALK p.I1171T mutation	Certinib (at recurrence on crizotinib)	2 months	PR	
					Low-dose chemotherapy (Vinorelbine, methotrexate, ketorolac) (at recurrence)	6 months	Complete metabolic response on PET scan	23 months/DOD

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Alan et al. ³²	21	M	Colon	ALK positivity (IHC, FISH)	Colon resection, splenectomy			
					Crizotinib (2x250 mg/day)	6 months	CR	
					Readministration of Crizotinib (2x250 mg/day) at recurrence after cessation of treatment due to economic reason for 4 months	1 month	PR	
					Ceritinib (450 mg/day) at progression on Crizotinib			48 months/AWD

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