

Characterization and diagnostic application of genomic *NPM-ALK* fusion sequences in anaplastic large-cell lymphoma

SUPPLEMENTARY MATERIALS

Supplementary Table 1: Monitoring of *NPM-ALK* fusion RNA, DNA and ctDNA levels in 8 ALCL patients during the treatment course

See Supplementary File 1

Supplementary Table 2: Sequences of primers used in nested multiplex PCR assay

		Primer	Sequence 5'-3'
<i>NPM</i>	external	NPM_fw_1	acatgggggcttctgctgctactttatc
	internal	NPM_fw_2	atcagaggtggaaaaacaggtcactgg
<i>ATIC</i>	external	ATIC_fw_1	agccaccacatagcactgaatagtgaggag
	internal	ATIC_fw_2	ttgctgtggacgtagaaaaccatctgtc
<i>TPM3</i>	external	TPM3_fw_1	tggaccattcagcacatttagtcaagag
	internal	TPM3_fw_2	gggggtattgcctgtgtgactaatttctac
	external	TPM3_fw_3	ttggagggaagaagacggttagtagttc
	internal	TPM3_fw_4	tggatgcttctagtggttttcaacagag
<i>ALK</i>	external	ALK_rv_1	gttctggtggtgaattgctgcagag
	internal	ALK_rv_2	ttgctgcagagcagagagggatgaac
	external	ALK_rv_3	gaggaggtcttgccagcaaagcagtag
	internal	ALK_rv_4	agttgggggttagtcgggtcatgatgg
	external	ALK_rv_5	tagggcagagtcagttagtctggttctc
	internal	ALK_rv_6	gaagcagactggagatgggattagacc
	external	ALK_rv_7	catgtgaggatgttctggaaggcaactc
	internal	ALK_rv_8	gaaggcaactccatggaagccagaac
	external	ALK_rv_9	ccttggtcacaggctgaacagaaatac
	internal	ALK_rv_10	aaccgatttctatctctctgctggag

Supplementary Table 3: Sequences of primers and probes used in ddPCR for quantification of the genomic *NPM-ALK* fusion sequence

UPN12	forward primer	5'-AAGTCTCAGTTTTTAGAGTATTTACTATCAGTG-3'
	probe	5'-ATTGGTGAGTGCACAGAGCCCCAG-3'
	reverse primer	5'-ACTATTCAGTCCTGCCTTCCTG-3'
UPN15	forward primer	5'-CTCATTATAACGGCTGGAGTGC-3'
	probe	5'-CCCGTGTGTATCCTCCTGGCTGATC-3'
	reverse primer	5'-TGTGGGAGCTAGAAGTGACG-3'
UPN26	forward primer	5'-AAGTCTCAGTTTTTAGAGTATTTACTATCAGTG-3'
	probe	5'-TTCTTTTCCCAACCTTCCCCCAC-3'
	reverse primer	5'-GCTGAGGTGCAGAATCAGG-3'
UPN35	forward primer	5'-CTCATTATAACGGCTGGAGTGC-3'
	probe	5'-CATAGCTTGCTATATCGAAAATCTGCAGACCATATTG-3'
	reverse primer	5'-GGCAGAGTCATGTTAGTCTGGTTC-3'
UPN41	forward primer	5'-CTCATTATAACGGCTGGAGTGC-3'
	probe	5'-ACTCAGAAACCGATTATGATCACATCACTGCA-3'
	reverse primer	5'-TCAGCTCACCTTGGCTCAC-3'
UPN43	forward primer	5'-TGTATATGTGCAGATGGGGTCTC-3'
	probe	5'-ATGTTGCCAGATTGGTGCCATCCCT-3'
	reverse primer	5'-GCACGTAGTAACCATGCAACAAG-3'
UPN44	forward primer	5'-GCTTGGTTCAGTTTGGAC-3'
	probe	5'-CTCTCAAGAGCCTTCCCGTACTATACCCATG-3'
	reverse primer	5'-TCTACCGGCAGATCCCTTG-3'
UPN45	forward primer	5'-CTTGCTGCTTGAGTTTTATAATGTC-3'
	probe	5'-TTAAAGAAGGTGTGTCTTTTCCCTCCACAGCTAAAA-3'
	reverse primer	5'-AGCTCTGAACCTTCCATCATAAC-3'
Karpas 299	forward primer	5'-gcctcccaagtgagattac-3'
	probe	5'-cctccccggccAAGCCAAAAC-3'
	reverse primer	5'-GCTGAGGTGCAGAATCAGG-3'
SR-786	forward primer	5'-GAACTCCTGGCCTTAACGTG-3'
	probe	5'-ACGCCCTGGCGGCTCCAGAA-3'
	reverse primer	5'-GAAGGTTGGGTGGAAGCAC-3'
human albumin control	forward primer	5'-TGAAACATACGTTCCCAAAGAGTTT-3'
	probe	5'-TGCTGAAACATTCACCTTCCATGCAGA-3'
	reverse primer	5'-CTCTCCTTCTCAGAAAGTGTGCATAT-3'