

Table S1 The LiquidPlex™ 28-gene panel (ArcherDx)

Gene	Transcript of reference	Target exons
<i>ALK</i>	NM_004304	22+23+25
<i>AKT1</i>	NM_005163	3
<i>AR</i>	NM_033031	4+5+8
<i>BRAF</i>	NM_004333	11+15
<i>CTNNB1</i>	NM_001904	3
<i>DDR2</i>	NM_006182	17
<i>EGFR</i>	NM_005228	12+18+19+20+21
<i>ERBB2</i>	NM_004448	8+2
<i>ESR1</i>	NM_000125	5+7+8
<i>FGFR1</i>	NM_015850	13
<i>HRAS</i>	NM_005343	2+3
<i>IDH1</i>	NM_005896	4
<i>IDH2</i>	NM_002168	4
<i>KIT</i>	NM_000222	9+11+13+17+18
<i>KRAS</i>	NM_004985	2+3+4
<i>MAP2K1</i>	NM_002755	2+3
<i>MAP2K2</i>	NM_030662	3
<i>MET</i>	NM_000245	14
<i>NRAS</i>	NM_002524	2+3
<i>NTRK1</i>	NM_002529	14+15
<i>NTRK3</i>	NM_002530	16+17
<i>PIK3CA</i>	NM_006218	10+21
<i>PDGFRA</i>	NM_006206	12+14+16+18
<i>RET</i>	NM_020630	11+13+14+15+16
<i>ROS1</i>	NM_002944	38+4
<i>SMAD4</i>	NM_005359	9
<i>MTOR</i>	NM_004958	44+45+50
<i>TP53</i>	NM_000546	Full exon

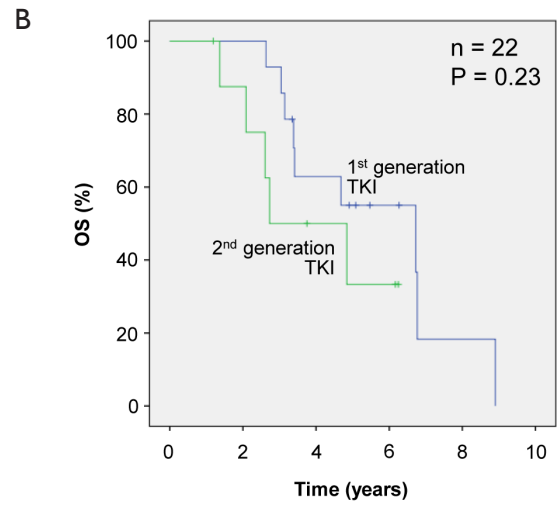
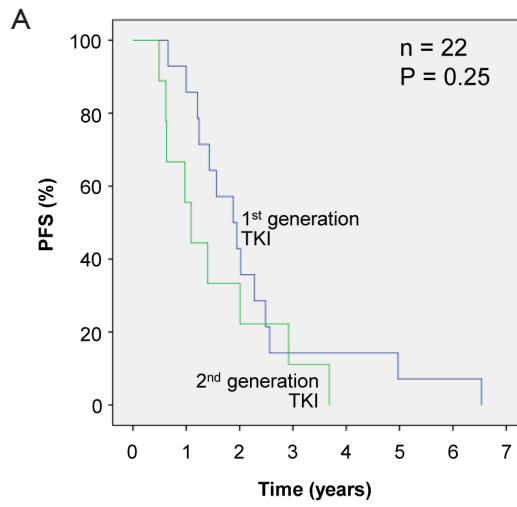


Figure S1 Kaplan-Meier analyses of patients who received first- or second-generation TKI as first-line treatment in terms of PFS (A) and OS (B). TKI, tyrosine kinase inhibitor; PFS, progression-free survival; OS, overall survival.

Table S2 Statistical comparison of the clinical characteristics in the patients who developed an *EGFR*-dependent or -independent mechanism of resistance (n=17)

Characteristics	Development of an <i>EGFR</i> -dependent mechanism	Development of an <i>EGFR</i> -independent mechanism	P
Sex			
Male	3	5	NS (0.15)
Female	7	2	
Age			
<60	5	3	NS (1)
≥60	5	4	
Smoking status			
Have smoked	4	2	NS (1)
Non-smoker	6	5	
<i>EGFR</i> ^{activating} mutation status at diagnosis			
<i>EGFR</i> ^{del19}	5	4	NS (0.41)
<i>EGFR</i> ^{L858R}	4	1	
<i>EGFR</i> ^{L861Q}	1	2	
1 st line TKI treatment			
1 st generation TKI	8	4	NS (0.59)
2 nd generation TKI	2	3	
Presence of metastases at osimertinib treatment initiation			
Yes	9	5	NS (0.54)
No	1	2	
Presence of metastases after relapse under osimertinib			
Yes	10	5	NS (0.15)
No	0	2	

Significance (Fisher exact test) was considered at P<0.05. NS, not significant.