Table S1. Bivariate analysis for testing rate.

	ALK			EGFR			PD-L1			ROS1		
	No	Yes	p-value	No	Yes	p-value	No	Yes	p-value	No	Yes	p-value
Sample type												
Biopsy (CNB/bronchial/transbronchial)	259	1600	p <0.001	183	1676	p =0.002	568	1291	p <0.001	720	1139	p <0.001
Cellular block	56	292		25	323		173	175		157	191	
FNA (extensions)	96	97		7	186		180	13		141	52	
Surgical piece	108	444		50	502		232	320		217	335	
Blood	84	0		0	84		84	0		84	0	
Others	40	150		13	177		114	76		95	95	
Histology												
Adenocarcinoma	583	2368	p =0.459	256	2695	p =0.788	1244	1707	p =0.327	1281	1670	p =0.128
NSCLC-NOS	60	215		22	253		107	168		133	142	
***Testing rate* ALK**												
No				200	443	p <0.001	434	209	p <0.001	629	14	p <0.001
Yes				78	2505		917	1666		785	1798	
***Testing rate* EGFR**												
No							66	212	p <0.001	238	40	p <0.001
Yes							1285	1663		1176	1772	
***Testing rate* PD-L1**												
No										815	536	p <0.001
Yes										599	1276	

CNB: core needle biopsy; FNPA: fine-needle aspiration; NSCLC-NOS: non-small cell lung cancer-not otherwise specified

Table S2. Bivariate analysis for positivity rate.

	ALK			EGFR			PD-L1			ROS1		
	No	Yes	p-value	No	Yes	p-value	No	Yes	p-value	No	Yes	p-value
Sample type												
Biopsy (CNB/bronchial/transbronchial)	1505	50	p =0.582	1426	214	p =0.265	638	640	p =0.358	1078	22	p =0.12
Cellular block	275	7		278	40		86	86		181	0	
FNA (extensions)	88	5		156	26		7	6		51	0	
Surgical piece	422	16		435	66		178	141		316	10	
Blood	0	0		66	16		0	0		0	0	
Others	142	7		144	32		34	40		91	3	
Histology												
Adenocarcinoma	2232	79	p =0.854	2261	387	p <0.001	866	822	p =0.204	1585	33	p =0.909
NSCLC-NOS	200	6		244	7		77	91		132	2	
Positivity ALK												
No				2079	254	p =0.009	816	750	p =0.103	1643	34	p =0.628
Yes				81	1		22	33		49	0	
Positivity EGFR												
No							739	709	p =0.031	1487	27	p =0.133
Yes							105	70		182	7	
Positivity PD-L1												
No										621	12	p =0.917
Yes										594	10	

CNB: core needle biopsy; FNA: fine-needle aspiration; NSCLC-NOS: non-small cell lung cancer-not otherwise specified