

Supplemental Table 1: Comprehensive histologic assessment on cryostat slides from frozen tumor specimens.

Case	Presentation (interval)	Tumor	Location	Type	Subtype					Comparison
					Acinar	Papillary	BAC	Solid	Micropapillary	
1	synchronous	A	LLL	ADC	0%	40%	60%	0%	0%	different
		B	RLL	ADC	40%	60%	0%	0%	0%	
2	synchronous	A	LLL	ADC	70%	20%	10%	0%	0%	similar
		B	RUL	ADC	70%	10%	20%	0%	0%	
3	synchronous	A	RUL	ADC	60%	0%	0%	0%	40%	different
		B	LUL	ADC	30%	70%	0%	0%	0%	
4	synchronous	A	RLL	ADC	0%	50%	30%	0%	20%	similar
		B	LUL	ADC	10%	30%	40%	0%	20%	
5	synchronous	A	LLL	ADC	80%	20%	0%	0%	0%	different* different# different ^
		B	LUL	LCNEC	n/a	n/a	n/a	n/a	n/a	
		C	RUL	ADC	40%	0%	0%	60%	0%	
6	synchronous	A	RUL	ADC	30%	70%	0%	0%	0%	similar
		B	LLL	ADC	30%	70%	0%	0%	0%	
7	metachronous (14.1 months)	A	LLL	ADC	0%	100%	0%	0%	0%	similar
		B	RML	ADC	0%	100%	0%	0%	0%	
8	metachronous (51.1 months)	A	LUL	ADC	40%	60%	0%	0%	0%	different
		B	RUL	ADC	0%	0%	0%	100%	0%	
9	metachronous (41.2 months)	A	RLL	ADC	10%	70%	0%	0%	20%	similar
		B	RUL	ADC	10%	80%	0%	0%	10%	
10	metachronous (25.1 months)	A	LUL	SCC	n/a	n/a	n/a	n/a	n/a	n/a
		B	RLL	SCC	n/a	n/a	n/a	n/a	n/a	
11	metachronous (42.7 months)	A	LUL	ADC	30%	0%	0%	70%	0%	different
		B	RLL	ADC	60%	40%	0%	0%	0%	
12	metachronous (23.0 months)	A	RUL	ADC	60%	40%	0%	0%	0%	similar
		B	LUL	ADC	60%	40%	0%	0%	0%	
13	metachronous (18.9 months)	A	RLL	ADC	0%	70%	30%	0%	0%	similar
		B	RUL	ADC	10%	80%	10%	0%	0%	
14	metachronous (18.6 months)	A	RUL	ADC	90%	0%	10%	0%	0%	different
		B	LUL	ADC	90%	0%	0%	10%	0%	
15	metachronous (50.2 months)	A	LUL	SCC	n/a	n/a	n/a	n/a	n/a	n/a
		B	RUL	SCC	n/a	n/a	n/a	n/a	n/a	
16	metachronous (53.6 months)	A	LLL	SCC	n/a	n/a	n/a	n/a	n/a	different
		B	LUL	ADC/SCC	60%	40%	0%	0%	0%	
17	metachronous (33.3 months)	A	LUL	SCC	n/a	n/a	n/a	n/a	n/a	different
		B	RUL	ADC	70%	30%	0%	0%	0%	
18	metachronous (72.2 months)	A	LUL	ADC	0%	10%	90%	0%	0%	different
		B	RLL	ADC	100%	0%	0%	0%	0%	
19	metachronous (13.5 months)	A	LLL	ADC/SCC	10%	0%	0%	90%	0%	different
		B	LLL	ADC	60%	0%	0%	40%	0%	
20	metachronous (6.6 months*) (11.5 months#) (18.1 months^)	A	LLL	ADC	0%	30%	0%	70%	0%	similar* similar# similar ^
		B	LUL	ADC	0%	40%	0%	60%	0%	
		C	LUL	ADC	0%	20%	0%	80%	0%	

ADC: adenocarcinoma; SCC: squamous cell carcinoma; ADC/SCC: adenosquamous carcinoma; LCNEC: large-cell neuroendocrine carcinoma; BAC: bronchiolo-alveolar carcinoma; n/a: not applicable; * tumor A vs. tumor B; # tumor B vs. tumor C; ^ tumor A vs. tumor C