

Table S1. Prognostic Clinicopathologic Variables as Predictors for Disease-Specific Survival in 335 NSCLC Patients (Univariate Analyses; Log-rank Test) adapted from [19].

Characteristic	Patients (n)	Patients (%)	Median survival (months)	5-Year survival (%)	P
Age					0.34
≤ 65 years	156	47	83	55	
> 65 years	179	53	NR	60	
Sex					0.20
Female	82	25	190	63	
Male	253	75	83	56	
Smoking					0.23
Never	15	5	19	43	
Current	215	64	NR	60	
Former	105	31	71	54	
Performance status					0.013
ECOG 0	197	59	NR	63	
ECOG 1	120	36	64	52	
ECOG 2	18	5	25	33	
Weight loss					0.71
< 10%	303	90	127	58	
> 10%	32	10	98	57	
Histology					0.028
SCC	191	57	NR	66	
Adenocarcinoma	95	28	54	45	
LCC	31	9	98	56	
BAC	18	5	NR	67	
Differentiation					< 0.001
Poor	138	41	47	47	
Moderate	144	43	190	64	
Well	53	16	NR	68	
Surgical procedure					0.004
Lobectomy + Wedge*	243	73	190	61	
Pneumonectomy	92	27	37	47	
Pathological stage					< 0.001
I	157	47	190	71	
II	136	41	61	51	
IIIa	42	12	17	23	
Tumor status					< 0.001
1	85	25	190	74	
2	188	56	84	57	
3	62	19	25	36	
Nodal status					< 0.001
0	232	69	190	66	
1	76	23	35	43	
2	27	8	18	18	
Surgical margins					0.29
Free	307	92	190	58	
Not free	28	8	47	47	
Vascular infiltration					< 0.001
No	284	85	190	58	
Yes	51	15	27	32	

Table S2. Expression of Dicer, Drosha and miR-126 by histology

Histology	Dicer*		Drosha**		miR-126***	
	Mean	95% CI	Mean	95% CI	Mean	95% CI
squam	1.28	1.16-1.40	1.47	1.36-1.58	1.27	1.14-1.41
adeno	0.95	0.78-1.12	1.28	1.13-1.43	0.92	0.75-1.10
bac	1.50	1.00-2.00	1.44	0.99-1.89	1.08	0.54-1.62
large-undiff	1.17	0.86-1.49	1.44	1.15-1.73	1.07	0.79-1.35
Total	1.18	1.09-1.28	1.41	1.33-1.49	1.14	1.05-1.24

* P = 0.008

** P = 0.282

*** P = 0.020

Table S3. Cox regression analysis summarizing significant independent prognostic factors in the total patient material with Dicer and Drosha as covariates on a continuous scale.

Factor	HR	95% CI	P
Tumor status			<0.001*
1	1.00		
2	1.84	1.10 – 3.07	0.021
3	3.65	2.04 – 6.52	<0.001
Nodal status			<0.001*
0	1.00		
1	2.01	1.30 – 3.11	0.002
2	2.82	1.63 – 4.91	<0.001
Histology			0.006*
Squamous cell	1.00		
Adeno	1.85	1.24 – 2.76	0.003
Bac	0.51	0.06 – 4.08	0.527
Large undiff	0.81	0.41 – 1.59	0.536
Differentiation			0.016*
Poor	1.00		
Moderate	0.57	0.37 – 0.86	0.008
Well	0.55	0.27 – 1.09	0.085
Performance status			0.005*
Normal	1.00		
Slightly reduced	1.81	1.23 – 2.68	0.003
In bed < 50%	2.08	0.92 – 4.71	0.079
Vascular infiltration			
No	1.00		
Yes	2.25	1.42 – 3.58	0.001
Dicer**	1.04	0.84 – 1.30	0.712
Drosha***	0.94	0.704 – 1.27	0.700

*Overall significance as a prognostic factor.

** $B=0.042$

*** $B=-0.058$

HR: Hazard ratio; CI: confidence interval

Table S4. Expression of Dicer by histology, performance status, tumor differentiation, tumor status, nodal status and vascular infiltration

	Dicer			
Histology	Number	Mean	95% CI	P-value
SCC	186	1.28	1.16-1.40	0.012
Other NSCLC	135	1.05	0.90-1.19	
Performance status				
ECOG = 0	191	1.18	1.06-1.30	0.915
ECOG = 1-2	130	1.19	1.05-1.33	
Tumor differentiation				
Poor	134	1.11	0.96-1.25	0.209
Moderate	142	1.28	1.14-1.42	
Well	45	1.12	0.88-1.37	
Tumor status				
1	81	1.36	1.18-1.55	0.072
2	180	1.11	0.99-1.23	
3	60	1.17	0.95-1.38	
Nodal status				
0	224	1.20	1.09-1.31	0.702
1	73	1.11	0.91-1.32	
2	24	1.24	0.91-1.58	
Vascular infiltration				
Yes	50	1.41	1.18-1.64	0.035
No	271	1.14	1.04-1.24	

Table S5. Cox regression analysis summarizing significant independent prognostic factors exploring Dicer interaction with histology.

Factor	HR	95% CI	P
Tumor status			<0.001*
1	1.00		
2	1.68	1.03 – 2.74	0.040
3	3.10	1.78 – 5.41	<0.001
Nodal status			<0.001*
0	1.00		
1	2.19	1.45 – 3.32	<0.001
2	3.04	1.77 – 5.23	<0.001
Histology			
SCC	1.00		
Other NSCLC	0.98	0.51 – 1.89	0.951
Differentiation			0.053*
Poor	1.00		
Moderate	0.66	0.45 – 0.97	0.034
Well	0.58	0.31 – 1.10	0.096
Performance status			
ECOG = 0	1.00		
ECOG = 1-2	1.80	1.26 – 2.59	0.001
Vascular infiltration			
No	1.00		
Yes	1.80	1.26 – 3.12	0.003
Dicer**	0.87	0.68 – 1.10	0.257
Dicer*histology***	1.37	1.10 – 1.70	0.005

*Overall significance as a prognostic factor.

** $B = 0.313$

*** $B = -0.141$

HR: Hazard ration; CI: confidence interval

Table S6. Cox regression analysis summarizing significant independent prognostic factors exploring Dicer interaction with ECOG.

Factor	HR	95% CI	P
Tumor status			<0.001*
1	1.00		
2	1.58	0.97 – 2.58	0.067
3	2.96	1.70 – 5.15	<0.001
Nodal status			<0.001*
0	1.00		
1	2.21	1.45 – 3.35	<0.001
2	2.80	1.62 – 4.86	<0.001
Histology			
SCC	1.00		
Other NSCLC	1.57	1.07 – 2.30	0.022
Differentiation			0.092*
Poor	1.00		
Moderate	0.70	0.47 – 1.05	0.081
Well	0.58	0.31 – 1.09	0.090
Performance status			
ECOG = 0	1.00		
ECOG = 1-2	1.88	1.30 – 2.70	0.001
Vascular infiltration			
No	1.00		
Yes	2.02	1.28 – 3.18	0.003
Dicer**	0.97	0.72 – 1.32	0.862
Dicer*ECOG***	1.12	0.83 – 1.50	0.475

*Overall significance as a prognostic factor.

**B = -0.027

***B = 0.629

HR: Hazard ration; CI: confidence interval

Table S7. Cox regression analysis summarizing significant independent prognostic factors exploring Dicer interaction with vascular infiltration.

Factor	HR	95% CI	P
Tumor status			<0.001*
1	1.00		
2	1.58	0.97 – 2.58	0.067
3	2.96	1.70 – 5.15	<0.001
Nodal status			<0.001*
0	1.00		
1	2.21	1.45 – 3.35	<0.001
2	2.80	1.62 – 4.86	<0.001
Histology			
SCC	1.00		
Other NSCLC	1.57	1.07 – 2.30	0.022
Differentiation			0.092*
Poor	1.00		
Moderate	0.70	0.47 – 1.05	0.081
Well	0.58	0.31 – 1.10	0.090
Performance status			
ECOG = 0	1.00		
ECOG = 1-2	1.88	1.30 – 2.70	0.001
Vascular infiltration			
No	1.00		
Yes	2.02	1.28 – 3.18	0.003
Dicer**	1.04	0.84 – 1.29	0.708
Dicer*vascular infiltration***	0.45	0.48 – 1.49	0.563

*Overall significance as a prognostic factor.

** $B = 0.041$

*** $B = -0.166$

HR: Hazard ration; CI: confidence interval