

# A novel prognostic nomogram based on imaging and molecular parameters for newly diagnosed extranodal natural killer/T-cell lymphoma patients

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Supplementary Table S1. Baseline characteristics of 91 newly diagnosed ENKTL patients.

Characteristics	No. (n = 91)	Percentage (%)
Age		
≤60	73	80.2
>60	18	19.8
Gender		
Female	30	33.0
Male	61	67.0
AASS		
I–II	50	54.9
III–IV	41	45.1
ECOG PS		
<2	81	89.0
≥2	10	11.0
B symptoms		
No	52	57.1
Yes	39	42.9
Regional lymph node involvement		
No	37	40.7
Yes	54	59.3
Distant lymph node involvement		
No	60	65.9
Yes	31	34.1
Numbers of extranodal sites		
<2	64	70.3
≥2	27	29.7
LDH		
≤245 U/L	50	54.9
>245 U/L	41	45.1
EBV-DNA		
Negative	16	17.6
Positive	75	82.4
Non-nasal type		
No	68	74.7
Yes	23	25.3
Chemotherapy		
Pegaspargase-based	69	75.8
L-asparaginase-based	13	14.3
Other	9	9.9
HSCT		
Allo-HSCT	2	2.2
Auto-HSCT	11	12.1

No	78	85.7
Treatment		
CT alone	54	59.3
CRT	37	40.7
IPI		
Low (0–1)	53	58.2
Intermediate Low (2)	11	12.1
Intermediate High (3)	20	22.0
High ( $\geq 4$ )	7	7.7
KPI		
Group 1 (0)	18	19.8
Group 2 (1)	19	20.9
Group 3 (2)	21	23.1
Group 4 ( $\geq 3$ )	33	36.2
PINK		
Low risk (0)	39	42.8
Intermediate risk (1)	17	18.7
High risk ( $\geq 2$ )	35	38.5
PINK-E		
Low risk (0–1)	41	45.0
Intermediate risk (2)	17	18.7
High risk ( $\geq 3$ )	33	36.3

AASS: Ann Arbor staging system; ECOG PS: eastern cooperative oncology group performance status; LDH: lactate dehydrogenase; EBV: Epstein–Barr virus; CT: chemotherapy; CRT: chemoradiotherapy; HSCT: hematopoietic stem cell transplantation; IPI: International prognostic index; KPI: Korean Prognostic Index; PINK: prognostic index of natural killer lymphoma; PINK-E: PINK combined with EBV-DNA.

Supplementary Table S2 Harrell's C-index for different models for predicting survival.

	Model	C-index	95% CI
PFS	SEC	0.771	0.710–0.831
	IPI	0.645	0.559–0.732
	KPI	0.662	0.579–0.745
	PINK	0.657	0.572–0.743
	PINK-E	0.653	0.564–0.743
	PINK-EC	0.676	0.591–0.761
OS	SEC	0.817	0.768–0.866
	IPI	0.690	0.610–0.771
	KPI	0.708	0.627–0.788
	PINK	0.719	0.641–0.797
	PINK-E	0.728	0.653–0.802
	PINK-EC	0.759	0.687–0.832

PFS: progression-free survival; OS: overall survival; CI: confidence interval; IPI: International prognostic index; KPI: Korean Prognostic Index; PINK: prognostic index of natural killer lymphoma; PINK-E: PINK combined with Epstein–Barr virus (EBV)-DNA; PINK-EC: PINK-E combined with circulating tumor DNA (ctDNA); SEC: the initials of “standardized uptake value (SUVmax)”, “EBV-DNA” and “ctDNA”.

Supplementary Table S3. The variables and definitions of the different models.

Model and definition (total point)	Variable	Score
<b>SEC</b>		
Low (0)	SUVmax ( $\geq 9.950$ vs. $< 9.950$ )	1
Intermediate (1–2)	ctDNA ( $\geq 4.026$ log hGE/mL vs. $< 4.026$ log hGE/mL)	1
High (3)	EBV-DNA ( $\geq 1.4 \times 10^4$ copies/mL vs. $< 1.4 \times 10^4$ copies/mL)	1
<b>IPI</b>		
Low (0–1)	Age ( $> 60$ years vs. $\leq 60$ years)	1
Intermediate (2–3)	Ann Arbor stage (III–IV vs. I–II)	1
High (4–5)	ECOG score ( $\geq 2$ vs. 0–1)	1
	Elevated LDH (yes vs. no)	1
	Extranodal sites (2 vs. 0–1)	1
<b>KPI</b>		
Low (0)	Ann Arbor stage (III–IV vs. I–II)	1
Intermediate (1–2)	Elevated LDH (yes vs. no)	1
High (3–4)	B symptoms (yes vs. no)	1
	Regional lymph node (yes vs. no)	1
<b>PINK</b>		
Low (0)	Age ( $> 60$ years vs. $\leq 60$ years)	1
Intermediate (1)	Ann Arbor stage (III–IV vs. I–II)	1
High (2–4)	Distant lymph node (yes vs. no)	1
	Non-nasal disease (yes vs. no)	1
<b>PINK-E</b>		
Low (0–1)	Age ( $> 60$ years vs. $\leq 60$ years)	1
Intermediate (2)	Ann Arbor stage (III–IV vs. I–II)	1
High (3–5)	Distant lymph node (yes vs. no)	1
	Non-nasal disease (yes vs. no)	1
	EBV-DNA (yes vs. no)	1
<b>PINK-EC</b>		
Low (0–1)	Age ( $> 60$ years vs. $\leq 60$ years)	1
Intermediate (2–3)	Ann Arbor stage (III–IV vs. I–II)	1
High (4–6)	Distant lymph node (yes vs. no)	1
	Non-nasal disease (yes vs. no)	1
	EBV-DNA (yes vs. no)	1
	ctDNA ( $> 4.83$ log hGE/mL vs. $0-4.83$ log hGE/mL)	1

SUVmax: standardized uptake value; EBV: Epstein–Barr virus; ctDNA: circulating tumor DNA; IPI: International prognostic index; KPI: Korean Prognostic Index; PINK: prognostic index of natural killer lymphoma; PINK-E: PINK combined with EBV-DNA; PINK-EC: PINK-E combined with ctDNA; SEC: the initials of “SUVmax”, “EBV-DNA” and “ctDNA”; ECOG: eastern cooperative oncology group; LDH: lactate

dehydrogenase.