

The target definition, delineation and dosage standard of radiotherapy in our hospital

The gross tumor volumes (GTVs) included the primary tumor (GTVnx) and the positive lymph nodes (GTVnd) visible on the magnetic resonance image. The clinical target volumes (CTVs) included the high-risk region (CTV1) and the intermediate-risk region (CTV2). The CTV1 encompassed the GTVnx with a radial margin of 0.5-1 cm (0.3-0.5 cm margin posteriorly), and covered the whole nasopharyngeal mucosa and a 0.5-cm submucosal region. The CTV2 encompassed the CTV1 plus a 0.5-1 cm margin (also 0.3-0.5 cm margin posteriorly), and the GTVnd and the cervical lymphatic drainage regions. The planning target volumes (PTVs) for all GTVs and CTVs were constructed automatically by expanding the corresponding GTVs and CTVs by a 0.3-0.5 cm margin to overcome the immobilization and localization uncertainties. The radiotherapy was done in a conventional fractionation (1 fraction per day, 5 days per week). A total dose of 66-72Gy was given to the PTV for GTVnx, 64-70Gy to the PTV for GTVnd, 60-63Gy to the PTV for CTV1, and 54-56Gy to the PTV for CTV2.

Figures

Figure S1 The receiver operating characteristic curves of the serum lipid indexes

on overall survival. Abbreviations: AUC, area under curve; CI, confidence interval.

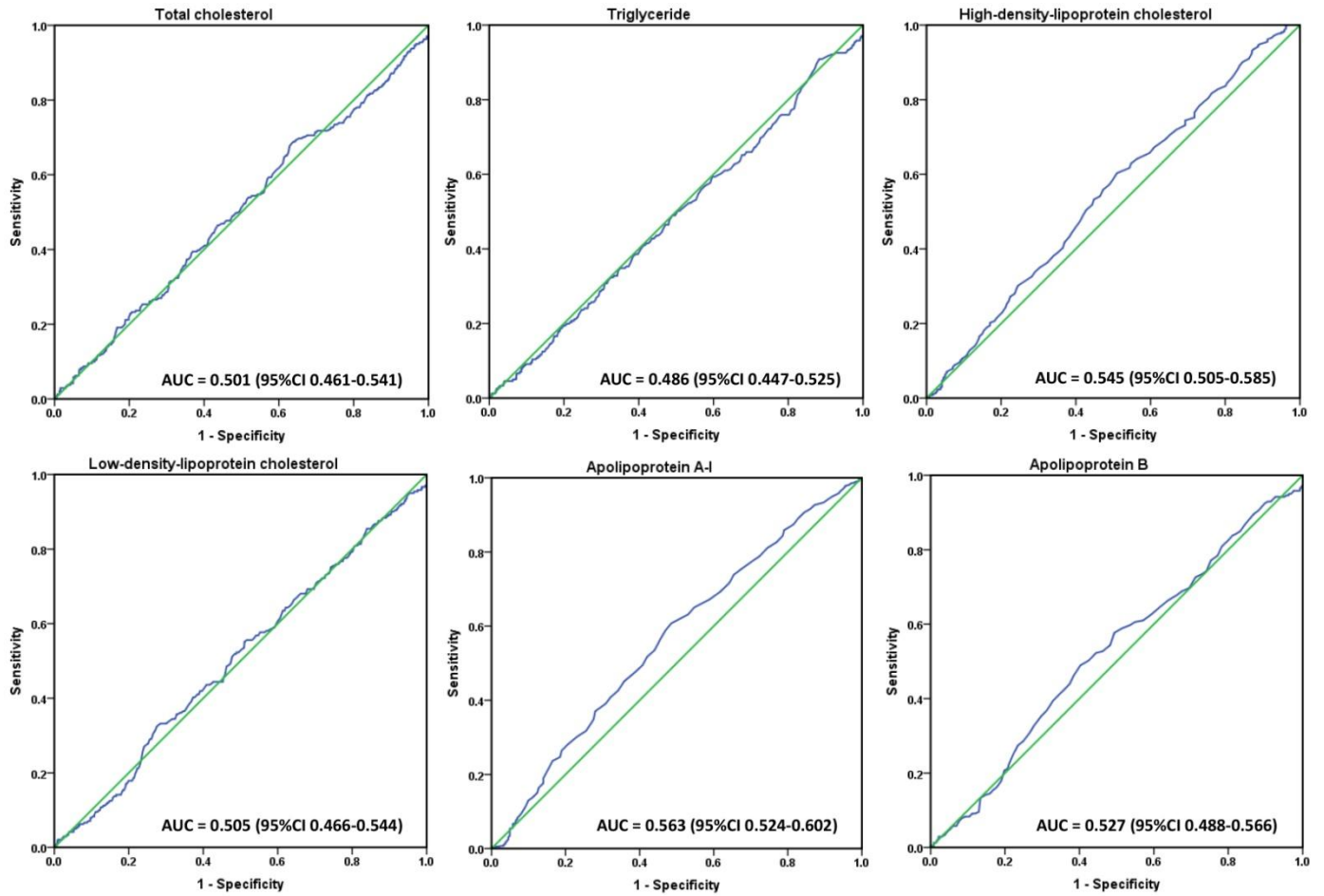


Figure S2 Disease-free survival curves of patients grouped by the apolipoprotein A-I (apoAI) in full group and subgroup analyses. Panel A: Full group of patients. Panel B: Patients with stage I-II nasopharyngeal carcinoma (NPC). Panel C: Patients with stage III-IVB NPC. Panel D: Patients with stage III-IVB NPC and concurrent chemotherapy (CCT) during radiotherapy.

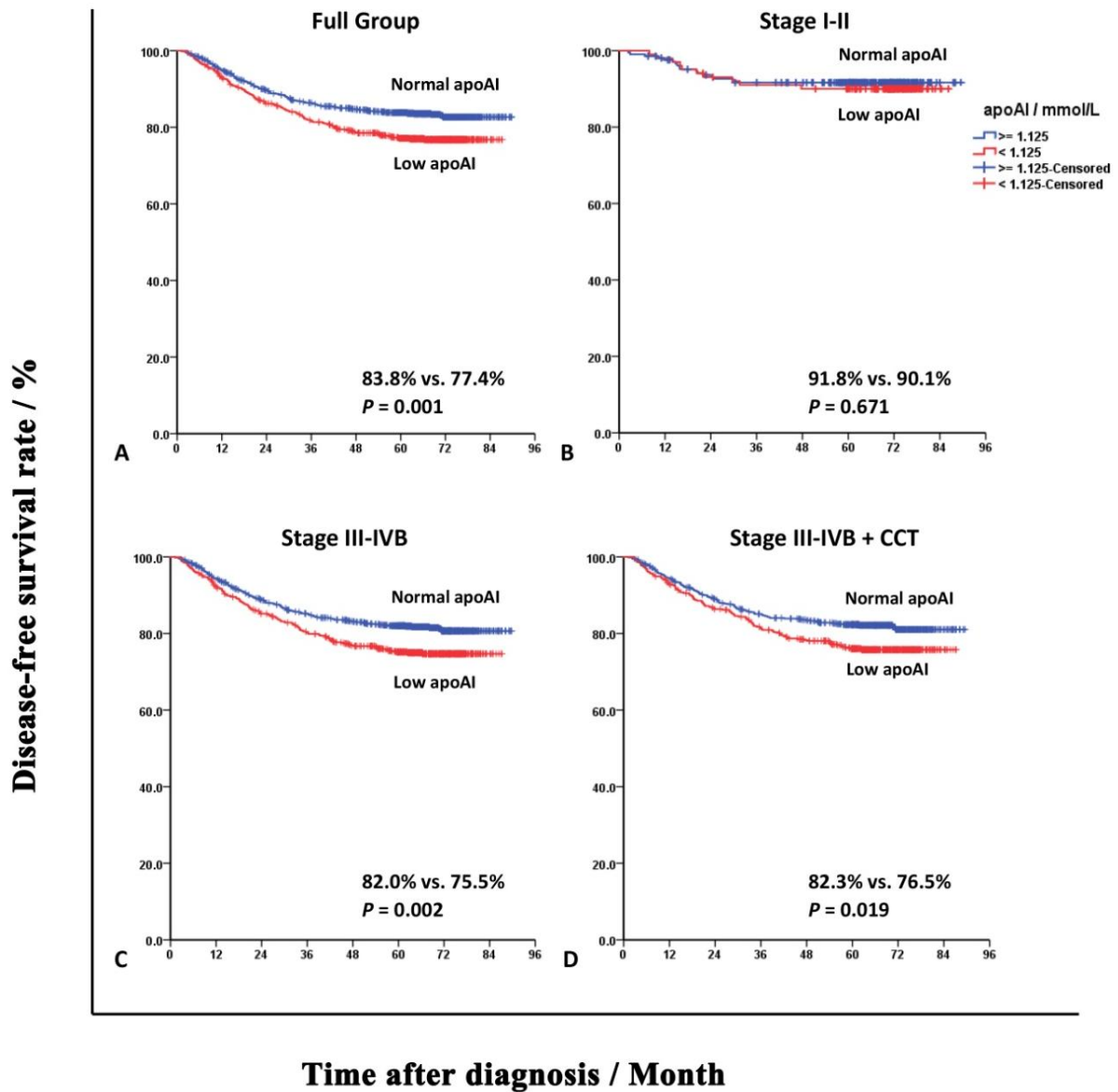
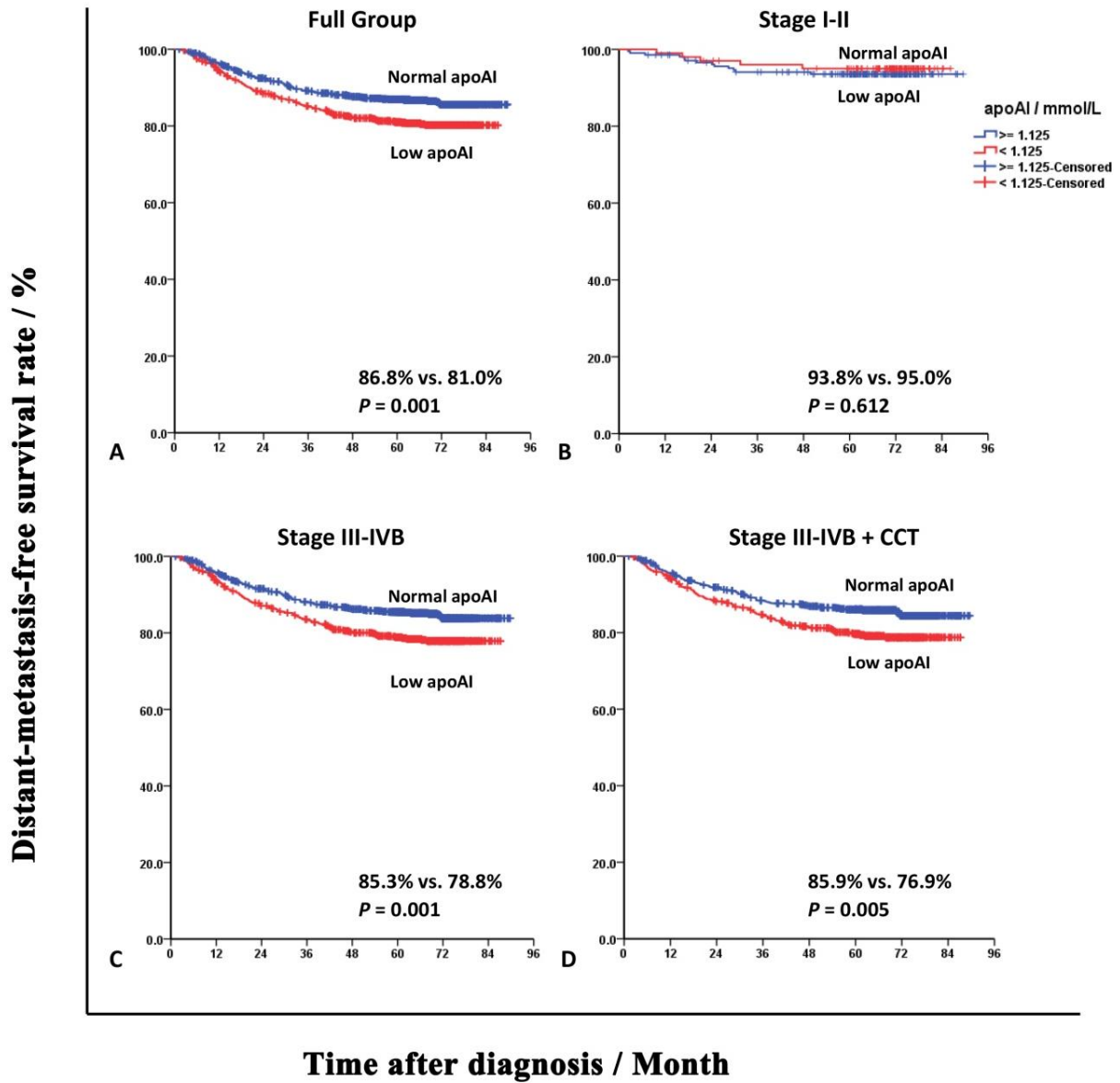


Figure S3 Distant-metastasis-free survival curves of patients grouped by the apolipoprotein A-I (apoAI) in full group and subgroup analyses. Panel A: Full group of patients. Panel B: Patients with stage I-II nasopharyngeal carcinoma (NPC). Panel C: Patients with stage III-IVB NPC. Panel D: Patients with stage III-IVB NPC and concurrent chemotherapy (CCT) during radiotherapy.



Tables

Table S1 Subgroup univariate survival analysis on association between serum apolipoprotein A-I and survivals.

Subgroups	ApoAI (mmol/L)	OS	<i>P</i> Value	DFS	<i>P</i> Value	LRFS	<i>P</i> Value	DMFS	<i>P</i> Value
Stage I-II	≥ 1.125	96.6%	0.839	91.8%	0.671	95.7%	0.373	93.8%	0.612
	< 1.125	96.0%		90.1%		93.1%		95.0%	
Stage III-IVB	≥ 1.125	88.3%	<0.001**	82.0%	0.002**	93.9%	0.576	85.3%	0.001**
	< 1.125	81.8%		75.5%		93.2%		78.8%	
Stage III-IVB with CCT	≥ 1.125	89.3%	0.001**	82.3%	0.019*	93.9%	0.817	85.9%	0.005**
	<1.125	82.8%		76.5%		93.5%		79.6%	

* $P < 0.05$, ** $P < 0.01$. Abbreviations: ApoAI, apolipoprotein A-I; OS, overall survival; DFS, disease-free survival; LRFS, local-recurrence-free survival; DMFS distant-metastasis-free survival; CCT, concurrent chemotherapy.

Table S2 Multivariate analysis in patients diagnosed with stage III-IVB nasopharyngeal carcinoma.

Survival	Factors	Variables	<i>P</i> Value	HR	95% CI for HR
OS	Age	> 45 vs. ≤ 45 years old	0.002**	1.515	1.163-1.976
	Pathologic type	WHO I-II vs. III	0.003**	2.105	1.299-3.401
	EBV DNA	> 4000 vs. ≤ 4000 copies/ml	< 0.001**	2.445	1.866-3.205
	ApoAI	< 1.125 vs. ≥ 1.125 mmol/L	0.002**	1.511	1.167-1.957
DFS	Age	> 45 vs. ≤ 45 years old	0.026*	1.282	1.031-1.595
	Pathologic type	WHO I-II vs. III	0.015*	1.733	1.112-2.695
	EBV DNA	> 4000 vs. ≤ 4000 copies/ml	<0.001**	2.545	2.033-3.195
	ApoAI	< 1.125 vs. ≥ 1.125 mmol/L	0.011*	1.321	1.066-1.639
DMFS	Age	> 45 vs. ≤ 45 years old	0.003**	1.431	1.125-1.818

Pathologic type	WHO I-II vs. III	0.010*	1.845	1.156-2.941
EBV DNA	> 4000 vs. ≤ 4000 copies/ml	<0.001**	2.688	2.096-3.448
ApoAI	< 1.125 vs. ≥ 1.125 mmol/L	0.005**	1.401	1.107-1.770

* $P < 0.05$, ** $P < 0.01$. Abbreviations: HR, hazard ratio; CI, confidence interval; OS, overall survival; DFS, disease-free survival; LRFS, local-recurrence-free survival; DMFS, distant-metastasis-free survival; WHO, World Health Organization; EBV DNA, Epstein-Barr virus deoxyribonucleic acid; apoA1, apolipoprotein A-I.

Table S3 Multivariate analysis in patients diagnosed with stage III-IVB nasopharyngeal carcinoma and treated with concurrent chemo-radiation.

Survival	Factors	Variables	P Value	HR	95% CI for HR
OS	Age	> 45 vs. ≤ 45 years old	0.008**	1.534	1.119-2.101
	Pathologic type	WHO I-II vs. III	0.027*	2.066	1.086-3.922
	EBV DNA	> 4000 vs. ≤ 4000 copies/ml	< 0.001**	2.247	1.629-3.096
	ApoAI	< 1.125 vs. ≥ 1.125 mmol/L	0.002**	1.548	1.135-2.110
DFS	Age	> 45 vs. ≤ 45 years old	0.049*	1.290	1.001-1.663
	Pathologic type	WHO I-II vs. III	0.312	1.387	0.735-2.618
	EBV DNA	> 4000 vs. ≤ 4000 copies/ml	<0.001**	2.242	1.730-2.907
	ApoAI	< 1.125 vs. ≥ 1.125 mmol/L	0.047*	1.277	1.003-1.642
DMFS	Age	> 45 vs. ≤ 45	0.013*	1.429	1.079-1.890
	Pathologic type	WHO I-II vs. III	0.094	1.724	0.911-3.268
	EBV DNA	> 4000 vs. ≤ 4000 copies/ml	<0.001**	2.398	1.799-3.205
	ApoAI	< 1.125 vs. ≥ 1.125 mmol/L	0.021*	1.383	1.050-1.825

* $P < 0.05$, ** $P < 0.01$. Abbreviations: HR, hazard ratio; CI, confidence interval; OS, overall survival; DFS, disease-free survival; LRFS, local-recurrence-free survival; DMFS, distant-metastasis-free survival; WHO, World Health Organization; EBV DNA, Epstein-Barr virus deoxyribonucleic acid; apoA1, apolipoprotein A-I.