

Prognostic Value of the Cumulative Cisplatin Dose During Concurrent Chemoradiotherapy in Locoregionally-Advanced Nasopharyngeal Carcinoma: A Secondary Analysis of a Prospective Phase III Clinical Trial Jun Ma et al.

Appendix S1.

The median cumulative cisplatin dose (CCD) for the entire cohort was 240 mg/m2 (interquartile range, 200-280). To address whether low or high doses makes a difference, further analysis was conducted to compared the survival difference between patients receiving a CCD \leq 200 mg/m² (low CCD group) and those who received a CCD \geq 280 mg/m² (high CCD group). In total, 113 (37.9%) patients received a CCD \leq 200 mg/m² and 78 (26.2%) patients received a CCD \geq 280 mg/m².

The baseline characteristics of the 191 patients were listed in Table 1. The high CCD group had a higher percentage of patients receiving intensity-modulated radiotherapy (IMRT). Although, the high CCD group had more patients with N2-3 stage compared with that in low CCD group, the overall stage were well balanced between the two groups.

The 5-year overall survival (OS), disease-free survival (DFS), locoregional relapse-free survival (LRRFS) and distant metastasis-free survival (DMFS) rates for low CCD group vs. high CCD group were 76.2% vs. 82.4% (P = 0.602), 67.8% vs. 71.1% (P = 0.713), 86.8% vs. 90.2% (P = 0.518) and 79.7% vs. 76.5% (P = 0.548). After adjusting for various prognostic factors, multivariate analysis revealed CCD was still not an independent prognostic factor for patients with locoregionally advanced NPC (Table 2).



Prognostic Value of the Cumulative Cisplatin Dose During Concurrent Chemoradiotherapy in Locoregionally-Advanced Nasopharyngeal Carcinoma: A Secondary Analysis of a Prospective Phase III Clinical Trial Jun Ma et al.

Table S1. Basic characteristics of the 191 patients with locoregionally-advanced NPC receiving concurrent chemoradiotherapy

Characteristic	Cumulative cisplatin dose		P ^a
	≤ 240 mg/m ²	≥ 280 mg/m ²	
	No. (%)	No. (%)	
Sex			0.185
Male	77 (68.1)	60 (76.9)	
Female	36 (31.9)	18 (23.1)	
KPS			0.213
≥ 90	86 (76.1)	53 (67.9)	
< 90	27 (23.9)	25 (32.1)	
Age (years)			0.384
<45	45 (39.8)	36 (46.2)	
≥ 45	68 (60.2)	42 (53.8)	
T category ^b			0.087
T1	7 (6.2)	1 (1.3)	
T2	24 (21.2)	27 (34.6)	
T3	55 (48.7)	31 (39.7)	
T4	27 (23.9)	19 (24.4)	
N category ^b			0.003
N1	40 (35.4)	13 (16.7)	
N2	67 (59.3)	53 (67.9)	
N3	6 (5.3)	12 (15.4)	
Overall stage ^b			0.115
III	84 (74.3)	49 (62.8)	
IVA	23 (20.4)	19 (24.4)	
IVB	6 (5.3)	10 (12.8)	
Radiotherapy technique			< 0.001
2D/3DRT	65 (57.5)	66 (84.6)	
IMRT	48 (42.5)	12 (15.4)	

Abbreviation: KPS = Karnofsky performance score; 2DRT = 2-dimensional radiotherapy; 3DRT = 3-dimensional radiotherapy; IMRT = intensity-modulated radiotherapy; NPC = nasopharyngeal carcinoma.

^aP-values were calculated using chi-square test (or Fisher's exact test if indicated).

^b According to the 6th edition of the UICC/AJCC staging system.



Prognostic Value of the Cumulative Cisplatin Dose During Concurrent Chemoradiotherapy in Locoregionally-Advanced Nasopharyngeal Carcinoma: A Secondary Analysis of a Prospective Phase III Clinical Trial Jun Ma et al.

Table S2. Multivariate analysis of variables correlated with clinical outcomes in the 191 patients with locoregional advanced-stage NPC

Endpoints	HR	95% CI	P ^a
OS			
Sex, female vs. male	0.654	0.311-1.375	0.263
KPS, ≥ 90 vs. < 90	0.697	0.353-1.376	0.298
Age, ≥ 45 vs. < 45 years	1.759	0.917-3.372	0.089
T category, T3-4 vs. T1-2	1.164	0.546-2.478	0.694
N category, N2 vs. N1	1.101	0.539-2.247	0.792
N category, N3 vs. N1	2.736	1.044-7.173	0.041
Radiotherapy technique, 2D/3DRT vs. IMRT	0.657	0.323-1.336	0.247
Cumulative cisplatin dose, ≤ 200 vs. ≥ 280 mg/m ²	0.675	0.342-1.331	0.256
DFS			
Sex, female vs. male	0.683	0.366-1.273	0.230
KPS, ≥ 90 vs. < 90	0.845	0.470-1.519	0.573
Age, ≥ 45 vs. < 45 years	1.434	0.834-2.464	0.192
T category, T3-4 vs. T1-2	0.980	0.518-1.854	0.950
N category, N2 vs. N1	1.117	0.607-2.056	0.721
N category, N3 vs. N1	2.181	0.904-5.262	0.083
Radiotherapy technique, 2D/3DRT vs. IMRT	0.745	0.410-1.352	0.332
Cumulative cisplatin dose, ≤ 200 vs. ≥ 280 mg/m ²	0.787	0.450-1.375	0.401
LRRFS			
Sex, female vs. male	0.706	0.250-1.993	0.510
KPS, ≥ 90 vs. < 90	2.325	0.661-8.177	0.189
Age, ≥ 45 vs. < 45 years	0.788	0.308-2.020	0.620
T category, T3-4 vs. T1-2	1.008	0.333-3.045	0.989
N category, N2 vs. N1	0.741	0.269-2.039	0.562
N category, N3 vs. N1	2.508	0.707-8.903	0.155
Radiotherapy technique, 2D/3DRT vs. IMRT	0.490	0.163-1.474	0.204
Cumulative cisplatin dose, ≤ 200 vs. ≥ 280 mg/m ²	0.547	0.206-1.456	0.227
DMFS			
Sex, female vs. male	0.607	0.279-1.318	0.207
KPS, ≥ 90 vs. < 90	0.694	0.358-1.345	0.279
Age, ≥ 45 vs. < 45 years	1.635	0.847-3.156	0.143
T category, T3-4 vs. T1-2	1.033	0.478-2.230	0.934
N category, N2 vs. N1	1.073	0.522-2.202	0.849
N category, N3 vs. N1	1.639	0.543-4.941	0.381
Radiotherapy technique, 2D/3DRT vs. IMRT	0.918	0.466-1.810	0.805
Cumulative cisplatin dose, ≤ 200 vs. ≥ 280 mg/m ²	1.066	0.543-2.094	0.853

Abbreviations: NPC = nasopharyngeal carcinoma; OS = overall survival; DFS = disease-free survival; LRRFS = locoregional relapse-free survival; DMFS = distant metastasis-free survival; KPS = Karnofsky performance score; 2DRT = 2-dimensional radiotherapy; 3D = 3-dimensional radiotherapy; IMRT = intensity-modulated radiotherapy. HR = hazard ratio; CI = confidence interval.



Prognostic Value of the Cumulative Cisplatin Dose During Concurrent Chemoradiotherapy in Locoregionally-Advanced Nasopharyngeal Carcinoma: A Secondary Analysis of a Prospective Phase III Clinical Trial Jun Ma et al.