



***Chemioterapia di induzione seguita da  
radiochemioterapia vs radiochemioterapia esclusiva  
nei tumori del rinofaringe***

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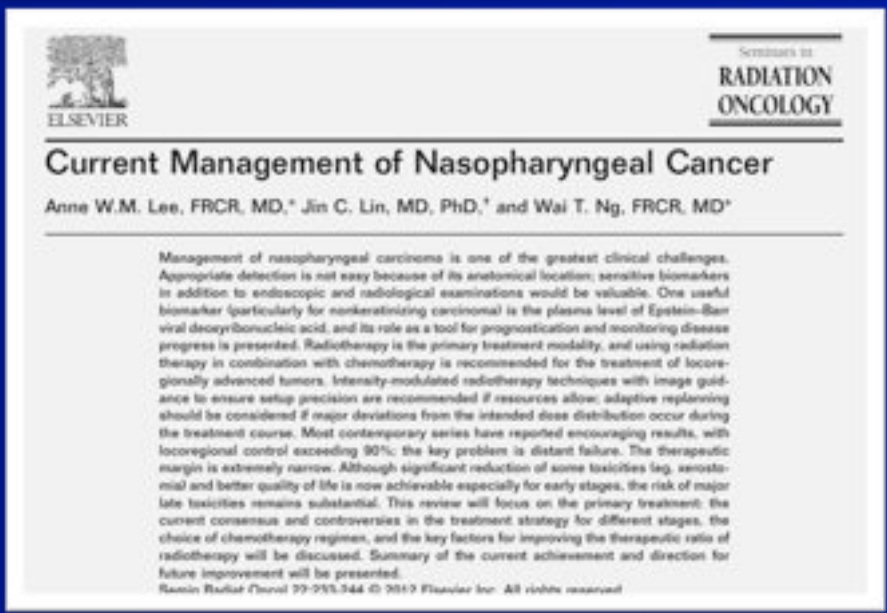
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❑ **Concomitant RTCT:**  
20% increase in OS

❑ **Adj Chemotherapy**  
has no benefit for OS  
or EFS

❑ **Induction chemotherapy** though  
achieved high RR  
failed to show  
improvement in OS



## Induction Chemotherapy Followed by Concurrent Chemoradiotherapy Versus Concurrent Chemoradiotherapy with or without Adjuvant Chemotherapy for Locoregionally Advanced Nasopharyngeal Carcinoma: Meta-analysis of 1,096 Patients from 11 Randomized Controlled Trials

Zhong-Guo Liang, Xiao-Dong Zhu\*, Ai-Hua Tan, Yan-Ming Jiang, Song Qu, Fang Su, Guo-Zeng Xu

### Conclusion:

....induction chemotherapy followed by concurrent chemoradiotherapy was well tolerated but could not significantly improve prognosis in terms of OS, LC, MFS.

Study	Group	No. of patients	Year	Stage	Radiotherapy	IC*	CC	AC
Wu et al., 2011	IC+CC CC	26 26	2004-7	III/IV	2 Gy/Fr/Wk, primary site 40-50 Gy, positive nodes 44-48 Gy, the gross tumor dose for neck 50-55 Gy	Cisplatin 40 mg/m <sup>2</sup> d1, 2-fluorouracil 800 mg/m <sup>2</sup> qd for 5 cycles, 40-50 Gy/2 Gy/1 cycle	Cisplatin 40 mg/m <sup>2</sup> d1, 2-fluorouracil 800 mg/m <sup>2</sup> qd for 5 cycles	1
Li et al., 2011	IC+CC CC	40 40	2001-5	III/IV	2 Gy/Fr/Wk, primary site 50 Gy, the gross tumor dose for neck 50-55 Gy	Taxol 125 mg/m <sup>2</sup> d1, cisplatin 20 mg/m <sup>2</sup> d1, 2 and 4-fluorouracil 1000 mg/m <sup>2</sup> qd for 2 cycles	Cisplatin 20 mg/m <sup>2</sup> d1, 2-fluorouracil 1000 mg/m <sup>2</sup> qd for 2 cycles	1
Wang et al., 2011	IC+CC CC	18 18	2001-5	III/IV	2 Gy/Fr/Wk, nasopharyngeal cavity	Docetaxel 75 mg/m <sup>2</sup> and cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles	Cisplatin 40 mg/m <sup>2</sup> for 4 cycles	1
Lin et al., 2011	IC+CC CC	70 70	2001-5	III/IV	Concurrent radiotherapy 2 Gy/Fr/Wk, primary site 50 Gy, positive nodes site 50 Gy, pharyngeal extension and metastatic nodes 50 Gy	Group A: Cisplatin 40 mg/m <sup>2</sup> , 5-fluorouracil 1 g/m <sup>2</sup> qd for 2 cycles Group B: Taxol 125 mg/m <sup>2</sup> , Carboplatin 100 mg/m <sup>2</sup> qd for 2 cycles	Cisplatin 40 mg/m <sup>2</sup> qd for 2 cycles	1
Wang et al., 2011	IC+CC CC	18 18	2001-7	III/IV	2 Gy/Fr/Wk, primary site 50 Gy, 50 Gy/2 Gy, nodal site 40 Gy, nodal positive sites 50 Gy	Docetaxel 75 mg/m <sup>2</sup> and cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group A: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group B: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles	Cisplatin 20 mg/m <sup>2</sup> d1, 2-fluorouracil 1000 mg/m <sup>2</sup> qd for 2 cycles	1
Guo et al., 2011	IC+CC CC	25 25	2004-8	III/IV	2 Gy/Fr/Wk, primary site 50 Gy, 50 Gy/2 Gy, nodal site 40 Gy, nodal positive sites 50 Gy	Docetaxel 75 mg/m <sup>2</sup> and cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group A: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group B: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles	Cisplatin 40 mg/m <sup>2</sup> qd for 2 cycles	1
Li et al., 2011	IC+CC CC	30 30	2004-12	III/IV	Total dose 50 Gy	Docetaxel 75 mg/m <sup>2</sup> and cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group A: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group B: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles	Cisplatin 40 mg/m <sup>2</sup> qd for 2 cycles	1
Yoshida et al., 2011	IC+CC CC	70 70	2001-10	III/IV	2 Gy/Fr/Wk, 50 Gy to clinically involved nodes of site, 50 Gy to nodal site and 40 Gy to noninvolved cervical and supraclavicular sites	Docetaxel 75 mg/m <sup>2</sup> and cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group A: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group B: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles	Cisplatin 40 mg/m <sup>2</sup> qd for 2 cycles	1
Tan et al., 2011	IC+CC CC	30 30	2001-1	III/IV	2 Gy/Fr/Wk, primary site 50 Gy, 50 Gy/2 Gy, nodal site 40 Gy, nodal positive sites 50 Gy	Docetaxel 75 mg/m <sup>2</sup> and cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group A: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group B: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles	Cisplatin 40 mg/m <sup>2</sup> qd for 2 cycles	1
Li et al., 2011	IC+CC CC	15 15	2004-1	III/IV	2 Gy/Fr/Wk, primary site 40-50 Gy, positive nodes 40-50 Gy, the gross tumor dose for neck 50-55 Gy	Docetaxel 75 mg/m <sup>2</sup> and cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group A: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group B: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles	The experimental group: Docetaxel 40 mg/m <sup>2</sup> qd for 2 cycles, 2-fluorouracil 1000 mg/m <sup>2</sup> qd for 2 cycles The control group: Cisplatin 40 mg/m <sup>2</sup> qd for 2 cycles, 2-fluorouracil 1000 mg/m <sup>2</sup> qd for 2 cycles	1
Wang et al., 2011	IC+CC CC	30 30	2001-5	III/IV	2 Gy/Fr/Wk, primary site 50 Gy, 50 Gy/2 Gy, positive nodes 40-50 Gy, the gross tumor dose for neck 50-55 Gy	Docetaxel 75 mg/m <sup>2</sup> and cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group A: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles Group B: Docetaxel 75 mg/m <sup>2</sup> , cisplatin 75 mg/m <sup>2</sup> qd for 2 cycles	Cisplatin 40 mg/m <sup>2</sup> qd for 2 cycles	1

IC: induction chemotherapy; CC: concurrent chemoradiotherapy; AC: adjuvant chemotherapy; ACC: American Joint Committee on Cancer; ICCC: International Cancer Control; MFS: metastasis-free survival; OS: overall survival; PP: publication bias.

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ORIGINAL REPORT

Randomized Phase II Trial of  
Radiotherapy  
and

**GORTEC-NPC 2006 TRIAL  
&  
NPC-0501 TRIAL**

71.7% (p= 0.01)

...therapy followed by concomitant  
... and weekly cisplatin versus the same  
... concomitant chemoradiotherapy in patients with  
nasopharyngeal carcinoma: a randomized phase II study  
conducted by the Hellenic Cooperative Oncology Group  
(HeCOG) with biomarker evaluation

G. Fountzilas<sup>1\*</sup>, E. Ciuleanu<sup>2</sup>, M. Bobos<sup>3</sup>, A. Kalogera-Fountzila<sup>4</sup>, A. G. Eleftheraki<sup>5</sup>,  
G. Karayannopoulou<sup>6</sup>, T. Zamboukas<sup>6</sup>, A. Nikolaou<sup>7</sup>, K. Markou<sup>7</sup>, L. Resiga<sup>8</sup>,  
D. Dionysopoulos<sup>1</sup>, E. Samantas<sup>9</sup>, H. Athanassiou<sup>10</sup>, D. Misailidou<sup>11</sup>, D. Skarlos<sup>12</sup> & T. Ciuleanu<sup>13</sup>

CT NAD-> RTCT vs RTCT: 3ys OS 66.6% vs 71.8% (p= 0.65)  
3ys PFS 64.5% vs 63.5% (p= 0.70)

Background

**Obiettivo**

Materiali e  
Metodi

Risultati

Conclusioni

Valutare gli **outcomes** di pazienti affetti da  
tumore del **Rinofaringe** trattati con  
**chemioterapia neoadiuvante (CT NAD)**  
seguita da radio chemioterapia  
concomitante o sola **radio chemioterapia  
esclusiva (RTCT)**

**Criteri di selezione:**

- Pz con biopsia positiva per Ca del Rinofaringe Stadio II-IV ECOG 0*
- No precedente trattamenti per HNC*
- No secondi tumori primitivi*

# ***STUDIO RETROSPETTIVO*** *2007-2013*

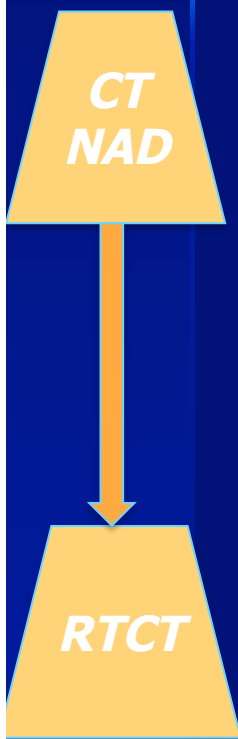
**45 PZ**



**23 PZ**  
**CT NAD → RTCT**

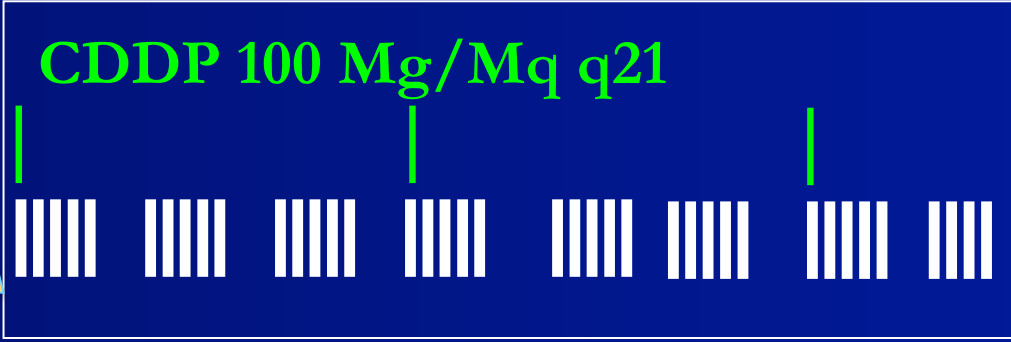
**22 PZ**  
**RTCT escl**





3 CICLI

- Docetaxel 75 mg/mq
- Cisplatin 75 mg/mq
- 5-FU 750 mg/mq ic 96 h

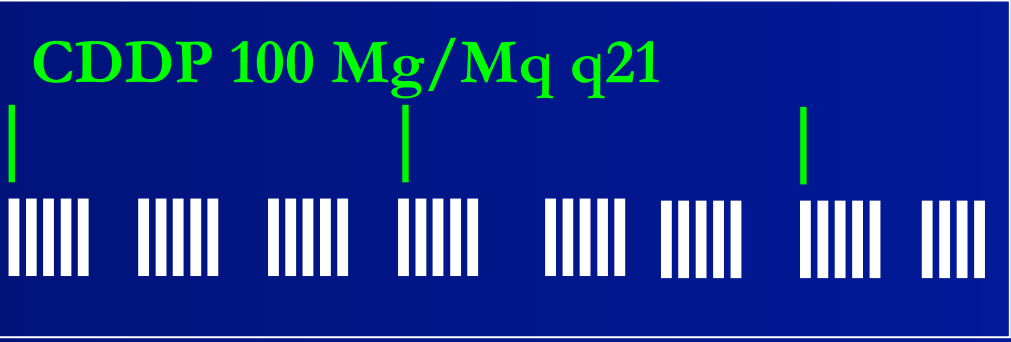


**IMRT: 70.2 Gy  
(180 cGy)**

**Chemioterapia:  
CDDP 100 mg/mq q21**

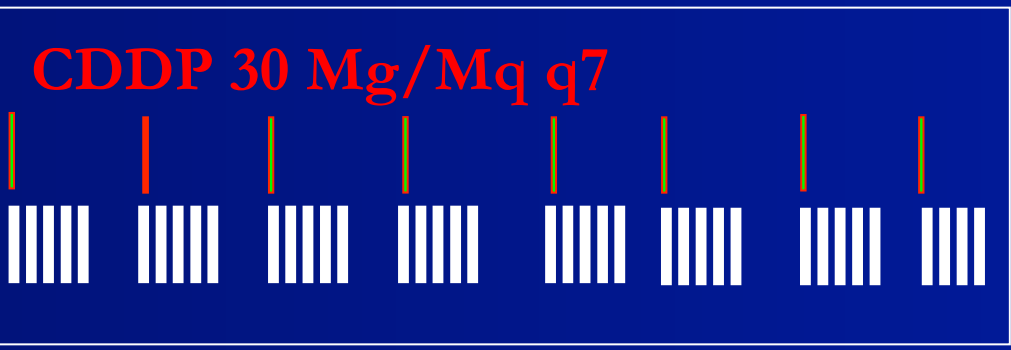


**RTCT**



**IMRT: 70.2 Gy  
(180 cGy)**

**Chemioterapia:  
CDDP 100 mg/mq q21**



**IMRT: 70.2 Gy  
(180 cGy)**

**Chemioterapia:  
CDDP 30 mg/mq q7**

Background

Obiettivo

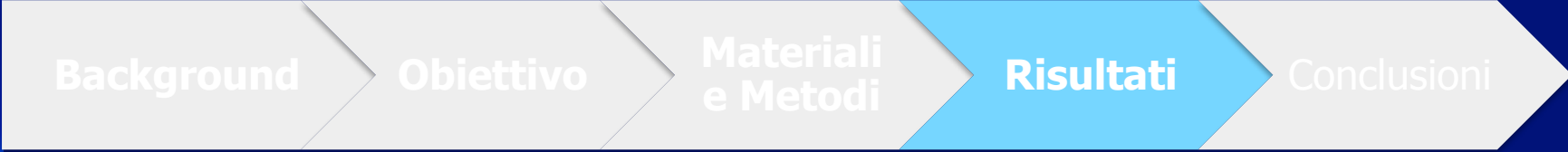
Materiali  
e Metodi

**Risultati**

Conclusioni



CARATTERISTICHE	CT NAD (n=23)	RTCT (n=22)
<b>Età</b> Mediana	55 aa (30-68)	55 aa (22-77)
<b>Sesso</b> M F	18 5	16 6
<b>ECOG</b>	0-2	0-2
<b>AJCC</b> II III IV	2 4 17	9 6 7
<b>cT</b> 1 2 3 4	4 3 4 12	9 6 1 6
<b>cN</b> 0 1 2 3	3 4 7 9	5 7 9 1

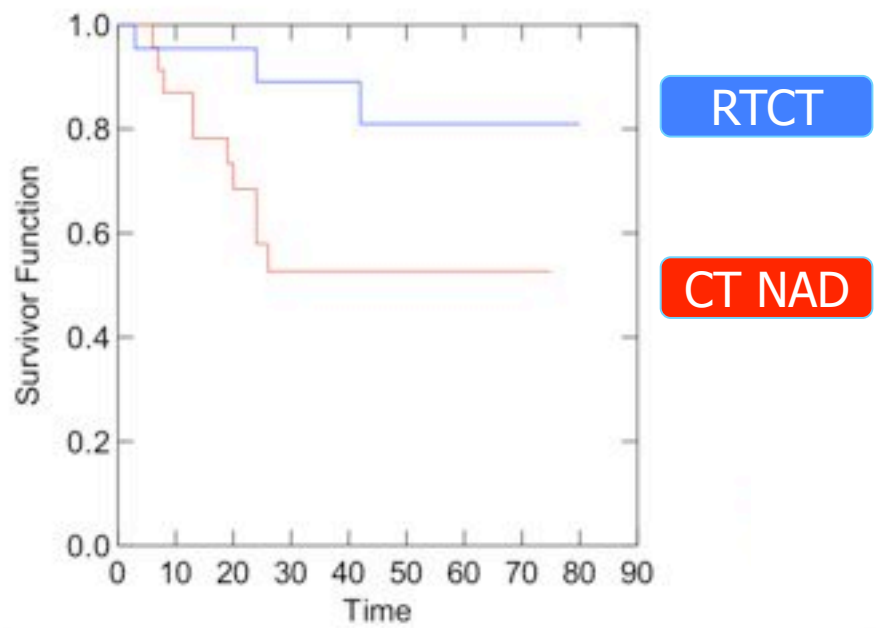


TOSSICITA' ACUTA				
	G1-2		G3-4	
<b>CT NAD</b>				
<b>Ematologica</b>	21		2	
<b>Non Ematologica</b>	22		1	
◆ Nausea/Vomito	1		0	
◆ Diarrea				
<b>RTCT</b>	<b>CT NAD</b>	<b>RTCT</b>	<b>CT NAD</b>	<b>RTCT</b>
<b>Ematologica</b>	17	18	6	4
<b>Non Ematologica</b>	21	19	2	3
◆ Mucosite				

**RISPOSTA DOPO CT NAD:**  
 CR=1  
 PR=21  
 SD=1  
 PD=0

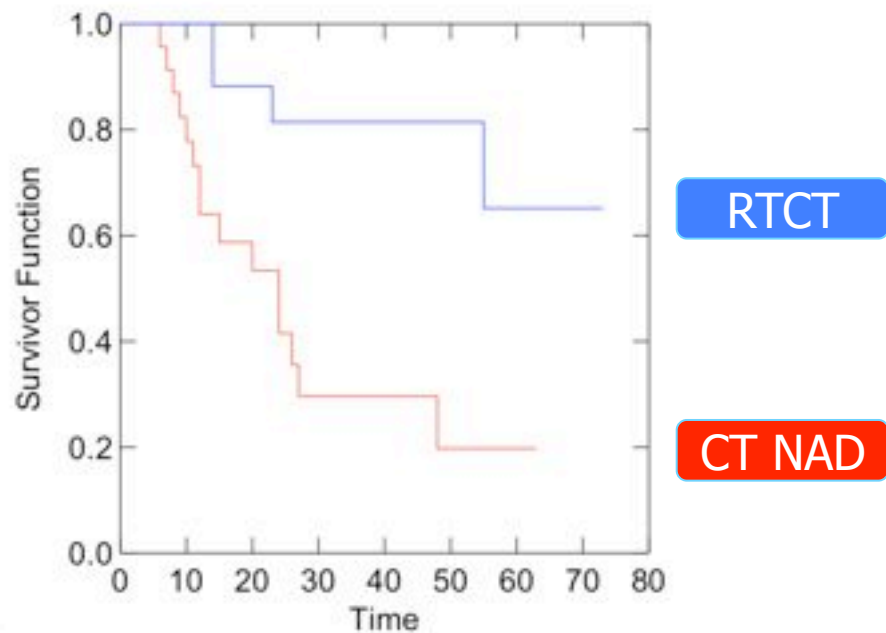
# FUP Mediano: 63 mesi (3-146)

Overall Survival



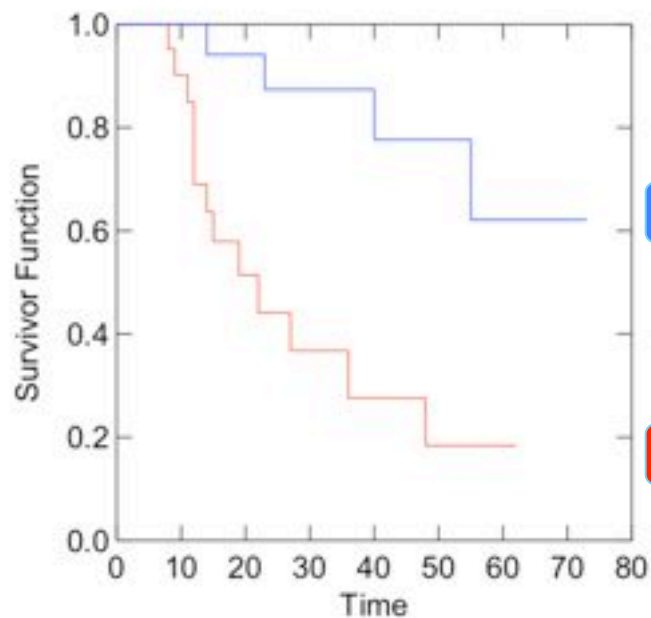
	CT NAD	RTCT	P value
OS 1 ys	79%	95%	0.04
OS 3 ys	58%	89%	
OS 5 ys	52%	81%	

## Disease Free Survival



	CT NAD	RTCT	P value
DFS 1 ys	64%	88%	0.002
DFS 3 ys	41%	81%	
DFS 5 ys	19%	65%	

## Local Control



RTCT

CT NAD

	CT NAD	RTCT	P value
LC 1 ys	69%	94%	0.001
LC 3 ys	40%	87%	
LC 5 ys	18%	62%	

*Analisi multivariata: lo stadio impatta sulla sopravvivenza globale ( $p=0.03$ ), sulla sopravvivenza libera da malattia ( $p=0.0021$ ) e sul controllo locale ( $p=0.0086$ ).*

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# Conclusioni

La radiochemioterapia concomitante sembrerebbe dare risultati migliori in termini di controllo locale e sopravvivenza rispetto alla chemioterapia neoadiuvante