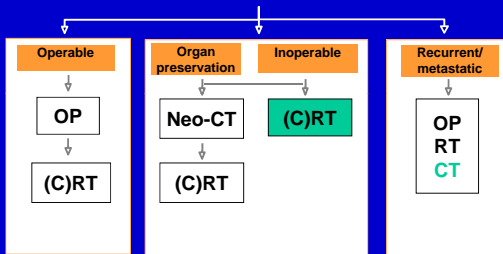


Larynx Hypopharynx

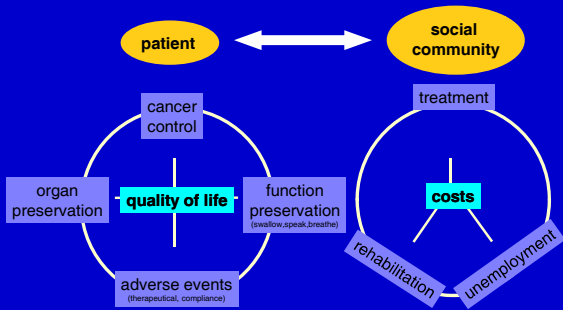
- Moderation Rainald Knecht, Hamburg
- State of the art Jean Louis Lefebvre, Lille
- Debate pro CRT Jan Klozar, Prague
contra CRT Marshall Posner, Boston
- Clinical cases all

Therapy algorithms

Head and neck carcinoma



Why larynx preservation at all ?

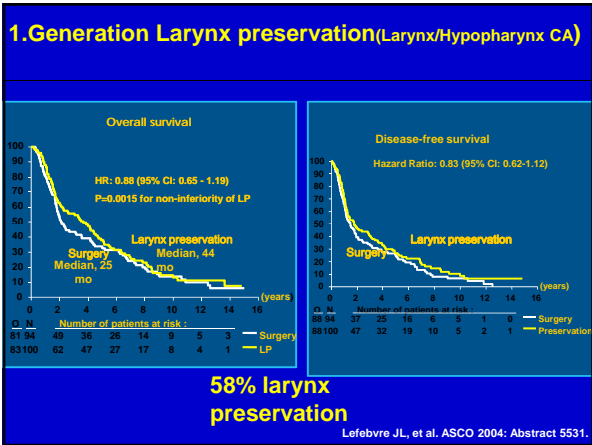


main publications on nonsurgical larynx preservation

Veterans Affair, N Engl J Med 1991, 324:1685-90 (Larynx)

Lefebvre et al., J Natl Cancer Inst, 1996, 88:890-99 (Hypopharynx)

Forastiere et al., N Engl J Med 2003, 349:2091-2098 (Larynx)



RTOG 91-11 (Laryngeal Cancer, III-IV)

5-year Results (med foll up 6.9 yrs)

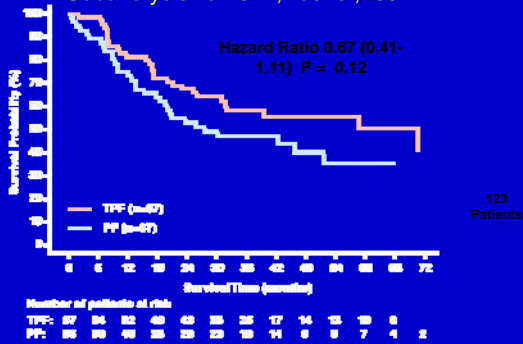
	CRT	I + RT	RT
Lx Preserv	84%	70%	66%
LR Control	69%	55%	51%
Dist. Mets	13%	14%	22%
LF Survival	47%	45%	34%
DF Survival	39%	39%	27%
Survival	55%	59%	54%

Forastiere AA et al. ASCO 2006 Atlanta, abstract # 5517; Forastiere A et al. N Engl J Med 2003;349:2091-8

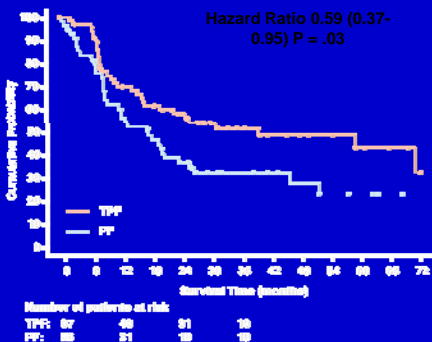
remission rate with Induction chemotherapy in advanced HNSCC

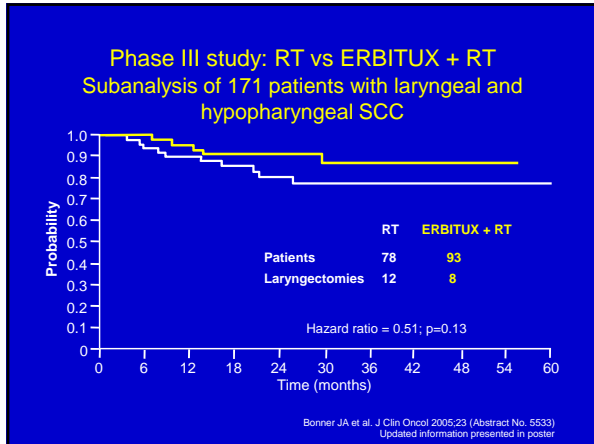
	CR	PR	RR
Cisplatin (100mg/m ²) 5-Fluorouracil (5000mg/m ²) 2-3 Cycles VA, 1991	33%	53%	68%
Cisplatin (100mg/m ²) 5-Fluorouracil (5000mg/m ²) EORTC, 1996	43%	43%	86%
Docetaxel (100mg/m ²) 1-8 Cycles DFCI, 1992	11%	31%	43%
Docetaxel (80mg/m ²) Cisplatin (70mg/m ²) 1-3 Cycles Kienzer, 1998	25%	51%	76%
Docetaxel (75mg/m ²) Cisplatin (75mg/m ²) 1-3 Cycles Mol, 1999	29%	26%	55%
Docetaxel (80mg/m ²) Cisplatin (70mg/m ²) 1-3 Cycles Baur, 1998	14%	60%	74%
Docetaxel (75mg/m ²) Cisplatin (75mg/m ²) 4 Cycles Bischof, 2000	17%	48%	65%
Docetaxel (75mg/m ²) Cisplatin (100mg/m ²) 5-Fluorouracil (4000mg/m ²) 4 Cycles Posner, 2000	47%	53%	100%

**OS "Operable" Hypopharynx and Larynx
Subanalysis Tax 324, Posner, 2007**



**LFS "Operable" Hypopharynx and Larynx
Subanalysis Tax 324, Posner, 2007**





Phase III study: RT vs ERBITUX + RT (1) Subanalysis of 171 patients with laryngeal and hypopharyngeal SCC

Treatment	Laryngeal preservation	
	2-year rate	3-year rate
RT alone (n=78)	83%	80%
ERBITUX + RT (n=93)	92%	88%

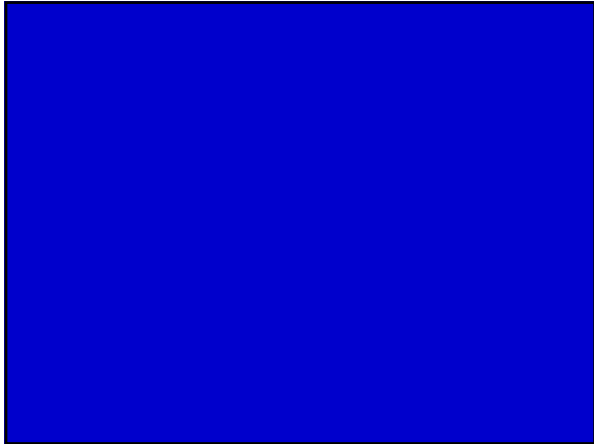
Bonner J et al. ASCO Annual Meeting, Orlando (2005) (Abstract No. 5533)

State of the art?

primary treatment

Surgery Total LE only T4?
TLS,CCS,CHEP at all?
Neck dissection(XRT) when?

Radio/Chemo Therapy
combined(CRT) or sequential(I+RT)
normofract.or hyerfract.accel.RT
bioradiation(EGFR):replacing or adding to



RTOG 91-11(Laryngeal Cancer,III-IV)
5-year Results (med foll up 6.9 yrs)

	CRT	I + RT	RT
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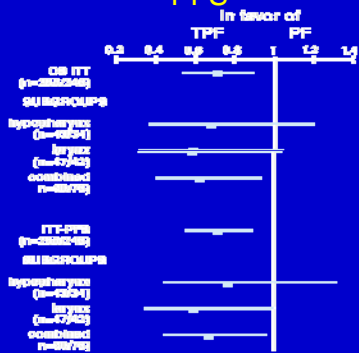
Table 2. Grade 3 or 4 Acute Toxic Effects, According to the Treatment Group.*

Toxic Effect	Cisplatin plus Fluorouracil Followed by Radiotherapy (N=168)			Radiotherapy with Concurrent Cisplatin (N=171)			Radiotherapy Alone (N=171)		
	grade 3	grade 4	total	grade 3	grade 4	total	grade 3	grade 4	total
Hematologic	43	44	87 (52)	13	10	23 (15)	64	17	81 (47)
Infection	4	5	9 (5)	2	0	2 (1)	7	0	7 (4)
Mucosal (stomatitis)	27	7	34 (20)	36	2	38 (24)	64	9	73 (43)
Pharyngeal or esophageal	—	—	—	30	0	30 (19)	60	0	60 (35)
Laryngeal	—	—	—	20	1	21 (13)	29	2	31 (18)
Dermatologic (in radiation field)	—	—	—	16	0	16 (10)	10	2	12 (7)
Nausea or vomiting	20	3	23 (14)	0	0	0	28	7	35 (20)
Renal or genitourinary	3	0	3 (2)	2	0	2 (1)	6	1	7 (4)
Neurologic	5	1	6 (4)	0	0	0	8	1	9 (5)
Other	20	7	27 (16)	16	2	18 (12)	58	11	69 (40)
Overall maximal severity	62	49	111 (66)	66	13	79 (51)	99	32	131 (77)

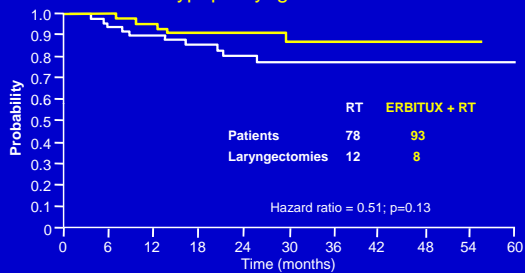
* Dashes denote not applicable.



Larynx and Hypopharynx OS and PFS



Phase III study: RT vs ERBITUX + RT Subanalysis of 171 patients with laryngeal and hypopharyngeal SCC

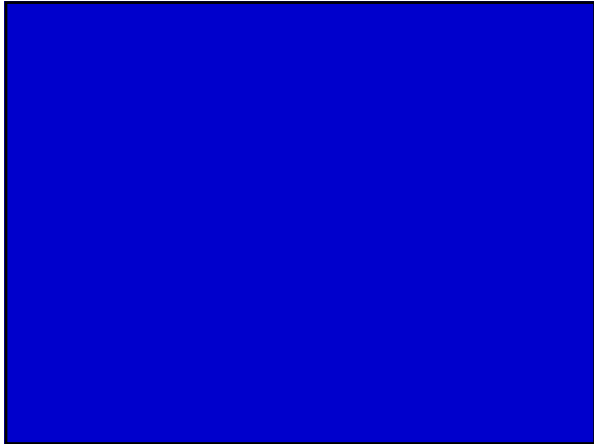


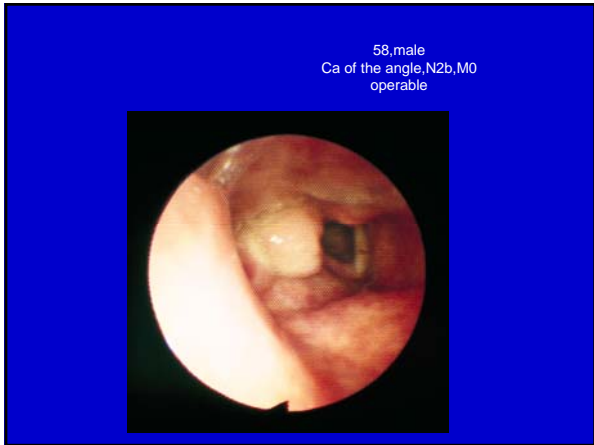
Bonner JA et al. J Clin Oncol 2005;23 (Abstract No. 5533)
Updated information presented in poster

Phase III study: RT vs ERBITUX + RT (1) Subanalysis of 171 patients with laryngeal and hypopharyngeal SCC

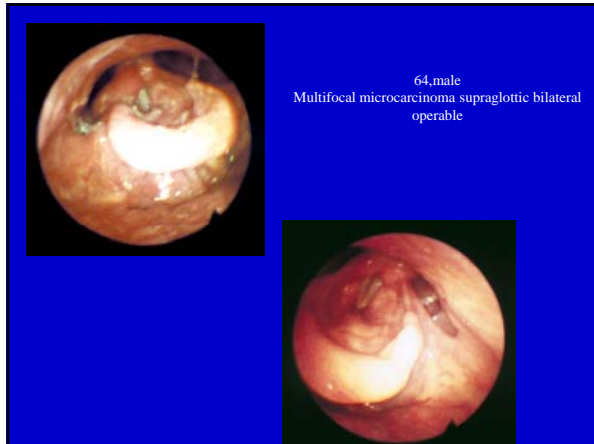
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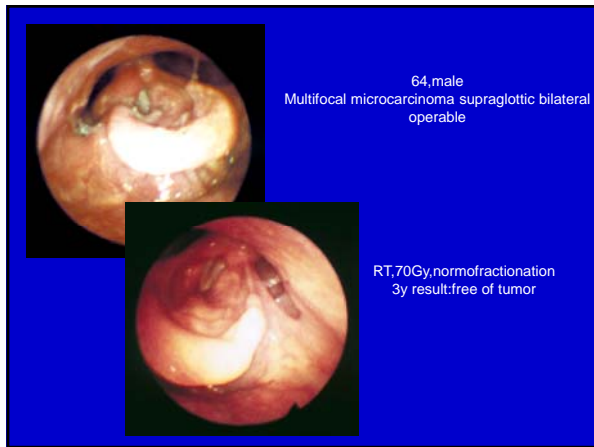
Bonner J et al. ASCO Annual Meeting, Orlando (2005) (Abstract No. 5533)

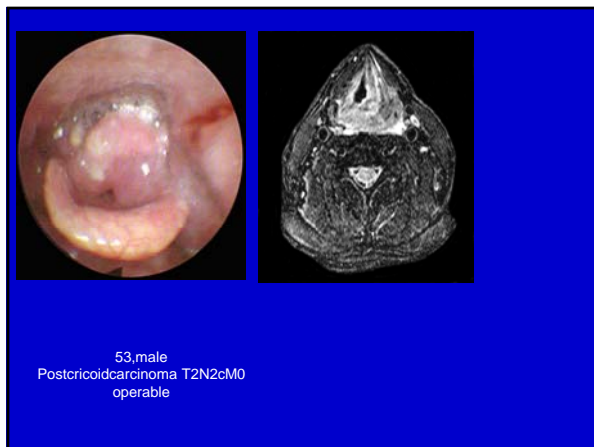


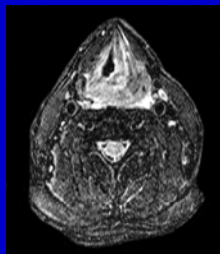








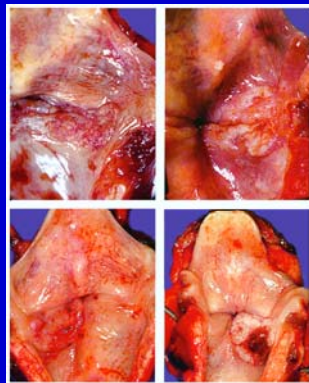




53, male
Postcricoidcarcinoma T2N2cM0
operable

Laryngoprotect study, Phase II
3 Cycl Induction TPF, Posner Prot.
CR
CRT, RTOG 91-11

3y result: no recurrence
no late toxicity



Vocal cord

T₂ / T₃

N₀ / N₁ / N_{2a/b/c} / N₃

Surgery

CCS
TLS
SCPL
neck dissection
comprehensive / selective

Radiation (2-D CRT/IMRT)

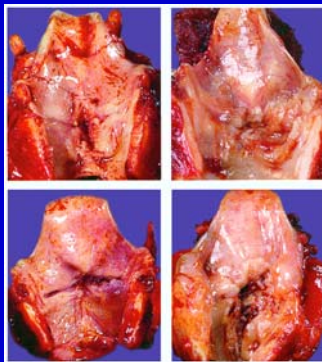
standard
hyperfractionated/accelerated(protocol?)

Chemotherapy

neoadjuvant (protocol?)
concurrent (protocol?)

Other therapy

Larynx preservation / function
tumor control
adverse events (CTCAE v3.0)
survival



Vocal cord

T_{4a}

N₁ / N_{2a/b/c} / N₃

Surgery

CCS
TLS
SCPL
neck dissection
comprehensive / selective

Radiation (2-D CRT/IMRT)

standard
hyperfractionated/accelerated(protocol?)

Chemotherapy

neoadjuvant (protocol?)
concurrent (protocol?)

Other therapy

Larynx preservation / function
tumor control
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