

The importance of Thinking Holistically When Caring for Head and Neck Patients

Dr Kumar Prabhash

Prof, HOD Medical Oncology

Tata Memorial Hospital, Mumbai

- **CTRT IN HEAD AND NECK CANCER**
- **NACT IN HEAD AND NECK CANCER**
- **PALLIATIVE SYSTEMIC THERAPY –**
 - **Expectation**
 - **metronomic**
 - **triple metronomic**
 - **Low dose immunotherapy**

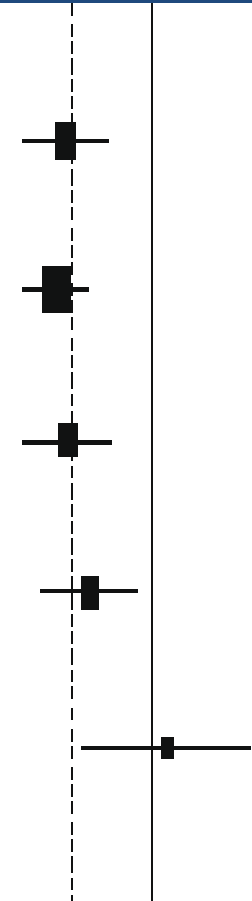
Effects of Chemotherapy on Survival at 5 Years: From the Meta-Analysis

Trial Category	No. of Trials	No. Patients	Absolute Benefit	<i>P</i> value
at 5 years				
All trials	65	10850	+4	<0.0001
Adjuvant	8	1854	+1	0.74
Induction	31	5269	+2	0.10
PF	15	2487	+5	0.01
Other Chemo	16	2782	0	0.91
Concomitant	26	3727	+8	<0.0001

Site wise outcomes

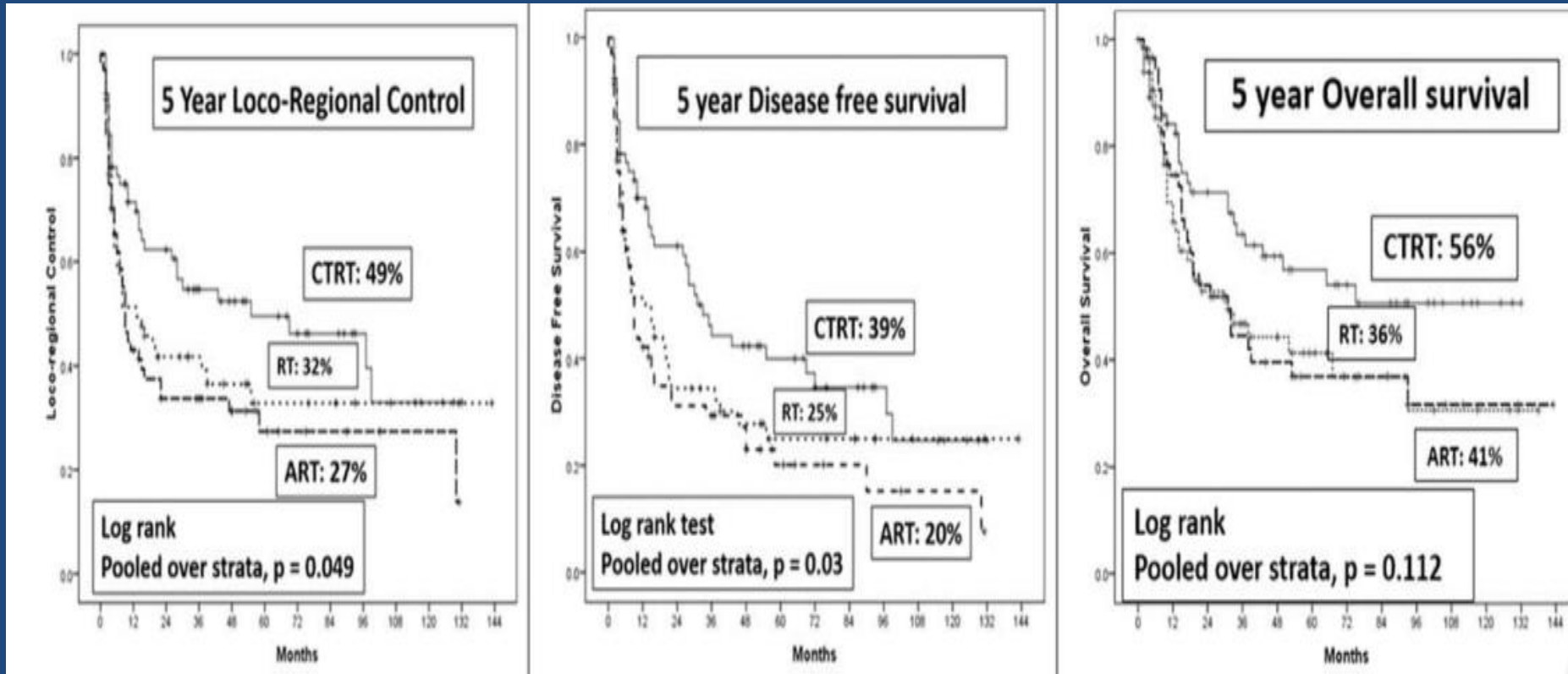
Site

Oral cavity	680/997	754/1020	-72.8	327.7
Oropharynx	1123/1723	1219/1681	-138.3	559.3
Larynx	607/1013	644/1012	-64.0	294.5
Hypopharynx	546/760	563/757	-40.5	252.6
Others	187/264	183/256	3.2	83.4



- **CISPLATIN ELIGIBLE PATIENTS**

Chemoradiation benefit in OS – 30 mg/m²



DOES WEEKLY CISPLATIN IMPROVE OUTCOME

Oral Cavity Adjuvant Therapy (OCAT)

Phase III, Randomized Controlled Trial of Surgery followed by Conventional RT (5 fr/wk) vs Concurrent CT-RT vs Accelerated RT (6fr/wk) in Locally Advanced, Resectable, Squamous Cell Carcinoma of Oral Cavity NCT00193843



Sarbani Ghosh-Laskar (PI)

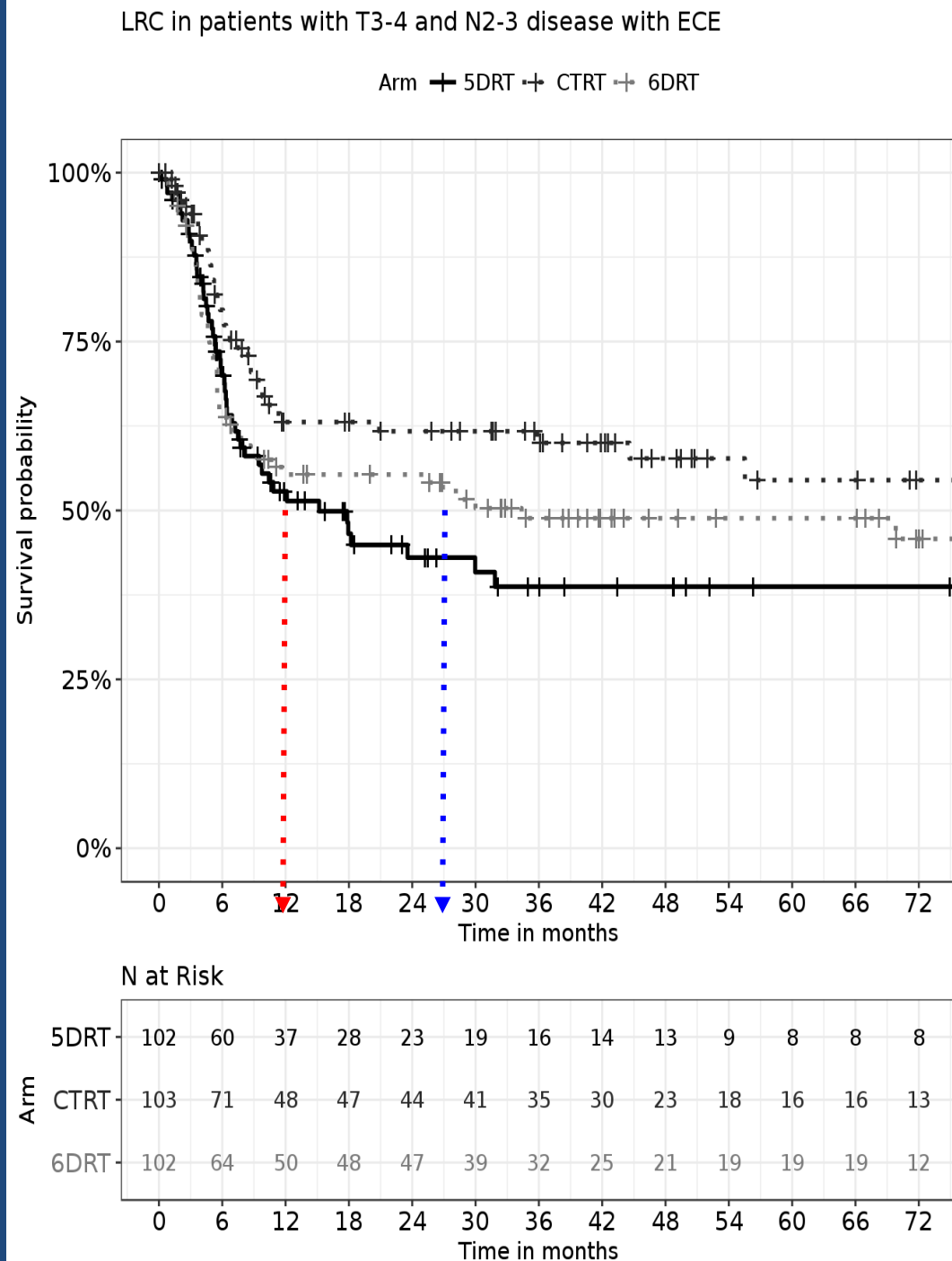
Devendra Chaukar (Co-PI), Mandar Deshpande, Abhishek Chatterjee, Rohini Hawaldar, Santam Chakraborty, Shilpi Sharma, Jai Prakash Agarwal, Tejpal Gupta, Ashwini Budrukkar, Vedang Murthy, P. S. Pai, Pankaj Chaturvedi, Gouri Pantvaidya, Anuja Deshmukh, Deepa Nair, Sudhir Nair, Kumar Prabhash, Amit Joshi, Anil D'Cruz

Tata Memorial Centre, Mumbai, India

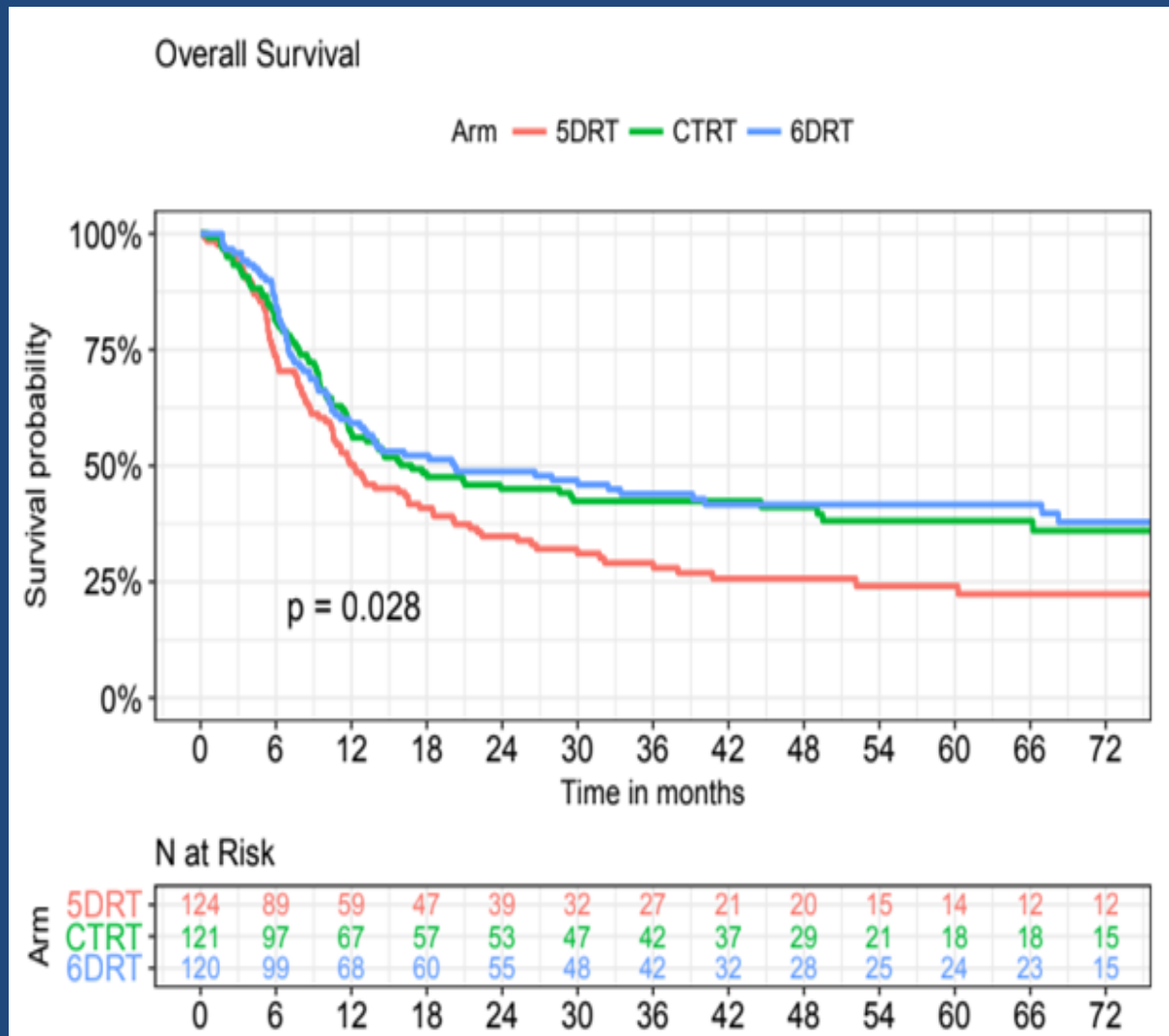
ASCO, 2016

OCAT data (high risk)

1. 5 yr LRC – **55% VS 39%** , CTRT vs 5DRT (HR =0.61 , 95% CI- 0.40-0.92,p=0.02)
2. 5 yr OS- **38% VS 16%**, CTRT vs 5DRT (HR =0.61 , 95% CI- 0.40-0.92,p=0.02)



T3-T4 with N2-N3 LN (OCAT data)



IS 3 WEEKLY CISPLATIN BETTER THAN WEEKLY CISPLATIN

Once-a-Week Versus Once-Every-3-Weeks Cisplatin Chemoradiation for Locally Advanced Head and Neck Cancer: A Phase III Randomized Noninferiority Trial

Vanita Noronha, Amit Joshi, Vijay Maruti Patil, Jaiprakash Agarwal, Sarbani Ghosh-Laskar, Ashwini Budrukhar, Vedang Murthy, Tejpal Gupta, Anil K. D'Cruz, Shripad Banavali, Prathamesh S. Pai, Pankaj Chaturvedi, Devendra Chaukar, Nikhil Pande, Arun Chandrasekharan, Vikas Talreja, Dilip Harindran Vallathol, Vijayalakshmi Mathrudev, Aparna Manjrekar, Kamesh Maske, Arati Sanjay Bhelekar, Kavita Nawale, Sadhana Kannan, Vikram Gota, Atanu Bhattacharjee, Shubhada Kane, Shashikant L. Juvekar, and Kumar Prabhash

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JOURNAL OF CLINICAL ONCOLOGY

R A P I D C O M M U N I C A T I O N

Trial Design-W3W

Ke ELIGIBILITY CRITERIA

- Age ≤ 70 yrs
- SCC of oral cavity/ pharynx/ larynx/ cervical lymphadenopathy of unknown primary
- Stage III / IV, no distant mets
- Adjuvant or definitive CRT
- If postop: high-risk features: ECE, close or + margins, T4 primary, > 2 LNs +
- No induction chemotherapy
- Adequate organ function

Stratify

- **T-group** (T0,1,2 vs T3,4)
- **N-group** (N0,1 vs N2,3)
- **Therapy intent** (adjuvant vs definitive)



Randomized
1:1
Open Label

n=150

n=150

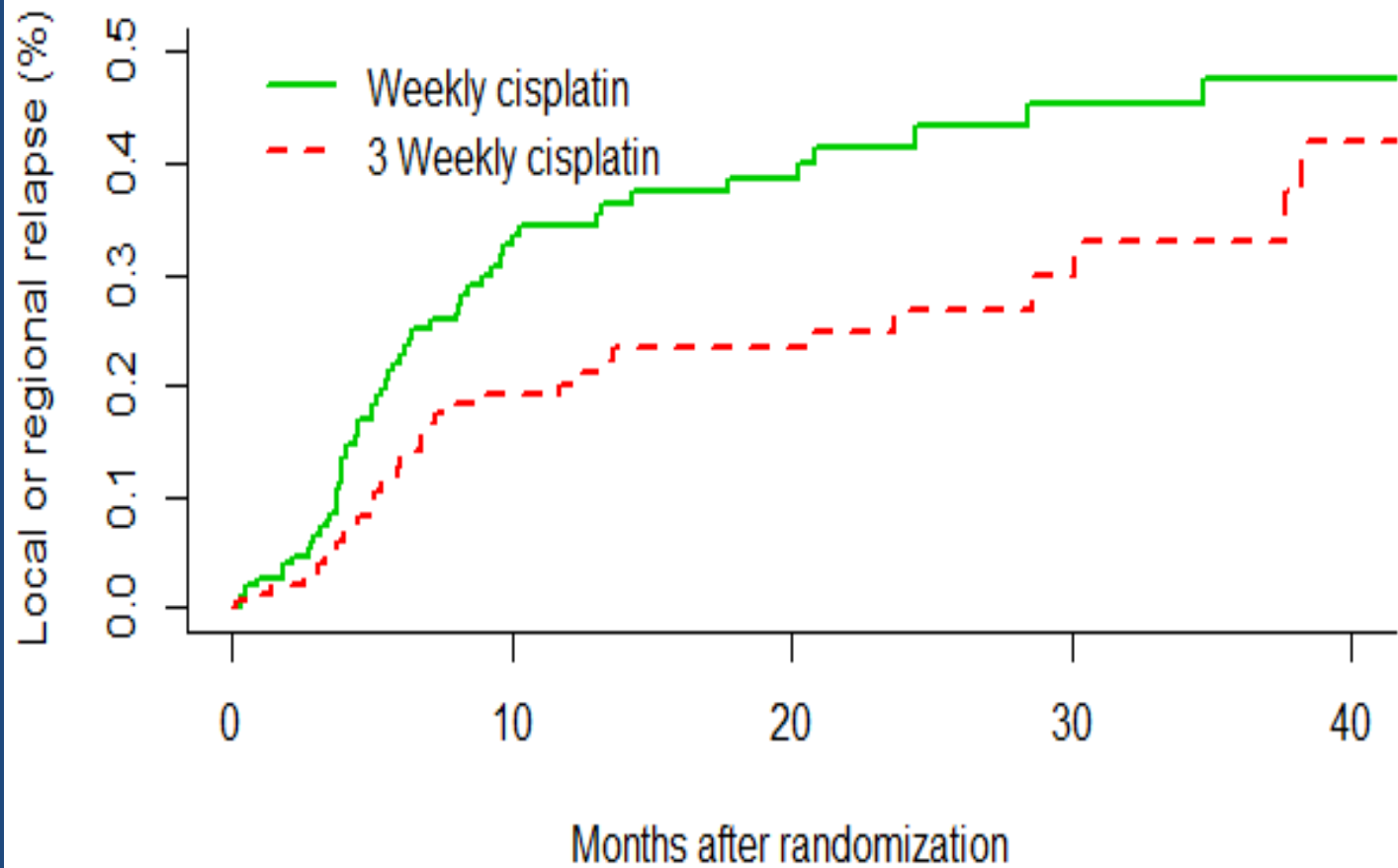
**3-weekly cisplatin
100mg/m²
D1,22,43 of RT**

RT: 60 Gy/30 fr/6 wks (adj)
70 Gy/35 fr/7 weeks-(def)

**Weekly cisplatin
30mg/m² with
RT**

F/U: Weekly during CRT, then Q3 mths x 2 yrs, then Q 6 mths

Cumulative incidence curve for locoregional failure



Number at risk

Weekly Cisplatin

150

75

45

24

15

3 weekly Cisplatin

150

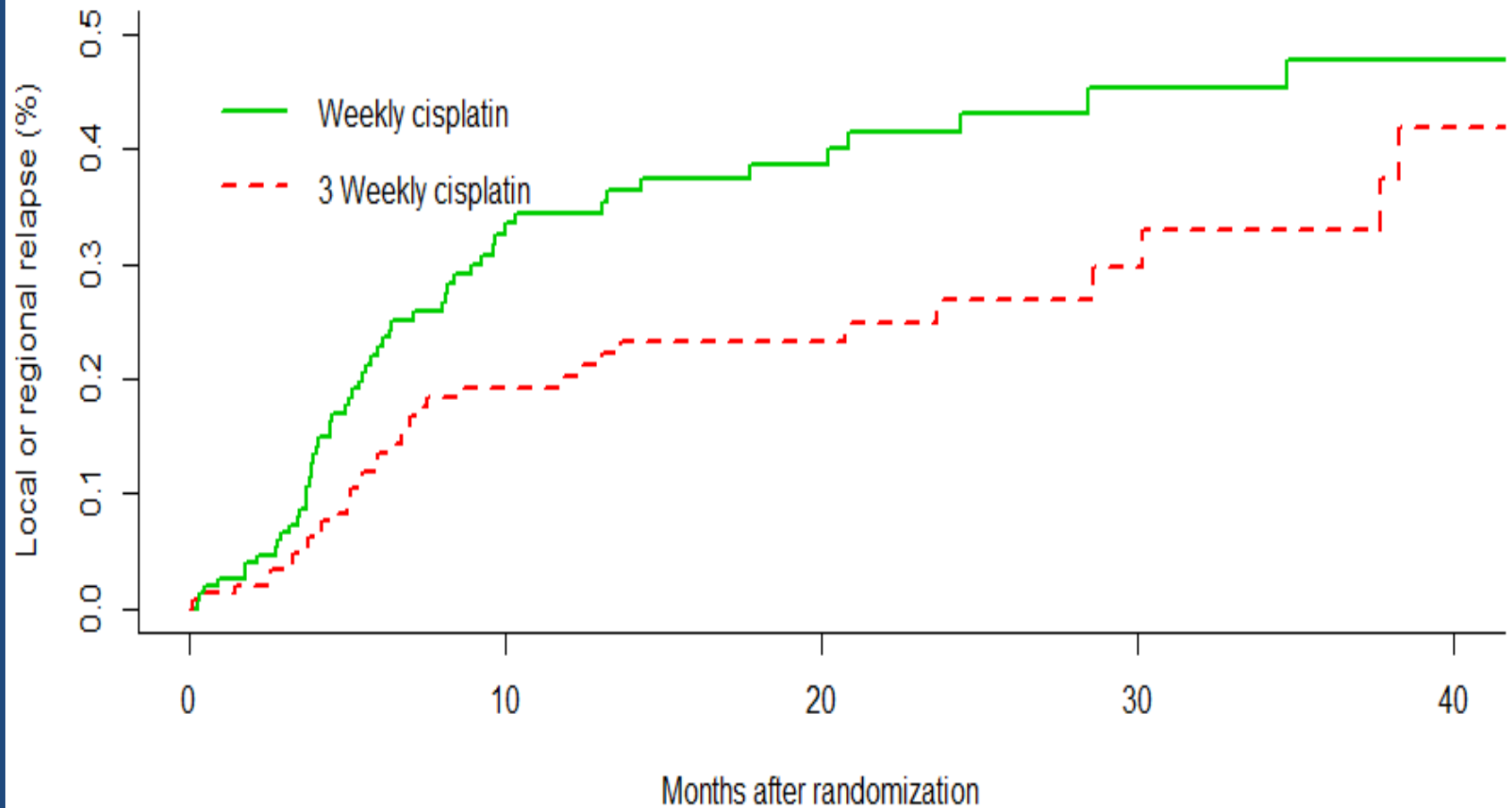
84

54

22

10

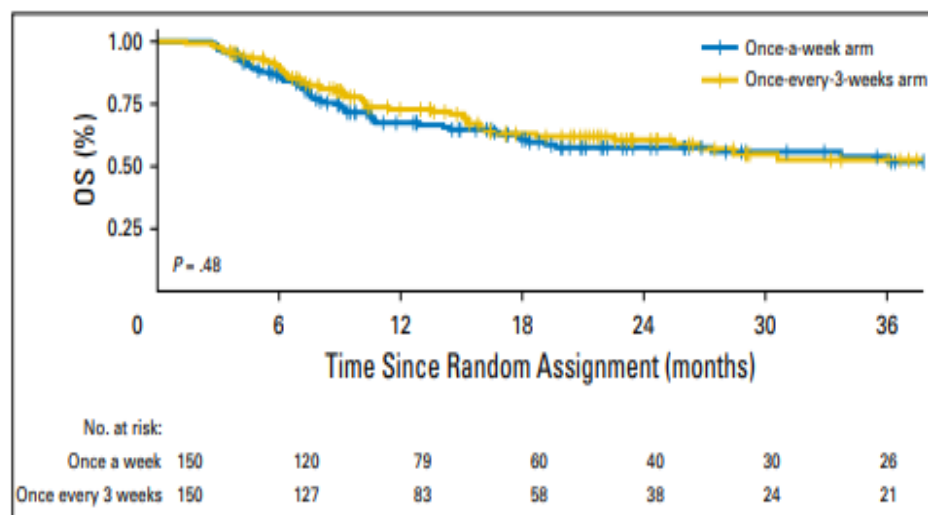
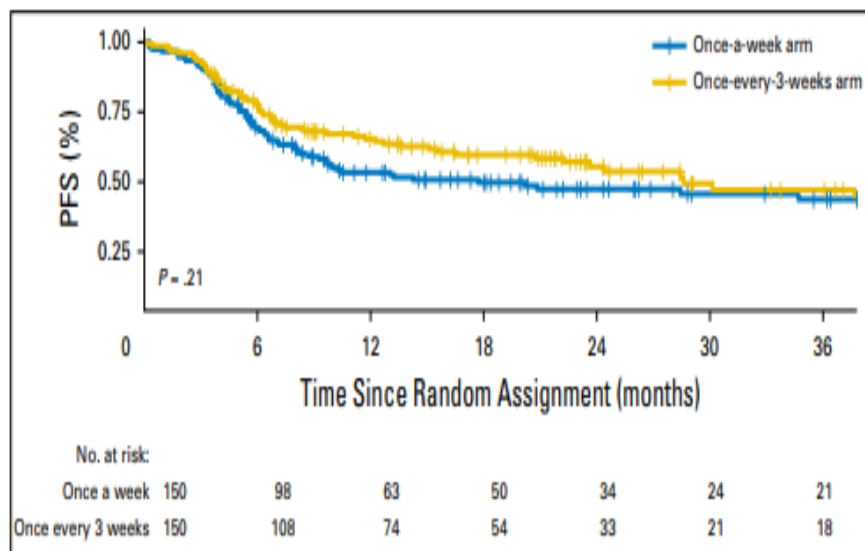
Cumulative incidence curve for locoregional failure with cisplatin ≥ 200 mg/m²



No at

Wkly Cisplatin	87	51	32	20	13
3 wkly Cisplatin	143	82	53	22	10

Presented by: Vanita Noronha, Tata Mem Hosp





Concurrent Chemotherapy and External Radiation
Therapy (ConCERT): An Open Label Non-Inferiority Phase
III Randomized Controlled Trial of Weekly Vs Three
Weekly Cisplatin and Radical Radiotherapy in Locally
Advanced Head and Neck Squamous Cell Carcinoma
On Behalf of All Investigators

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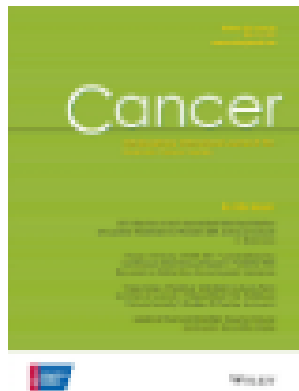
Survival data

Parameter	Standard arm No. (%) 133 (100)	Test arm No.(%) 133 (100)	P value
Median FU (surviving patients)	25.7 months		
LR failures	65 (48.9)	53 (39.9)	0.139
2 years LRC%	56.39%	60.90%	
Median OS (95% CI)	30 (20.4-39.7)	25.5 (13.3-37.5)	0.751
Median PFS	21.3	20.8	0.377
Median time to LRF	24.3	23	0.347
Mean OS (95% CI)	27.1 (23.9-30.4)	26.4 (23-29.7)	
Mean time to LRF (95% CI)	24.8 (21.6-28)	27.6 (24-31.1)	
RMST at 40 months	23.25	24.83	(95%CI:-1.86,5.02; p=0.449

CISPLATIN

- 30 MG/M2 IS BETTER THAN NONE
- 30 MG/M2 IS INFERIOR TO 100 MG/M2 FOR LRC
- 40MG/M2 IS SIMILAR TO 100 MG/M2 FOR LRC

Can we make it better beyond Cisplatin



Cancer

A randomized phase III trial comparing
Nimotuzumab with Cisplatin
Chemoradiotherapy versus Cisplatin
Chemoradiotherapy alone in locally advanced
head and neck cancer

DOI:10.1002/cncr.32179

Trial Design

ELIGIBILITY CRITERIA

- Age ≥ 18 years
- SCC of oral cavity/ oropharynx/ hypopharynx/ larynx
- Stage III / IV, no distant metastasis
- Definitive CRT
- Adequate organ function

Stratify

- T-group (T0,1,2 vs T3,4)
- N-group (N0,1 vs N2,3)
- Site (Oropharynx versus non oropharynx)
- Technique of radiation (conventional versus others)

Randomized
1:1
Open Label

n=268

Nimotuzumab
(200mg) -weekly
cisplatin
 $30\text{mg}/\text{m}^2$ with
of RT (NCRT)

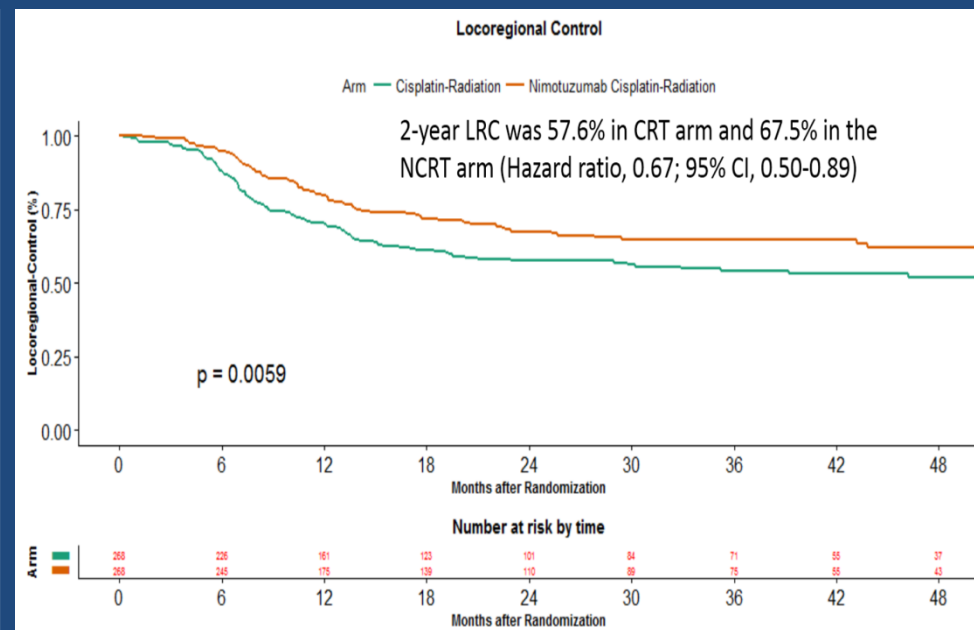
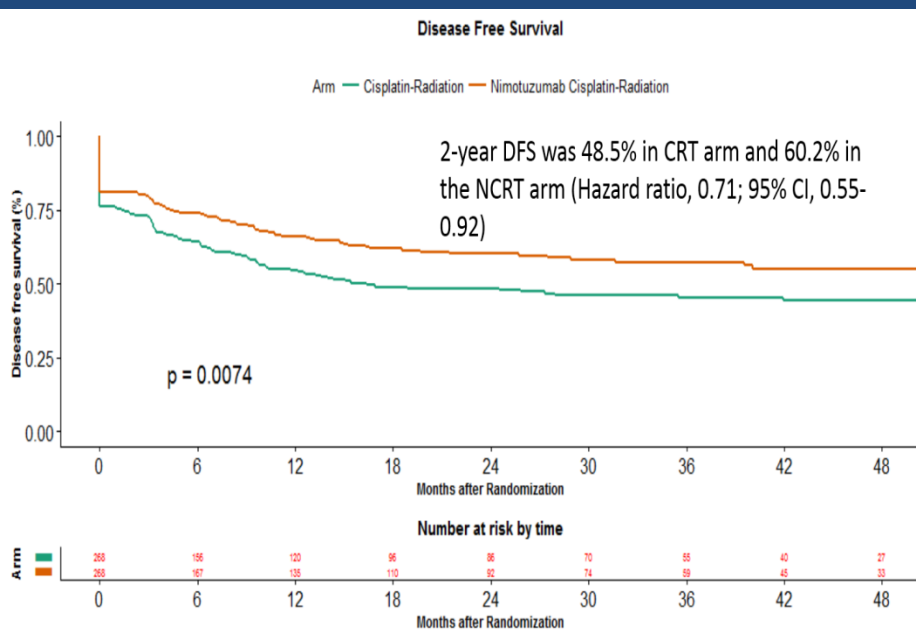
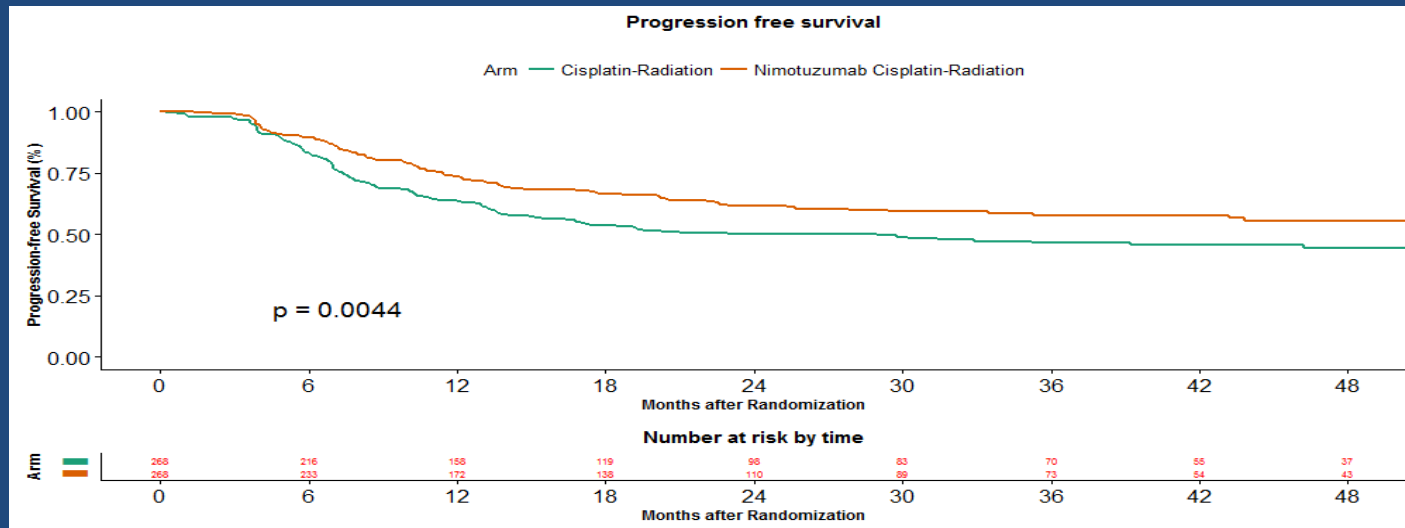
RT: 70 Gy/35 #/-7
weeks

n=268

Weekly
cisplatin
 $30\text{mg}/\text{m}^2$
with RT
(CRT)

Follow-up: Weekly during CRT, then Q3 months x 2 years, then Q6 monthly

IMPROVES PFS, DFS, LRC

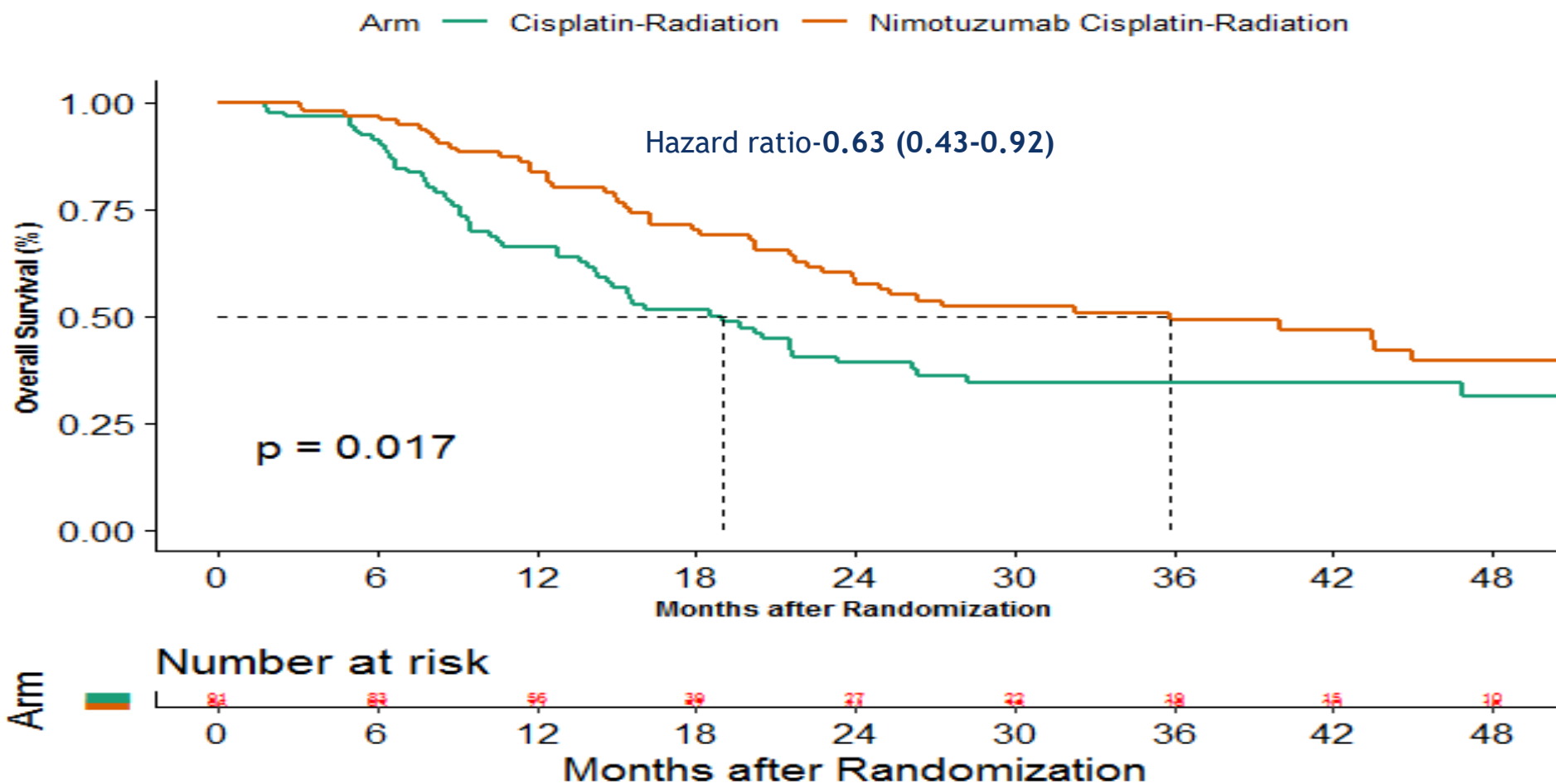


Nimotuzumab-cisplatin-radiation versus cisplatin-radiation in HPV negative oropharyngeal cancer

[Vanita Noronha](#),^{1,*} [Vijay Maruti Patil](#),^{1,*} [Amit Joshi](#),¹ [Manoj Mahimkar](#),² [Usha Patel](#),² [Manish Kumar Pandey](#),² [Arun Chandrasekharan](#),¹ [Hollis Dsouza](#),¹ [Atanu Bhattacharjee](#),³ [Abhishek Mahajan](#),¹ [Nilesh Sabale](#),¹ [Jai Prakash Agarwal](#),⁴ [Sarbani Ghosh-Laskar](#),⁴ [Ashwini Budrukhar](#),⁴ [Anil K. D'Cruz](#),⁵ [Pankaj Chaturvedi](#),⁵ [Prathamesh S. Pai](#),⁵ [Devendra Chaukar](#),⁵ [Sudhir Nair](#),⁵ [Shivakumar Thiagarajan](#),⁵ [Shripad Banavali](#),¹ and [Kumar Prabhash](#)¹

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HPV-Negative oropharyngeal cancers



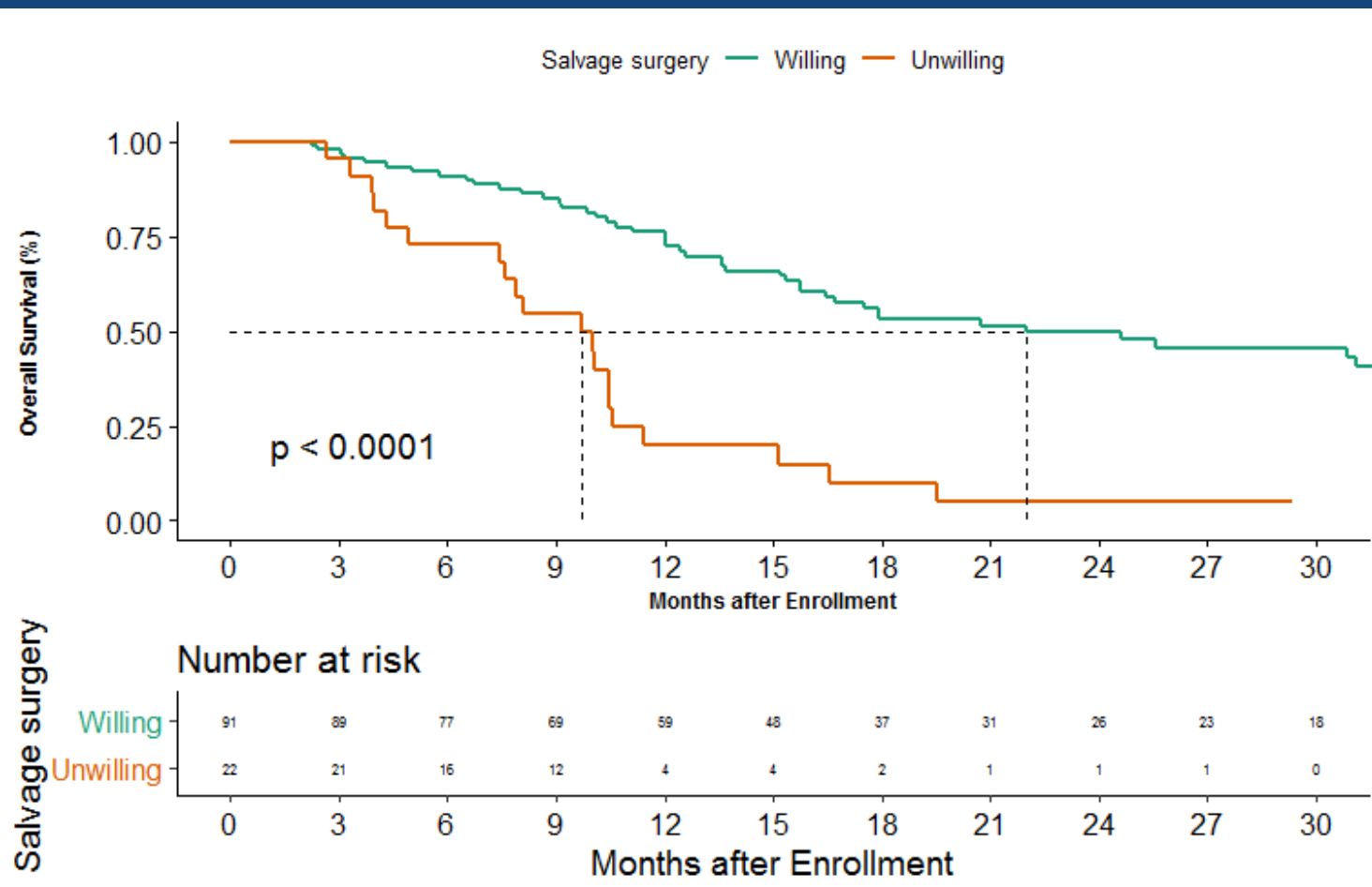


Salvage surgery in head and neck cancer: Does it improve outcomes?

Vijay Maruti Patil ^{a, 1}, Vanita Noronha ^{a, 1}, Shivakumar Thiagarajan ^{b, 1}, Amit Joshi ^a, Arun Chandrasekharan ^a, Vikas Talreja ^a, Jaiprakash Agarwal ^c, Sarbani Ghosh-Laskar ^c, Ashwini Budrukkar ^c, Shashikant Juvekar ^d, Abhishek Mahajan ^d, Archi Agarwal ^e, Nilendu Purandare ^e, Atanu Bhattacharjee ^f, Anil K. D'Cruz ^b, Pankaj Chaturvedi ^b, Prathamesh S. Pai ^b, Devendra Chaukar ^b, Kumar Prabhash ^a

Show more

Salvage Surgery



- **NIMOTUZUMAB WITH WEEKLY CISPLATIN IS AN OPTION FOR TREATMENT FOR LOCALLY ADVANCED HEAD AND NECK CANCER WITH RT**

- **CISPLATIN INELIGIBLE**



Results of phase 3 randomized trial for use of docetaxel as a radiosensitizer in patients with head and neck cancer unsuitable for cisplatin-based chemoradiation

Presenter at BOA India 2022: Dr Vijay Patil

Professor Vanita Noronha

(on behalf of Prof Vijay Patil and Prof Kumar Prabhash)

Behalf of Department of Medical Oncology

Head and Neck Disease Management Group



Selection criteria

1. Adult (≥ 18 years)
2. ECOG PS 0-2
3. LAHNSCC
4. CTRT indicated
 - a. Adjuvant
 - b. Definitive
5. Cisplatin unsuitable*

Stratification

- Site of the tumour (oral cavity vs oropharynx vs larynx vs hypopharynx)
- Type of radiation (conventional vs altered fractionation)
- T grouping (T1-2 vs T3 vs T4)
- N grouping (N0-N1 vs N2-N3)
- Indication (radical vs adjuvant)

Arm A: Radiation

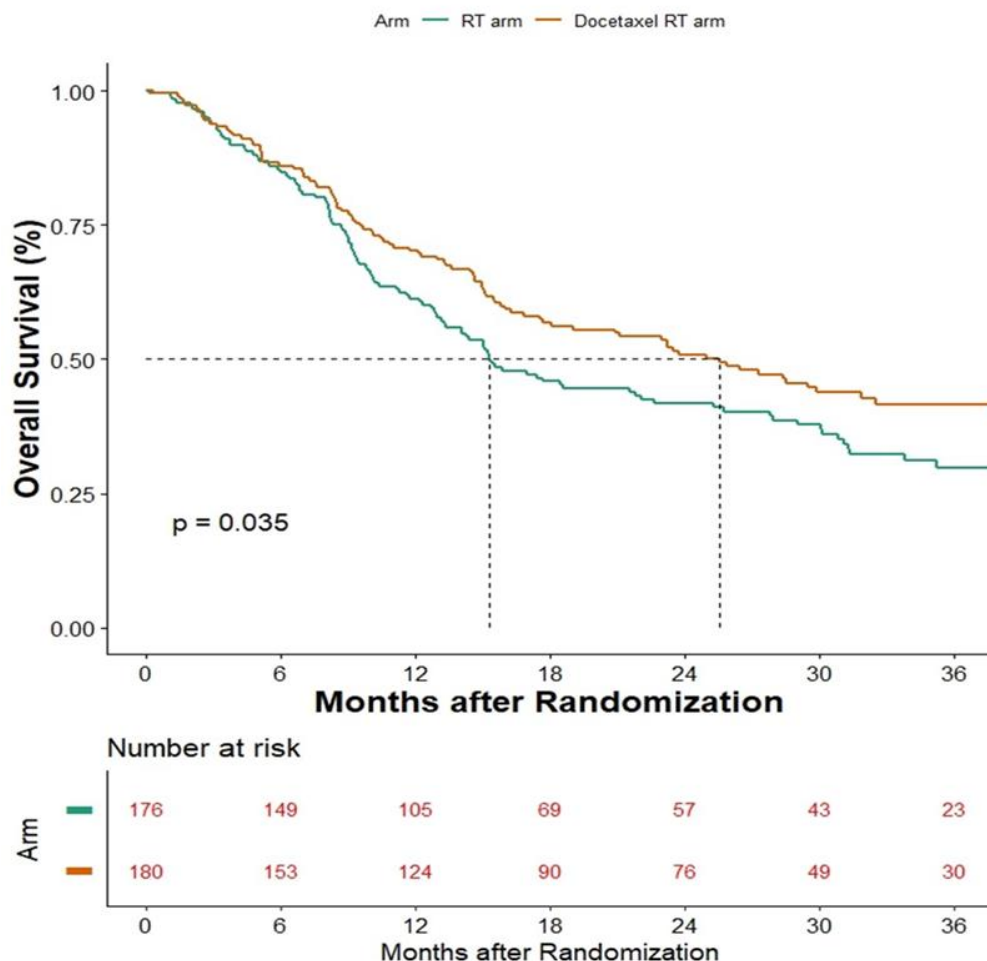
1:1 Randomisation

Arm B: Docetaxel + Radiation

Endpoints

1. 2-year disease free survival
2. 2-year overall survival
3. Quality of life
4. Adverse events



Docetaxel 15 mg/m² weekly intravenously
RT dose- 60 Gy in adjuvant & 66-70 Gy in definitive settings respectively
FACT H&N version 4.0- QOL recording



- The 2 year OS were 41.7% (95% CI 34.1-49.1) versus 50.8% (95% CI 43.1-58.1) in the RT and Docetaxel-RT arms respectively
- The addition of docetaxel led to a decrement in the hazard ratio to 0.747 (95% CI 0.569-0.98; P-value=0.035)

- In cisplatin ineligible patients docetaxel with RT is an option

RMAC study: A randomized study for evaluation of metronomic adjuvant chemotherapy in recurrent head and neck cancers post salvage surgical resection in those who are ineligible for re-irradiation

Vijay Patil ^a, Vanita Noronha ^a, Amit Joshi ^a, Nandini Menon ^a, Vijayalakshmi Mathrudev ^a, Atanu Bhattacharjee ^b, Arun Chandrasekharan ^a, Dilip Vallathol ^a, Hollis Dsouza ^a, Sujay Srinivas ^a, Tanmay Mandal ^a, Pankaj Chaturvedi ^c, Devendra Chaukar ^c, Prathamesh Pai ^c, Sudhir Nair ^c, Shiva Thiagrajan ^c, Sarbani Laskar ^d, Kavita Nawale ^a ... Kumar Prabhash ^a  

Results

At a median follow up of 30.2 months (95% confidence interval (CI), 25.3 to 35.1) the 1 year and 2-year DFS were 57.4% (95% CI, 42.8–69.5) and 37.6% (95% CI, 24.1–51) in MAC arm whereas the corresponding numbers were 62.3% (95% CI, 47.8 to 73.8) and 54.2%(95% CI, 39.8 to 66.5) in observation arm, respectively (hazard ratio for progression, 1.45; 95% CI, 0.87 to 2.47; P = 0.15). In the MAC arm, the 1 and 2 year OS was 78.7% (95% CI, 64.9 to 87.6) and 48% (95% CI, 34.1 to 62).The corresponding figures in the observation arm were 79.2% (95% CI, 65.7 to 87.9) and 65.5% (95% CI, 50.9 to 76.7) (hazard ratio for death, 1.7, 95% CI, 0.94 to 3.08; P = 0.08).

Conclusion

The adjuvant 6-month metronomic schedule was ineffective in improving outcomes in recurrent head and neck cancers post salvage surgery who are ineligible for re-radiation.

Trial registration.

Clinical trial registry of India (CTRI)- CTRI/2016/04/006872 [Registered on 26/4/2016]

HEAD AND NECK CANCER

Phase III randomized control study evaluating adjuvant metronomic chemotherapy in locally advanced head and neck cancers post-radical chemoradiation (MACE-CTRT).



[Sunil Ramdhan Chopade](#), [Vijay Maruti Patil](#), [Vanita Noronha](#), [Nandini Sharrel Menon](#), [Atanu Bhattacharjee](#), [Kavita Prakash Nawale](#), ...

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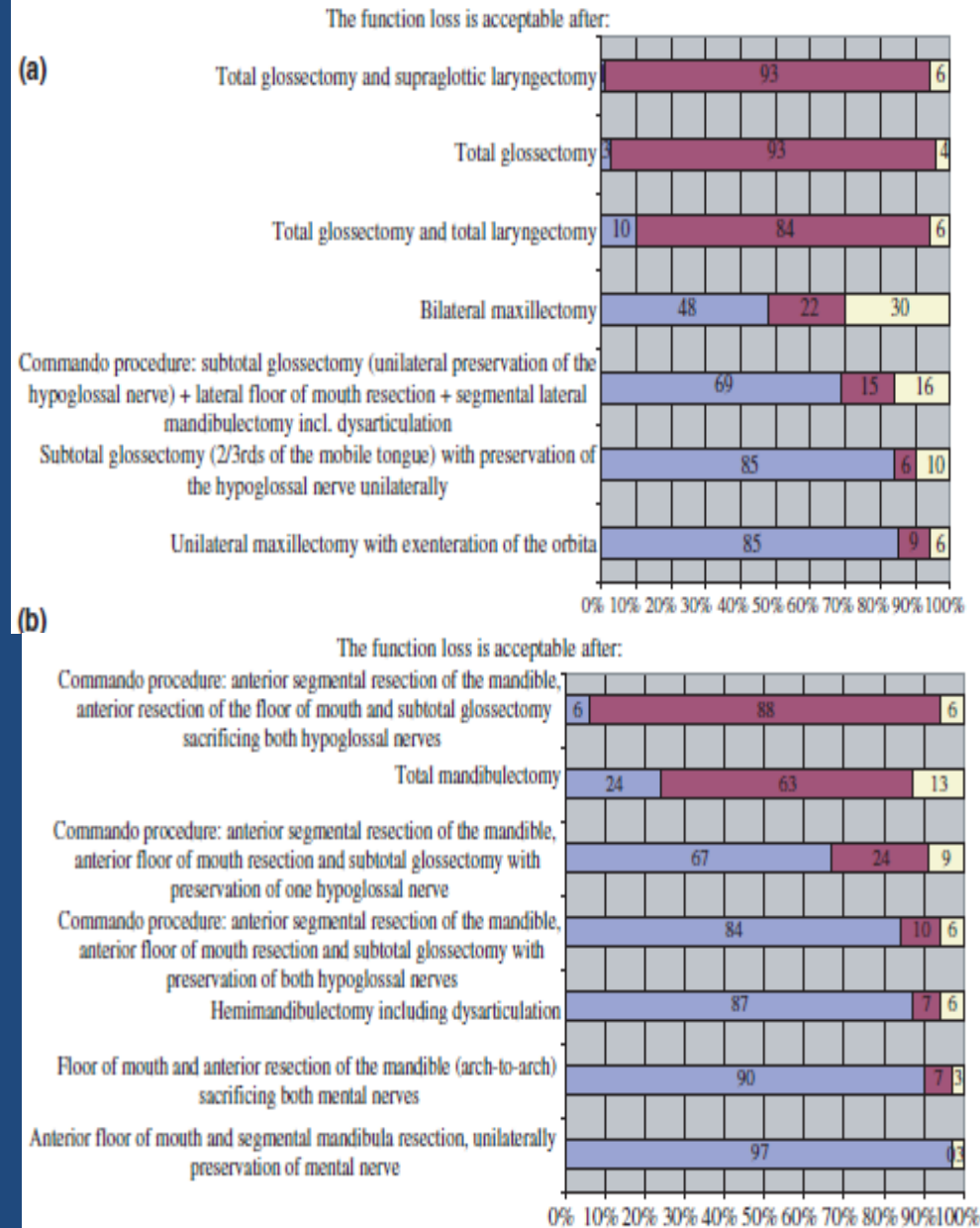
analyses for efficacy and futility. **Results:** 137 patients were recruited and an interim analysis was done. The 3 year PFS in the observation arm was 67.1% (95% CI 53.8-77.3) and the same in the MAC arm was 62.5%(95%CI 49.4-73.1). The corresponding hazard ratio was 1.402 (95% CI 0.7393-2.66, P-value = 0.3). The 3 year OS in the observation arm was 77.3% (95% CI 64.4-86) and the same in the MAC arm was 64.1% (95%CI 51-74.5). The corresponding hazard ratio was 1.588 (95% CI 0.8734-2.886, P-value = 0.1). Any grade mucositis was seen in 30 patients (45.5%) in the MAC arm and 20 patients (28.2%) in the observation arm (P-value = 0.05). The rate of grade 3 or above mucositis was 7.6%(n = 5) in the MAC arm and 1.4%(n = 1) in the observation arm (P-value = 0.106). **Conclusions:** Both arms had similar OS. Hence observation post complete response post radical chemoradiation remains the standard of care. **Clinical trial information:** [CTRI/2016/09/007315](#).[🔗](#)

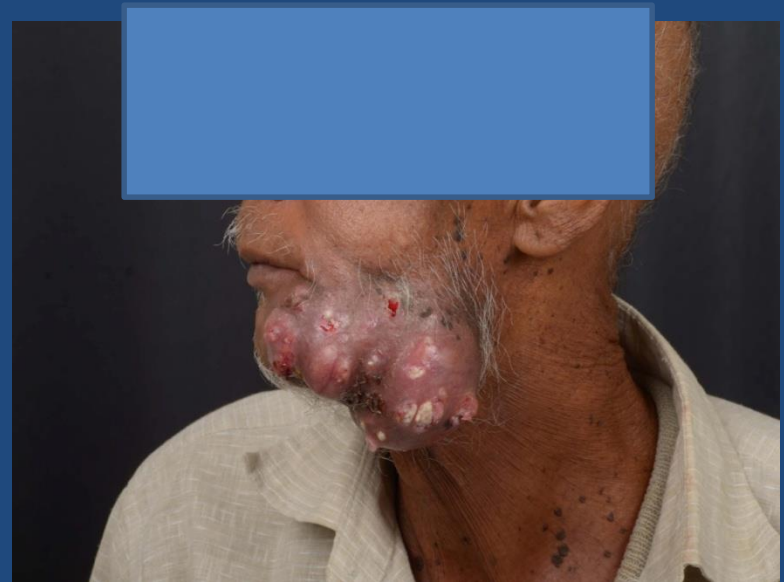
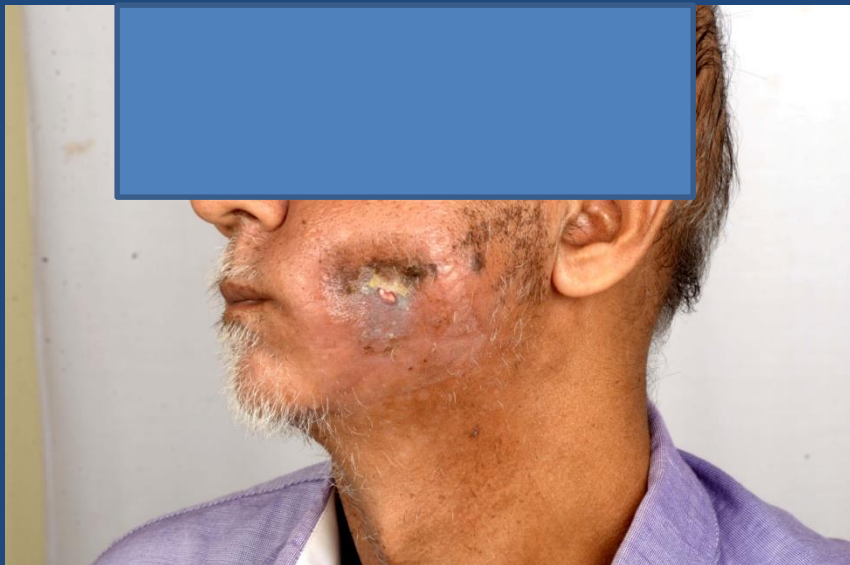
NACT IN ORAL CAVITY CANCER

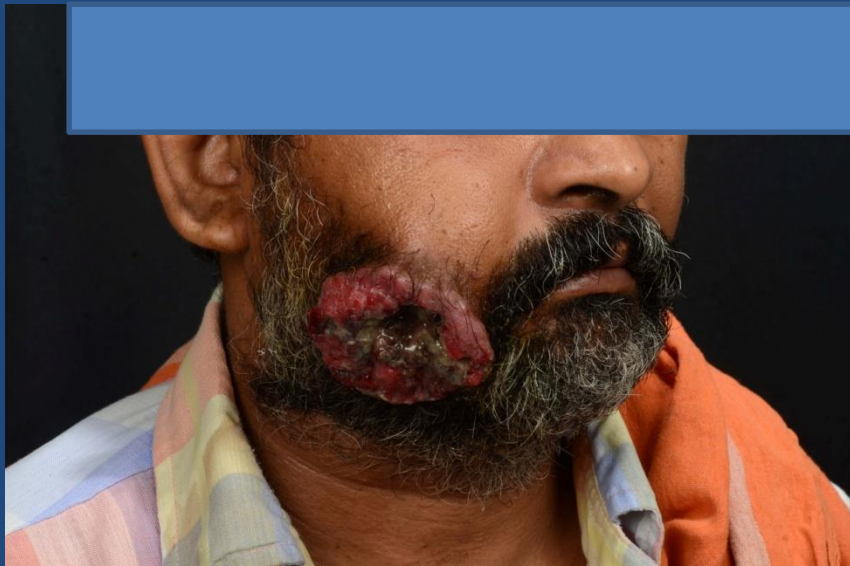
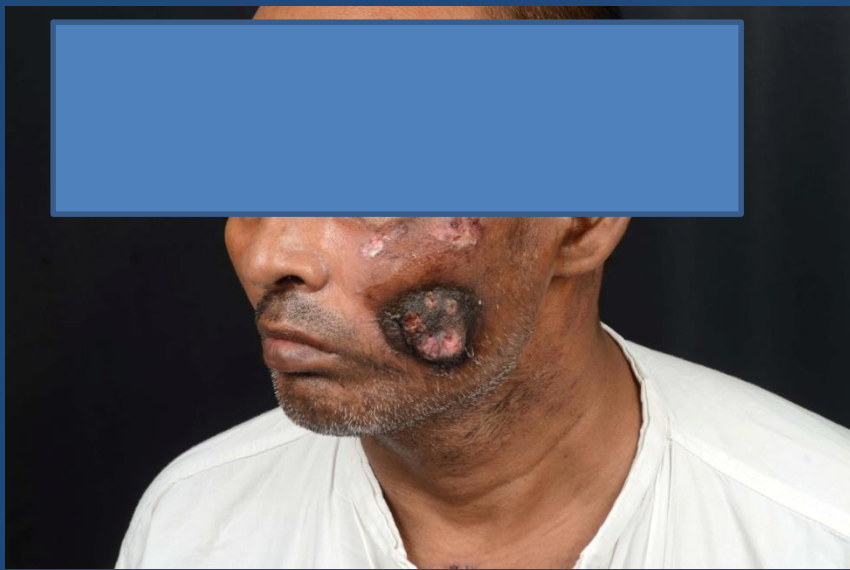
- What is resectable?

- Resectability in oral cancers
 - Balance of morbidity and prognosis
 - Subjective
 - Vary between institute to institute & between surgeons in same institute

Kreeft et al. Clin. Otolaryngol. 2009, 34, 140–146







IS THERE ROLE IN TECHNICALLY UNRESECTABLE TUMORS

Oral Oncology 50 (2014) 1000–1004



Contents lists available at [ScienceDirect](#)

Oral Oncology

journal homepage: www.elsevier.com/locate/oraloncology

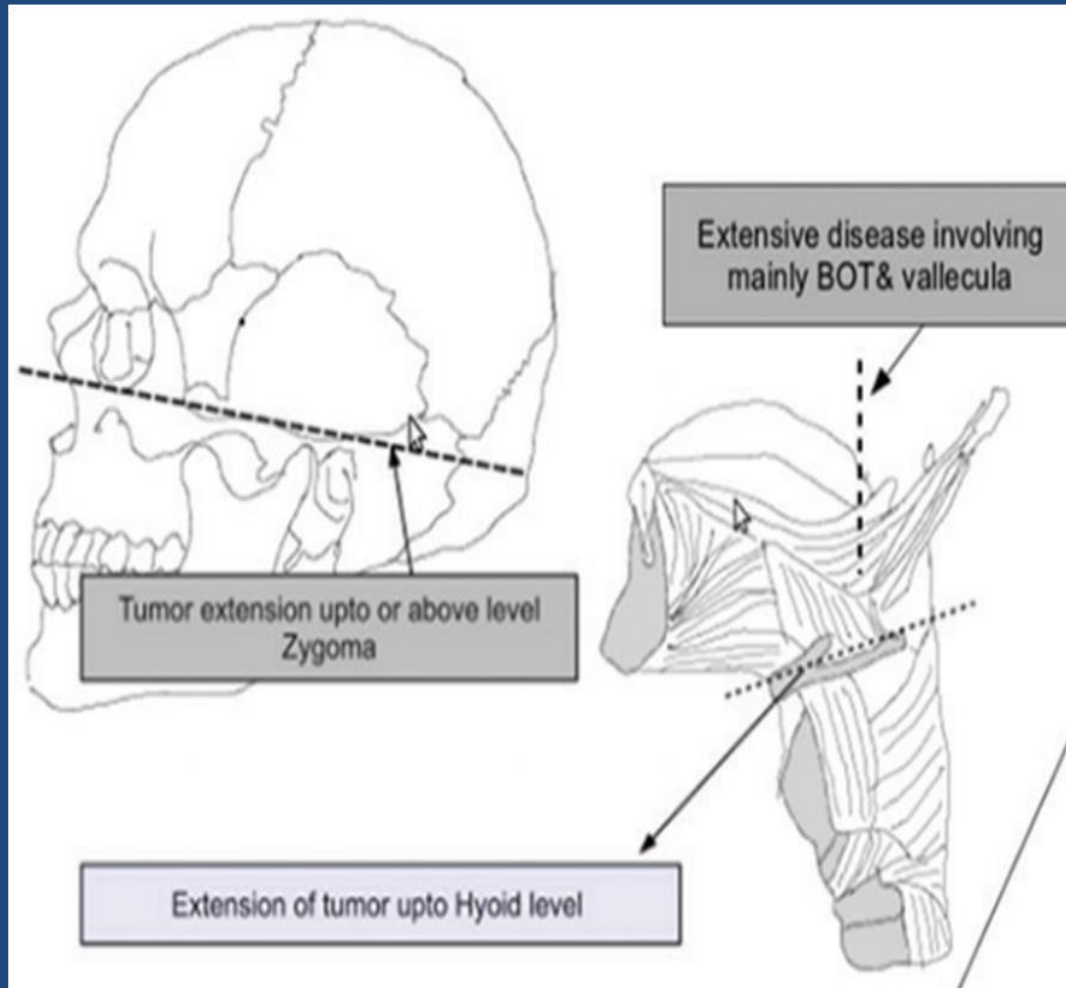


Neoadjuvant chemotherapy followed by surgery in very locally advanced technically unresectable oral cavity cancers

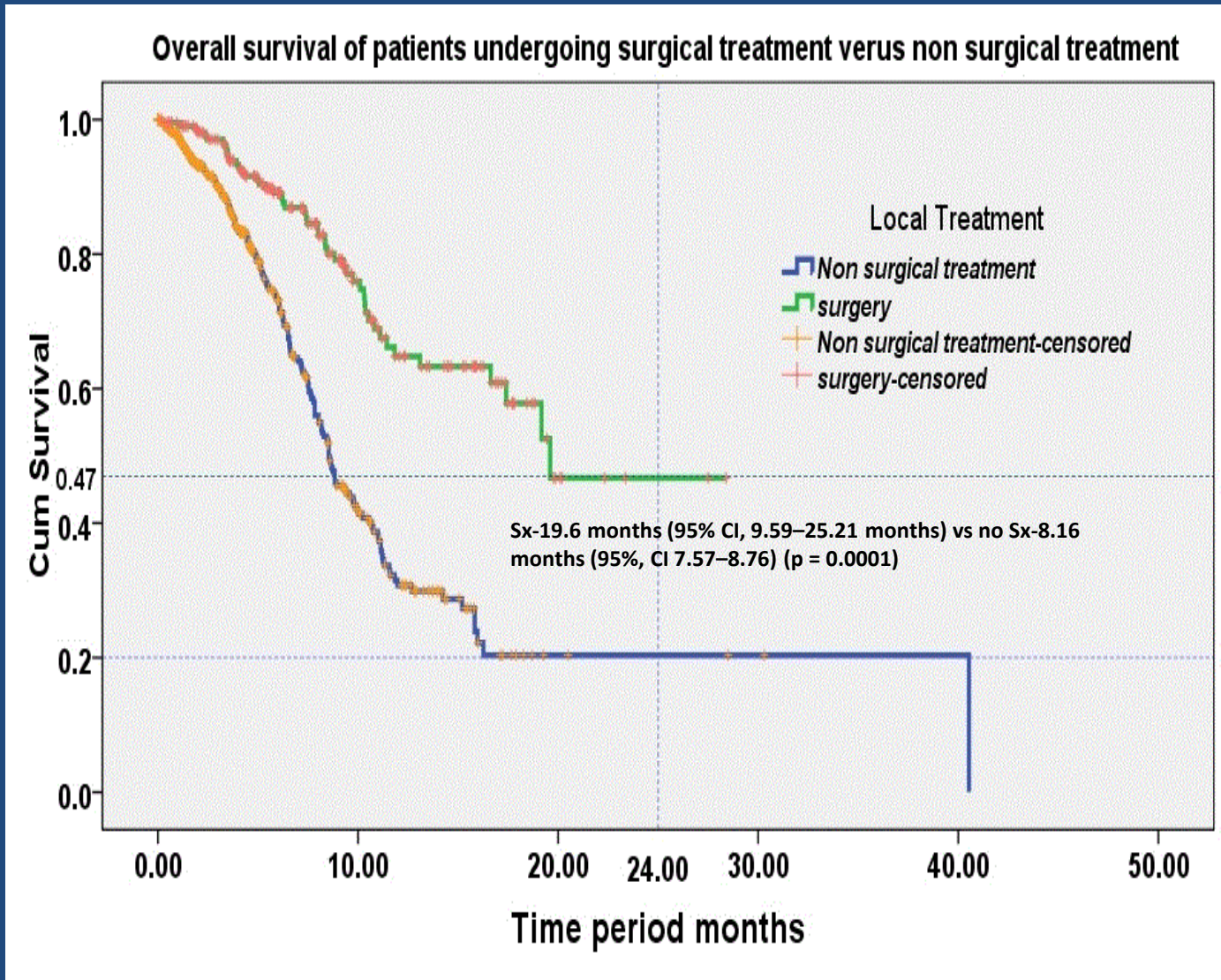


V.M. Patil^a, K. Prabhash^{a,*}, V. Noronha^a, A. Joshi^a, V. Muddu^a, S. Dhumal^a, S. Arya^b, S. Juvekar^b, P. Chaturvedi^d, D. Chaukar^d, P. Pai^d, S. Kane^e, A. Patil^e, J.P. Agarwal^c, S. Ghosh-Lashkar^c, A. Dcruz^d

Our Criteria for technical unresectability



OS (Sx vs no Sx)



40% pts
resected

Neoadjuvant chemotherapy and surgical margin in technically unresectable buccal mucosa cancers

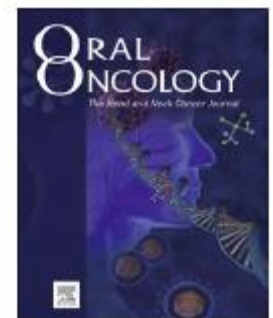
Table 2

Distribution of important post surgery pathological tumor parameters between the 2 groups.

	Upfront surgery (n = 215)	NACT → Surgery (n = 215)	p value
Positive margin	3 (1.4%)	0 (0.0%)	0.212**
Positive + Close margin	11 (5.1%)	07 (3.3%)	0.335**
Lymphovascular invasion	3 (1.4%)	3 (1.4%)	0.995**
Perineural invasion	50 (23.3%)	19 (7.4%)	0.000**

p value in bold signifies statistical significance.

** Comparison done by chi-square test.



Comparison of postoperative complications in advanced head and neck cancer patients receiving neoadjuvant chemotherapy followed by surgery versus surgery alone

Table 3: Complication details

Complications	Surgery <i>n</i> = 153 (%)	Neoadjuvant chemotherapy <i>n</i> = 52 (%)	<i>P</i>
Major complications	30 (19.6)	6 (11.5)	0.424
Minor complications	28 (18.3)	10 (19.2)	
None	95 (62.09)	36 (69.2)	
Major			
PMMC flap/free flap/neck skin necrosis	12	5	
OCF	8		
Hematoma evacuation	6	1	
Preoperative spinal accessory nerve/ facial nerve injury	2		
Arrhythmia	1		
DVT	1		
Minor			
Seroma	6	3	
Chyle leak	4	1	
Salivary fistula	7	4	
Marginal nerve paresis	5	1	
Wound erythema/dehiscence	2		
Hypotension per operatively	1		
Hypocalcemia/hyponatremia	2	1	
Fever	1		
Infection			
Yes	27 (17.6)	5 (9.4)	0.08
No	126 (82.4)	48 (90.6)	
Change of antibiotics			
Yes	24 (16.6)	5 (10.4)	0.27
No	129 (83.4)	47 (89.6)	

Preoperative chemotherapy in advanced resectable OCSCC: long-term results of a randomized phase III trial

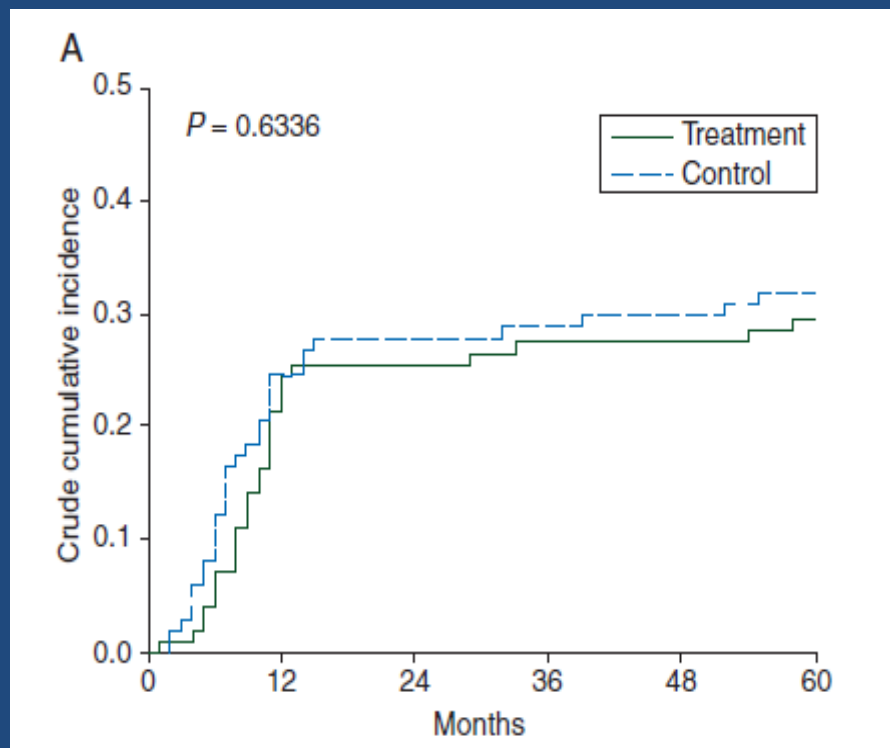
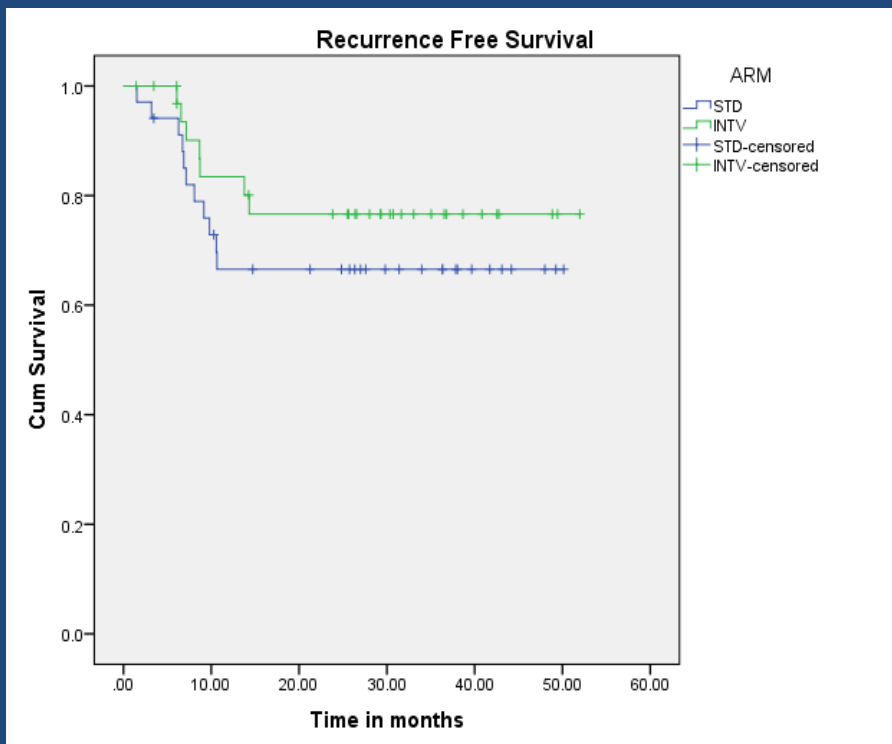


Figure 1. Incidence of locoregional relapse

MANDIBULAR PRESERVATION STUDY

Disease Free Survival

Median Follow up Period - 26.5 Months



Arm	Mean (Months)	At 24 Months	p value (Log Rank Test)
Standard	35.81	66.5 %	0.39
Intervention	40.01	76.6 %	

PI-Dr Devendra Chaukar

CLINICOPATHOLOGIC DETERMINANTS OF OUTCOME IN PATHOLOGIC T4a (pT4a)
SQUAMOUS CELL CARCINOMA OF THE GINGIVO-BUCCAL SUBSITE OF THE ORAL CAVITY.

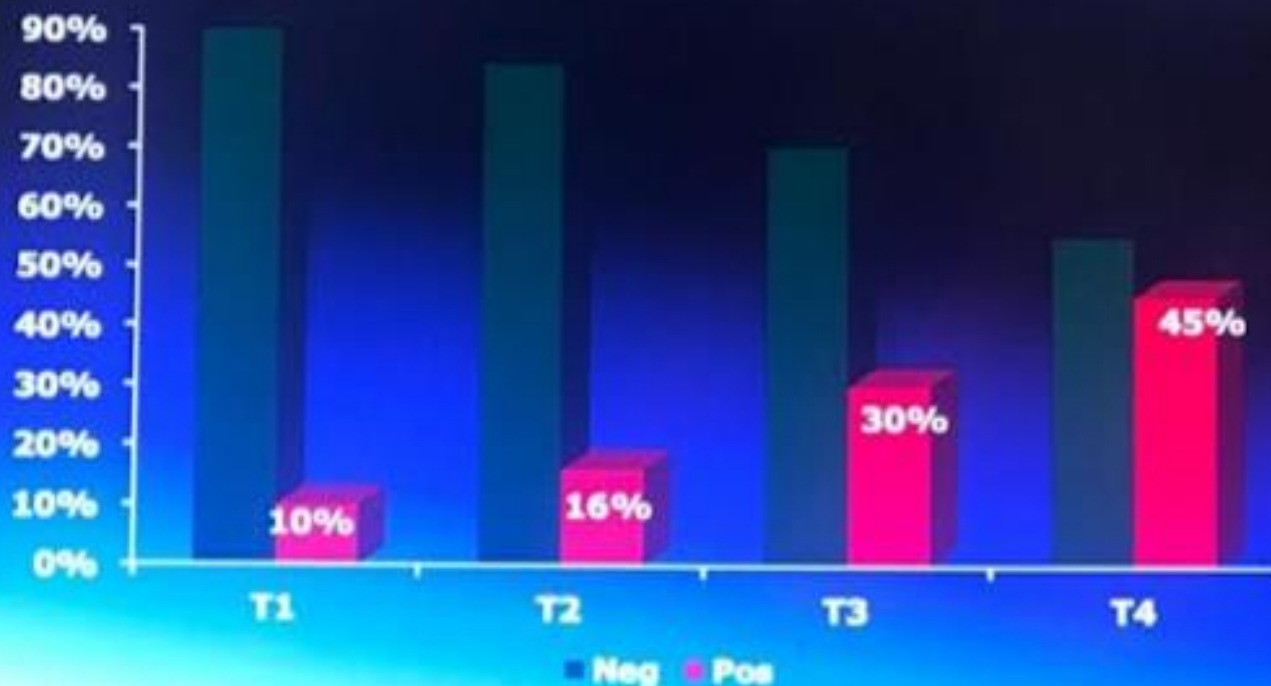
DR. PRATEEK JAIN



**TABLE 1: FACTORS AFFECTING DFS AND OS
(UNIVARIATE ANALYSIS, N=121)**

Factor	Number of patients (%)	Number of recurrences (%)	Number of deaths (%)	P value	
				DFS	OS
DIFFERENTIATION					
WELL	7 (5.78)	0 (0)	1 (14.28)	0.430	0.240
MODERATE	99 (81.81)	22 (22.22)	31 (31.31)		
POOR	15 (12.39)	3 (20)	7 (46.67)		
MARGIN					
FREE	86 (71.07)	22 (25.58)	26 (30.23)	0.103	0.509
CLOSE	24 (19.83)	1 (4.16)	9 (37.5)		
INVOLVED	11 (9.09)	2 (18.19)	4 (36.37)		

Risk for positive margins: T Stage



MSKCC Outcomes: 1985-2012



Oral Cancer
Oral Cancer
Jatin P. S.

VERY ADVANCED AND BORDERLINE TREATABLE ORAL CANCERS: EARLY ONCOLOGICAL OUTCOME AFTER COMPARTIMENT SURGERY.

PRESENTING AUTHOR-DR. SMITA DESAI

Department of head and neck cancer surgery and skull base surgery, Shankus medicity hospitals, mehsana, Gujarat, India

ABSTRACT- ID - 115

STUDY OF **106** PATIENTS



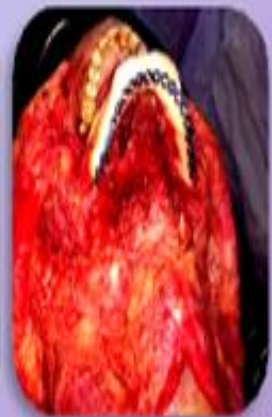
Methods:

This is a retrospective study for all cases done from July 2016 to December 2017.

Inclusion category was based on published literature about borderline head and neck cancers, which is divided in 8 category –

- 1 T4b Buccal Mucosa
- 2 Gross Skin Involvement +Oedema Upto Zygoma
- 3 Skin Infiltration >5 Cm
- 4 Large N3 Node
- 5 V.Advance Tongue Reaching Upto <= Hyoid
- 6 Maxilla + Skull Base + If
- 7 Salvage Surgery-previously Incomplete Treatment
- 8 Salvage Surgery-previously Complete Treatment

Exclusion criteria were- Carotid encasement, intra-cranial extension, pre-vertebral fascia involvement and distant metastasis. All patients were offered compartment surgery with appropriate adjuvant therapy.



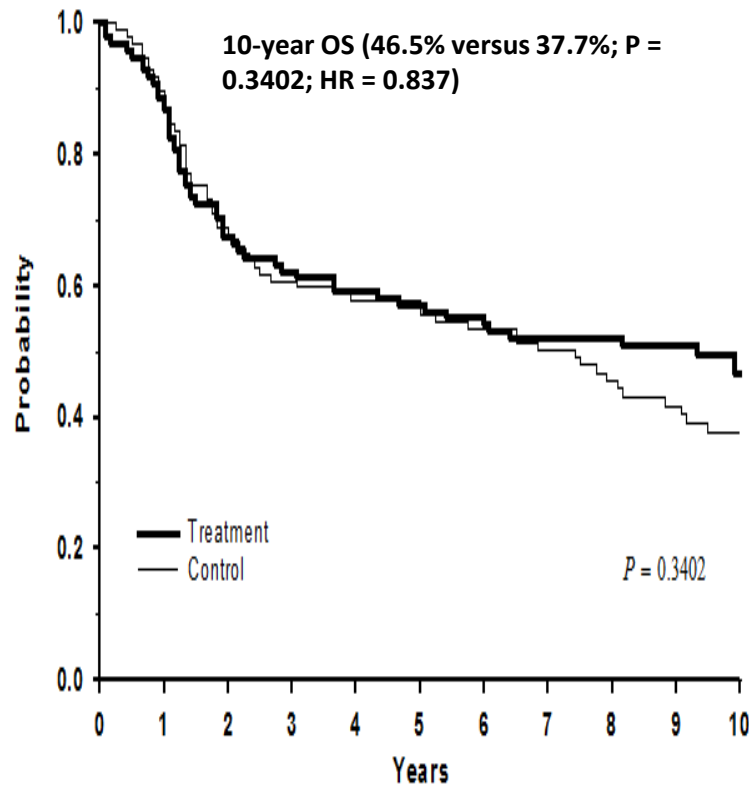
Results:

Median Follow Up Time-15 Months(Avg-10 To 24 Months)

Category	Category Description	No of Pts	Alive	Alive with Disease	Alive without Disease	Total Dead	Dead due to other causes	Dead due to disease	Lost to Follow up	Mean Follow up time	LR	RR	DM	Disease Recurrence	Avg time of recurrence
1	T4B BUCCAL MUCOSA	22	8 (36%)	1 (5%)	7 (32%)	8 (36%)	2 (9%)	6 (27%)	6 (27%)	15 Months	1 (5%)	3 (14%)	4 (18%)	8 (36%)	6 Months
2	GROSS SKIN INVOLVEMENT +OEDEMA UPTO ZYGOMA	19	6 (32%)	2 (11%)	4 (21%)	6 (32%)	2 (11%)	4 (21%)	7 (37%)	15 Months	1 (5%)	4 (21%)	3 (16%)	8 (42%)	6 Months
3	SKIN INFILTRATION >5 CM	5	3 (60%)	0 (0%)	3 (60%)	2 (40%)	1 (20%)	1 (20%)	0 (0%)	14 Months	0 (0%)	0 (0%)	2 (40%)	2 (40%)	5 Months
4	LARGE N3 NODE	13	5 (38%)	0 (0%)	5 (38%)	3 (23%)	1 (8%)	2 (15%)	5 (38%)	13 Months	0 (0%)	0 (0%)	2 (15%)	2 (15%)	2 Months
5	V.ADVANCE TONGUE REACHING UPTO <= HYOID	16	8 (50%)	0 (0%)	8 (50%)	6 (38%)	2 (13%)	4 (25%)	2 (13%)	14 Months	0 (0%)	3 (19%)	3 (19%)	6 (38%)	5 Months
6	MAXILLA + SKULL BASE + ITF	7	5 (71%)	1 (14%)	4 (57%)	1 (14%)	0 (0%)	1 (14%)	1 (14%)	15 Months	1 (14%)	0 (0%)	0 (0%)	1 (14%)	6 Months
7	SALVAGE SURGERY-PREVIOUSLY INCOMPLETE TREATMENT	17	10 (59%)	0 (0%)	10 (59%)	4 (24%)	1 (6%)	3 (18%)	3 (18%)	14 Months	0 (0%)	3 (18%)	0 (0%)	3 (18%)	4 Months
8	SALVAGE SURGERY-PREVIOUSLY COMPLETE TREATMENT	7	3 (43%)	1 (14%)	2 (29%)	3 (43%)	1 (14%)	2 (29%)	1 (14%)	15 Months	2 (29%)	2 (29%)	0 (0%)	4 (57%)	6 Months

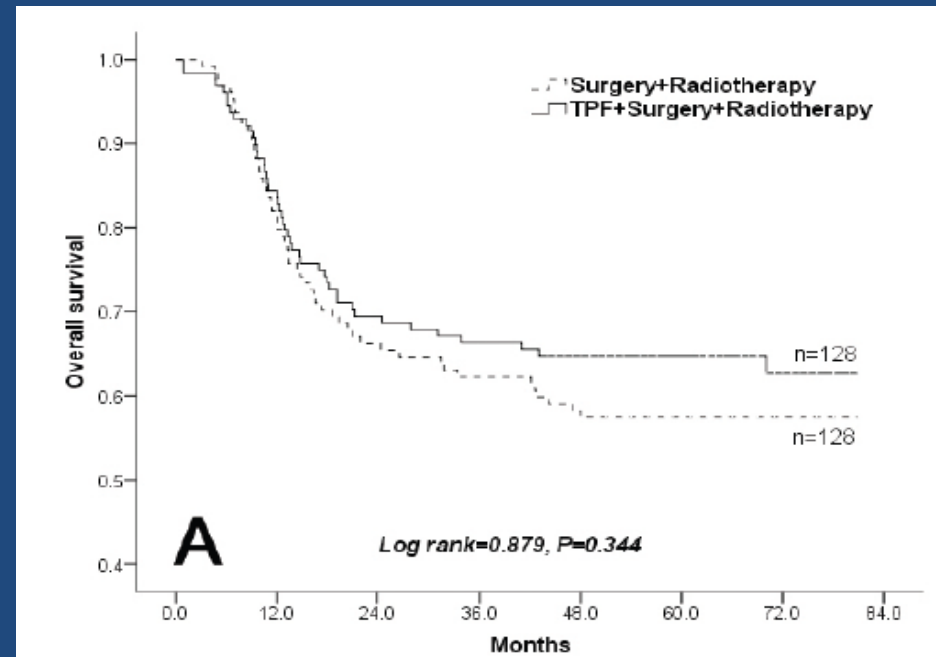
- **Resectable Disease**

Preoperative chemo : OS



Treatment	98	87	66	61	58	56	54	49	44	39	30
Control	97	87	67	59	56	56	49	45	38	31	27

No. patients at risk



Lai-ping Zhong et al. JCO 2013;31:744-751

ORGAN PRESERVATION

The Role of Neo-adjuvant Chemotherapy for Mandibular Preservation in Locally Advanced Operable Squamous Cell Carcinoma of the Oral Cavity- A RANDOMIZED TRIAL

Devendra Chaukar

Trial Design

Randomization

Standard Arm



Segmental Mandibulectomy

+

Appropriate
Adjuvant RT/ CTRT

Intervention Arm



NACT (2 Cycles)

T - Docetaxel – 75mg/m² – Day -1
P - Cisplatin – 75mg/m² – Day -1
F - 5 FU – 750mg/m² – day 1-5



Reassess

Surgery

+

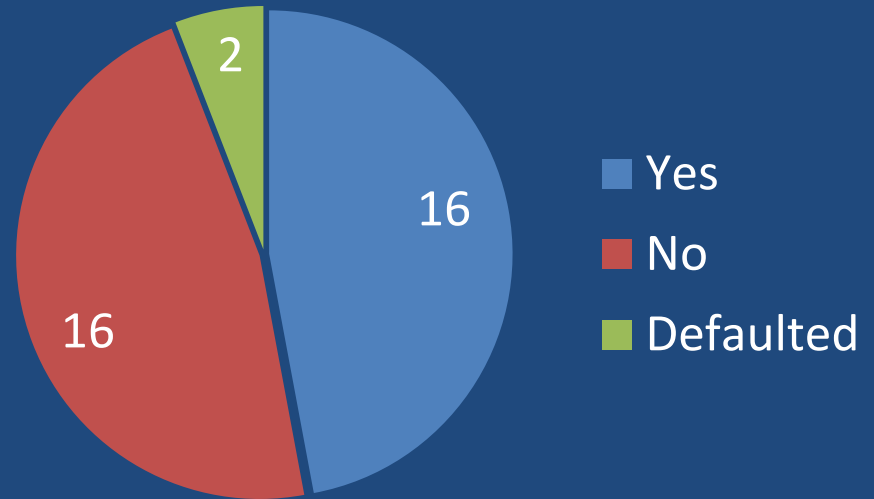
Adjuvant CTRT

Mandible Preservation

- Intervention Arm

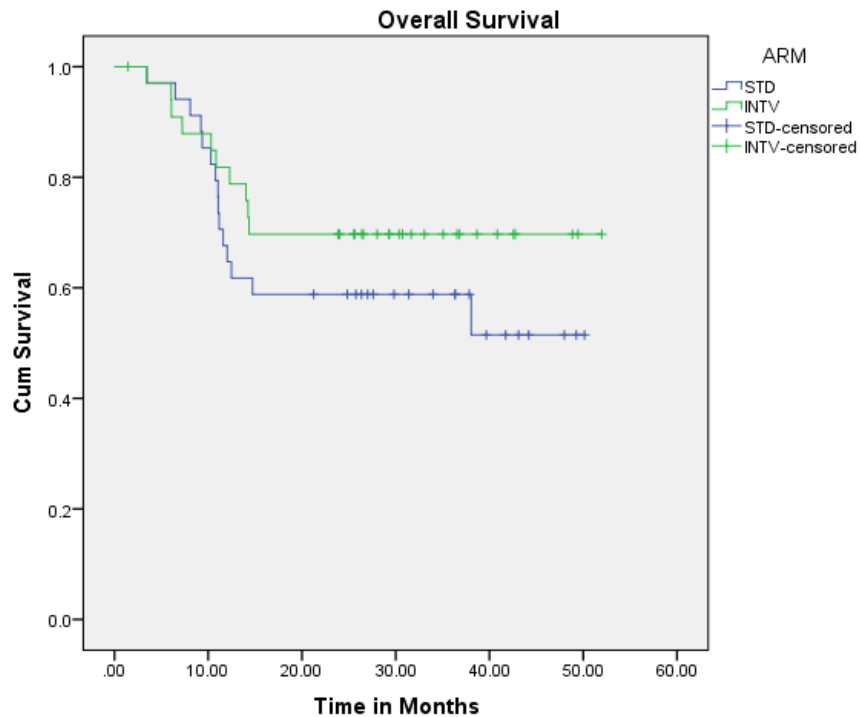
Mandible Preservation

48 % (16 / 34)



Overall Survival

Median Follow up Period - 26.5 Months



Arm	Mean (Months)	At 24 Months	p value (Log Rank Test)
Standard	37.22	58.8 %	0.27
Intervention	39.22	69.7 %	



AMERICAN SOCIETY OF CLINICAL ONCOLOGY
ASSOCIATION FOR CLINICAL ONCOLOGY
KNOWLEDGE CONQUERS CANCER

Abstract #380418

Phase 3 randomized study comparing docetaxel-platinum with docetaxel-platinum-5 fluorouracil as neoadjuvant chemotherapy in technically unresectable oral cancer.

Ajaykumar Singh, Vijay Maruti Patil, Vanita Noronha, Nandini Sharrel Menon, Pankaj Chaturvedi, Vijayalakshmi Mathrudev, Atanu Bhattacharjee, Sunil Ramdhan Chopade, Sujay Srinivas, Somnath Roy, Tanmoy Mondal, Hollis D'souza, Devendra A Chaukar, P. S. Pai, Sudhir Vasudevan Nair, Shivakumar Thiagarajan, Sarbani Laskar, Kavita Prakash Nawale, Sachin Babanrao Dhumal, Kumar Prabhash; Tata Memorial Centre, Mumbai, India; Department of Head and Neck Surgical Oncology, Tata Memorial Hospital, Mumbai, India, Mumbai, India; Tata Memorial Hospital, Mumbai, India; Tata Memorial, Mumbai, India; Tata Medical Center, Kolkata, India; Netaji Subhash Chandra Bose Hospital, Kolkata, India; Clinical Research Centre, Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Tata Memorial Centre, Kharghar, Navi Mumbai, India

Results:

495 patients were randomized in this study, 250 patients in arm A and 245 in arm B. At a median follow-up of 39.5 months. The 2-year OS was 29.1% in the DCF and 23.5% in the DC arm respectively (HR=0.81; 95%CI 0.66-0.99, P-value=0.043). Grade 3 or above adverse events were higher in the DCF arm - oral mucositis (10.6% versus 1.2%), diarrhea (13.6% versus 9.6%), febrile neutropenia (23.2% versus 2.6%), hyponatremia (40.8% versus 20.8%), and hypokalemia (17.9% versus 1.6%).

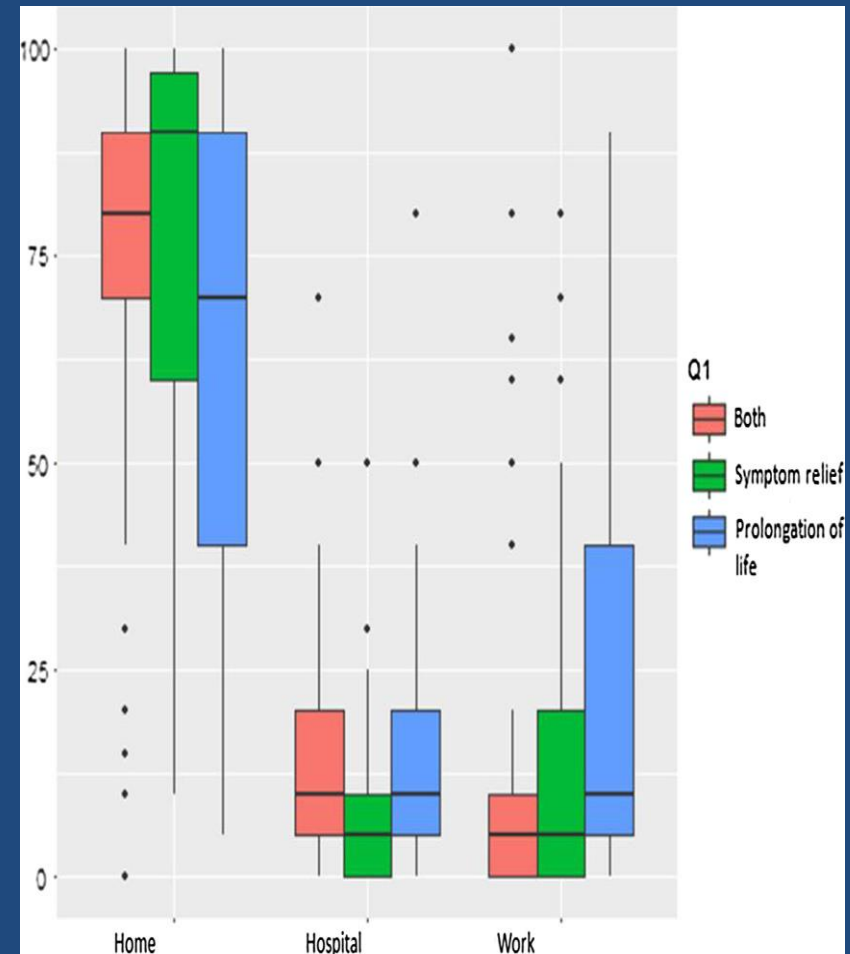
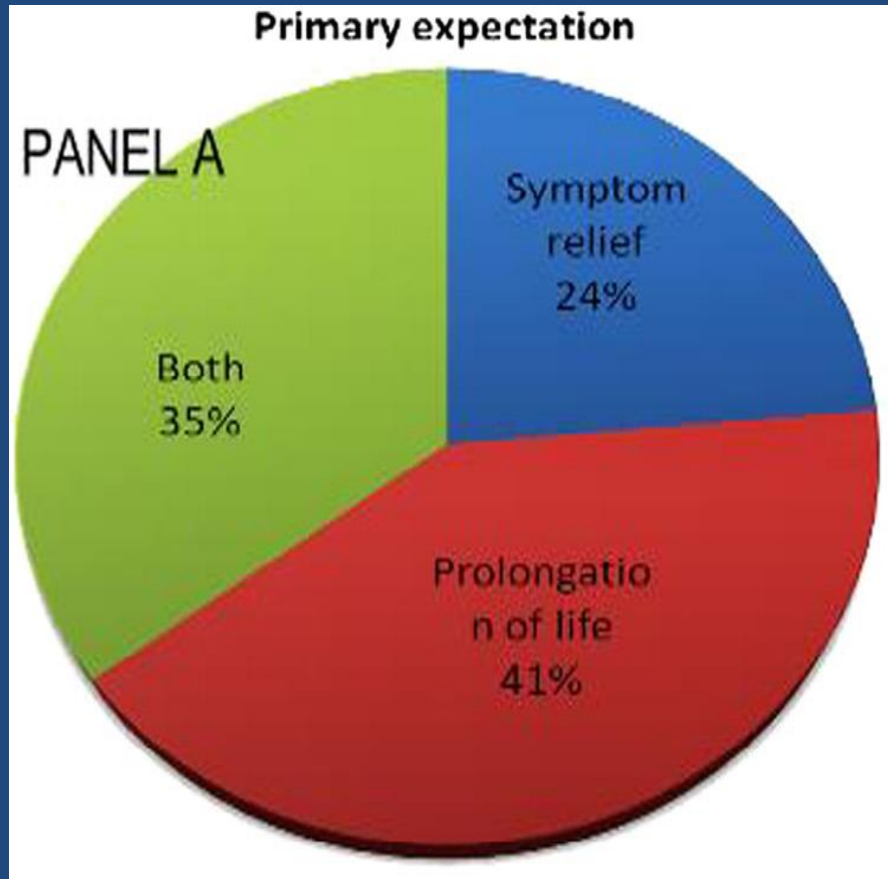
Conclusions:

NACT with DCF has a survival benefit over DC in oral cancers but it comes at the cost of an increment in acute adverse events.

- **PALLIATIVE SYSTEMIC THERAPY**

- What patients want?

Expectation & preference



- Distress evaluation

Distress in Palliative head and neck cancer

Problems	Numbers (%)200	Problems	Numbers (%)
Practical problems	133 (66.5%)	Physical problems	143 (71.5%)
Child care	59 (29.5%)	Appearance	83 (41.5%)
Housing	71 (35.5%)	Bathing/dressing	20 (10.0%)
Insurance/Finance	116 (58.8%)	Breathing	07 (3.5%)
Transport	74 (37.0%)	Changes in urination	02 (1.0%)
Work/school	14 (7.0%)	Constipation	10 (5.0%)
Family problems	58 (29.0%)	Diarrhea	-
Dealing with children	41 (20.5%)	Eating	62 (31.0%)
Dealing with partner	29 (14.5%)	Fatigue	56 (28.0%)
Dealing with close	27 (13.5%)	Feeling swollen	27 (13.5%)
Friend/relative	36 (18.0%)	Fevers	01 (0.5%)
Emotional problems	136 (68.0%)	Getting around	-
Depression	117(58.5%)	Indigestion	-
Fears	109 (54.5%)	Memory/concentration	4 (2.0%)
Nervousness	109 (54.5%)	Mouth sores	5 (2.5%)
Sadness	117 (58.5%)	Nausea	2 (1.0%)
Worry	112 (56.0%)	Nose dry/congested	1 (0.5%)
Loss of interest in usual activities	49 (24.5%)	Pain	130 (65.0%)
Spiritual/religious concerns	9 (4.5%)	Sexual	3 (1.5%)
		Skin dry itchy	2 (1.0%)
		Sleep	61 (30.5%)
		Tingling in hands and feet	12 (6.0%)

Distress relief

	Compliant	Incompliant	Total
Baseline (n=200)			
Low distress	86	25	111
High distress	66	23	89
After clinician lead counseling (n=88)			
Low distress	39	13	52
High distress	26	10	36
After psychologist lead counseling (n=32)			
Low distress	20	04	24
High distress	05	03	08

Distress counselling by clinicians relieves distress in 2/3rd of patients

Platinum-Based Chemotherapy plus Cetuximab in Head and Neck Cancer

N ENGL J MED 359;11 WWW.NEJM.ORG SEPTEMBER 11, 2008

Pembrolizumab and Nivolumab in R/M SCCHN

- ONLY 1-2% OUR PTS CAN TAKE IT

Checkpoint inhibitor accessibility in 15,000+ Indian patients.

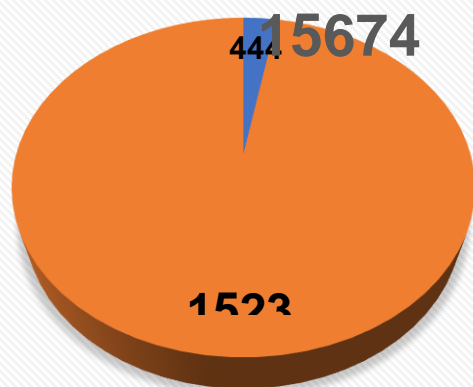
Madala Ravikrishna, Vijay Patil, George Abraham, Atanu
Bhattacharjee, Vanita Noronha, Nandini Menon, Jyoti Bajpai,
Kumar Prabhash

Department of Medical Oncology



Results-Accessibility

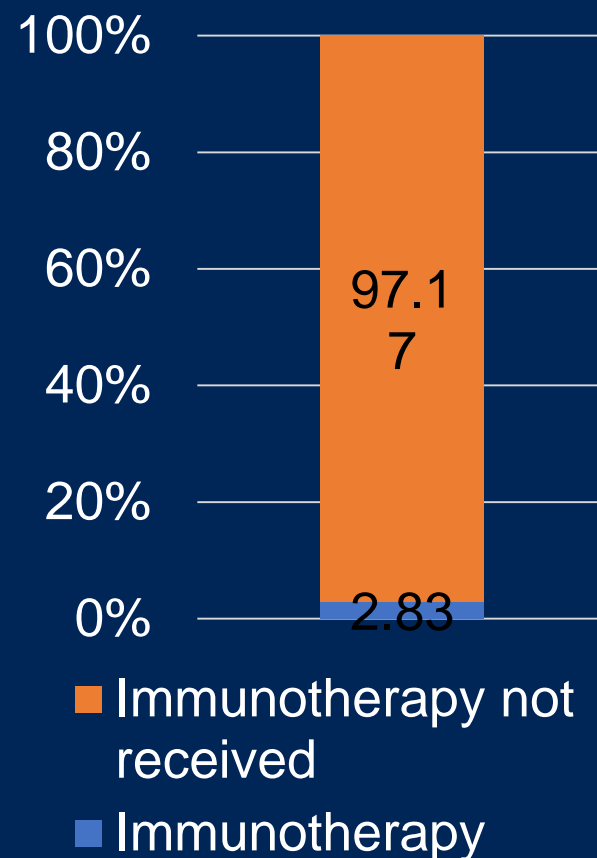
Total Number of Patients -



■ Immunotherapy received ■ Immunotherapy not received

A total of 15,674 patients were identified who required immunotherapy; of them only 444 received it

IO accessibility= 2.83% (95%CI 2.58-3.1)



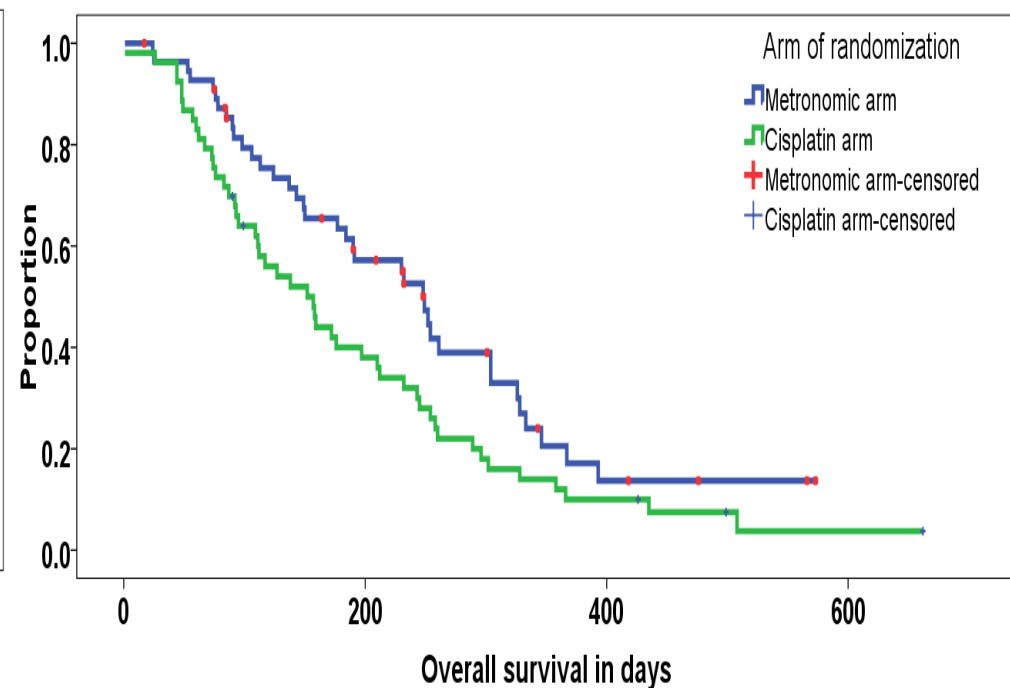
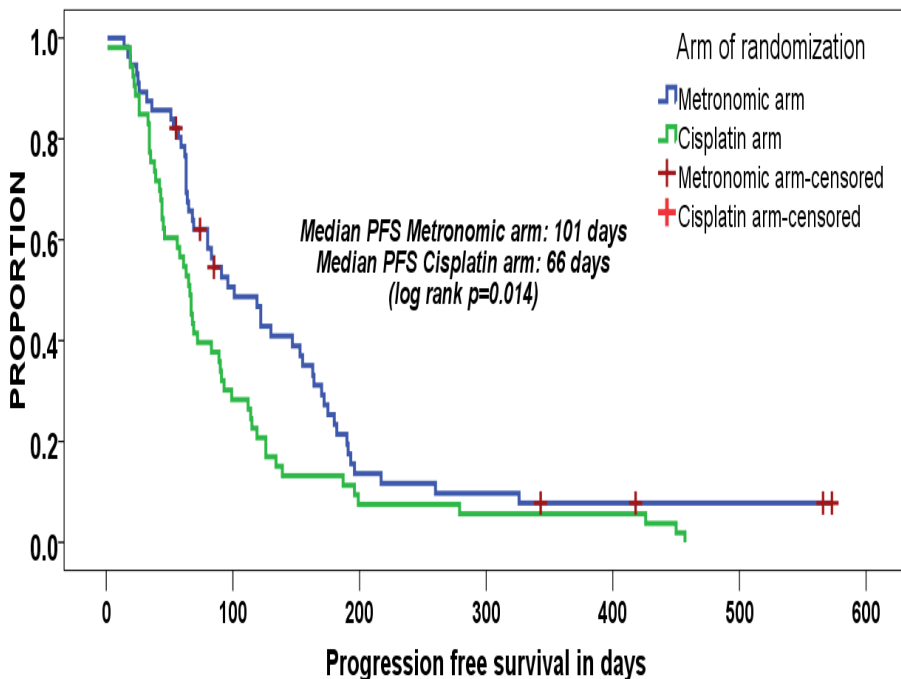
A prospective randomized phase II study comparing metronomic chemotherapy with chemotherapy (single agent cisplatin), in patients with metastatic, relapsed or inoperable squamous cell carcinoma of head and neck

Vijay Maruti Patil^a, Vanita Noronha^a, Amit Joshi^a, Vamshi Krishna Muddu^a, Sachin Dhumal^a, Bharatsingh Bhosale^a, Supreet Arya^b, Shashikant Juvekar^b, Shripad Banavali^a, Anil D'Cruz^c, Atanu Bhattacharjee^d, Kumar Prabhaskar^a  

[Show more](#)

doi:10.1016/j.oraloncology.2014.12.002

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Low-cost oral metronomic chemotherapy versus intravenous cisplatin in patients with recurrent, metastatic, inoperable head and neck carcinoma: an open-label, parallel-group, non-inferiority, randomised, phase 3 trial



Vijay Patil, Vanita Noronha, Sachin Babanrao Dhumal, Amit Joshi, Nandini Menon, Atanu Bhattacharjee, Suyash Kulkarni, Suman Kumar Ankathi, Abhishek Mahajan, Nilesh Sable, Kavita Nawale, Arti Bhelekar, Sadaf Mukadam, Arun Chandrasekharan, Sudeep Das, Dilip Vallathol, Hollis D'Souza, Amit Kumar, Amit Agrawal, Satvik Khaddar, Narmadha Rathnasamy, Ramnath Shenoy, Lakhan Kashyap, Rahul Kumar Rai, George Abraham, Saswata Saha, Swaratika Majumdar, Naveen Karuvandan, Vijai Simha, Vasu Babu, Prahalad Elamathi, Annu Rajpurohit, Kanteti Aditya Pavan Kumar, Anne Srikanth, Rahul Ravind, Shripad Banavali, Kumar Prabhash



Summary

Background Regimens for palliation in patients with head and neck cancer recommended by the US National Comprehensive Cancer Network (NCCN) have low applicability (less than 1–3%) in low-income and middle-income countries (LMICs) because of their cost. In a previous phase 2 study, patients with head and neck cancer who

Lancet Glob Health 2020;
8: e1213–22

For a Hindi translation of the
abstract see Online for

Low-cost oral metronomic versus intravenous chemotherapy in recurrent, inoperable & metastatic head & neck cancer: Phase III Metro-CIS study

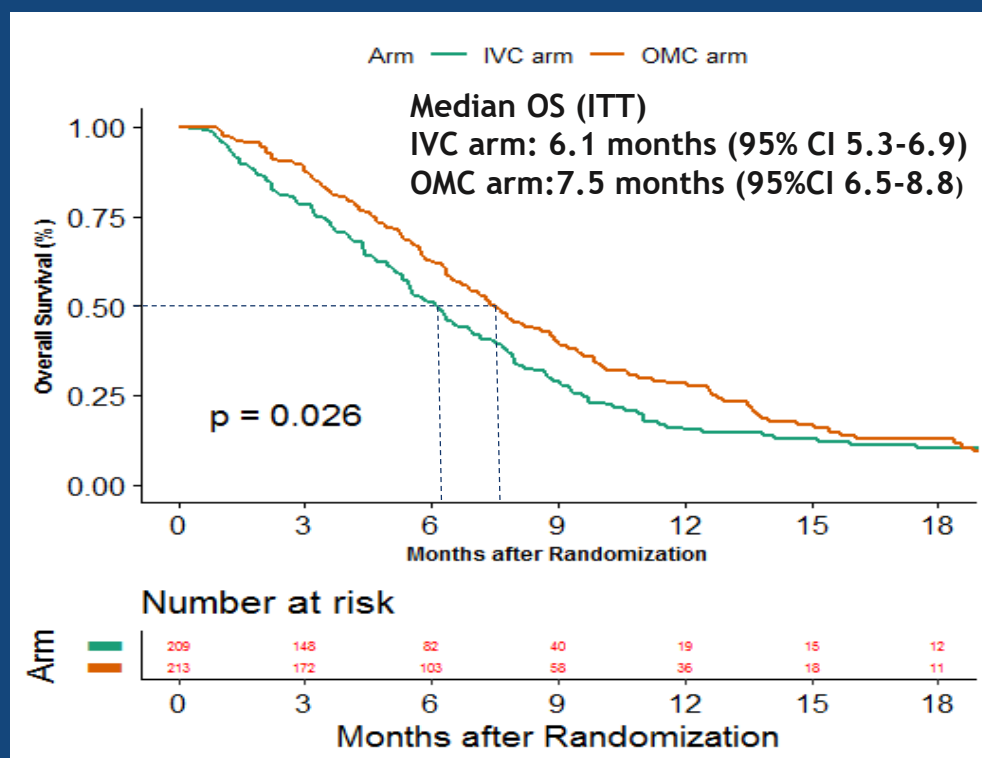
**Nandini Menon on behalf of the
Department of Medical Oncology
Head and Neck Disease Management Group
Tata Memorial Hospital, HBNI, Mumbai, India**



Nandini Menon

6
6

Overall Survival (OS)



• Six-months OS (ITT)

- IVC arm: **50.89%**
(95%CI 43.3-57.97)
- OMC arm: **62.26%**
(95%CI 54.72-68.9)
- Difference: **-11.37%**
(95%CI: -20.77 to -0.97)
- Non-inferiority **P<0.001**
- Superiority **P=0.026**

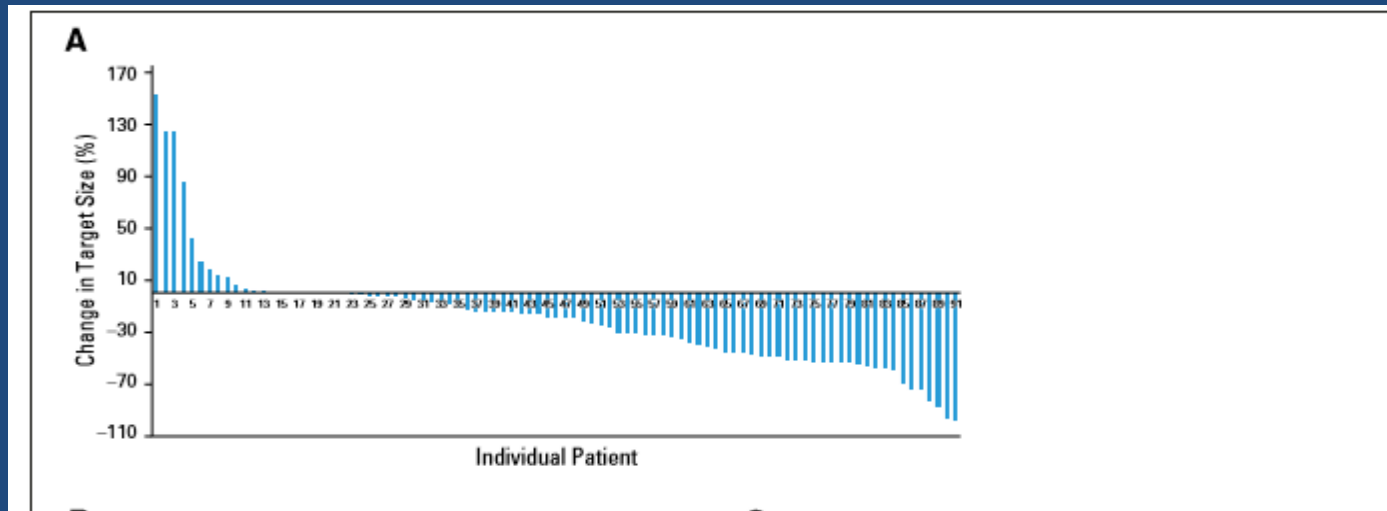
OVERALL SURVIVAL IN THE INTENTION TO TREAT POPULATION

Nandini Menon

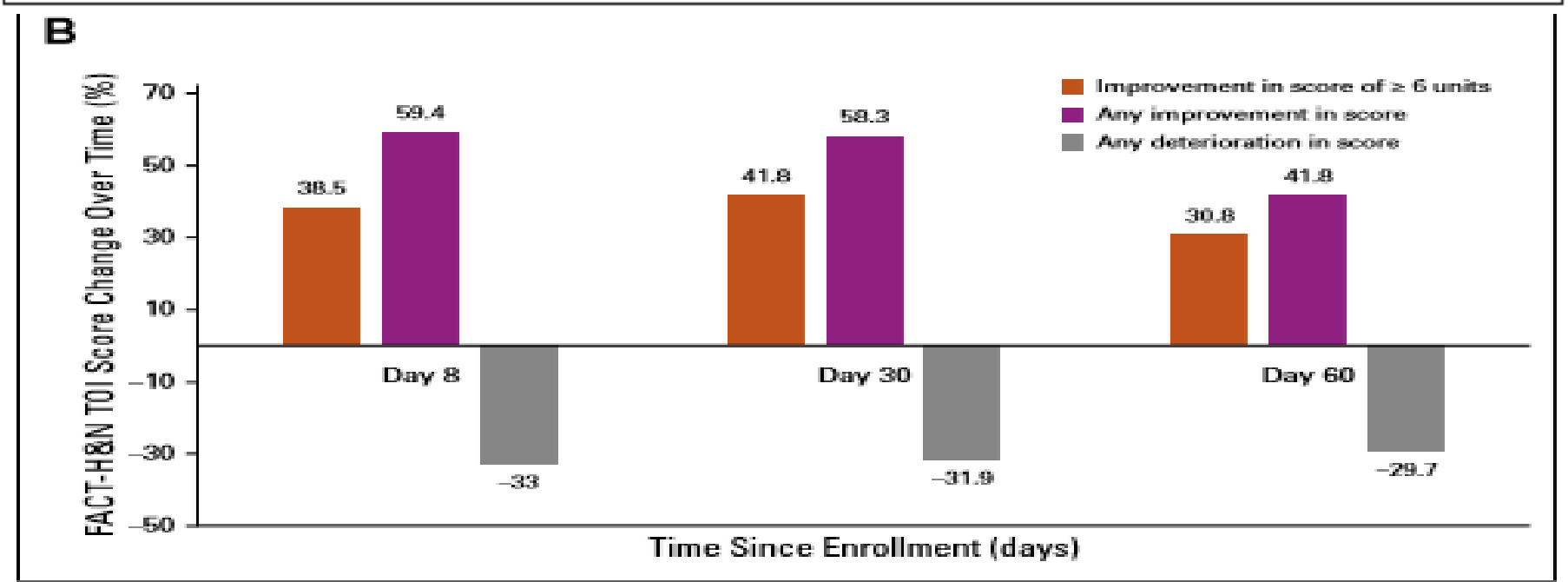
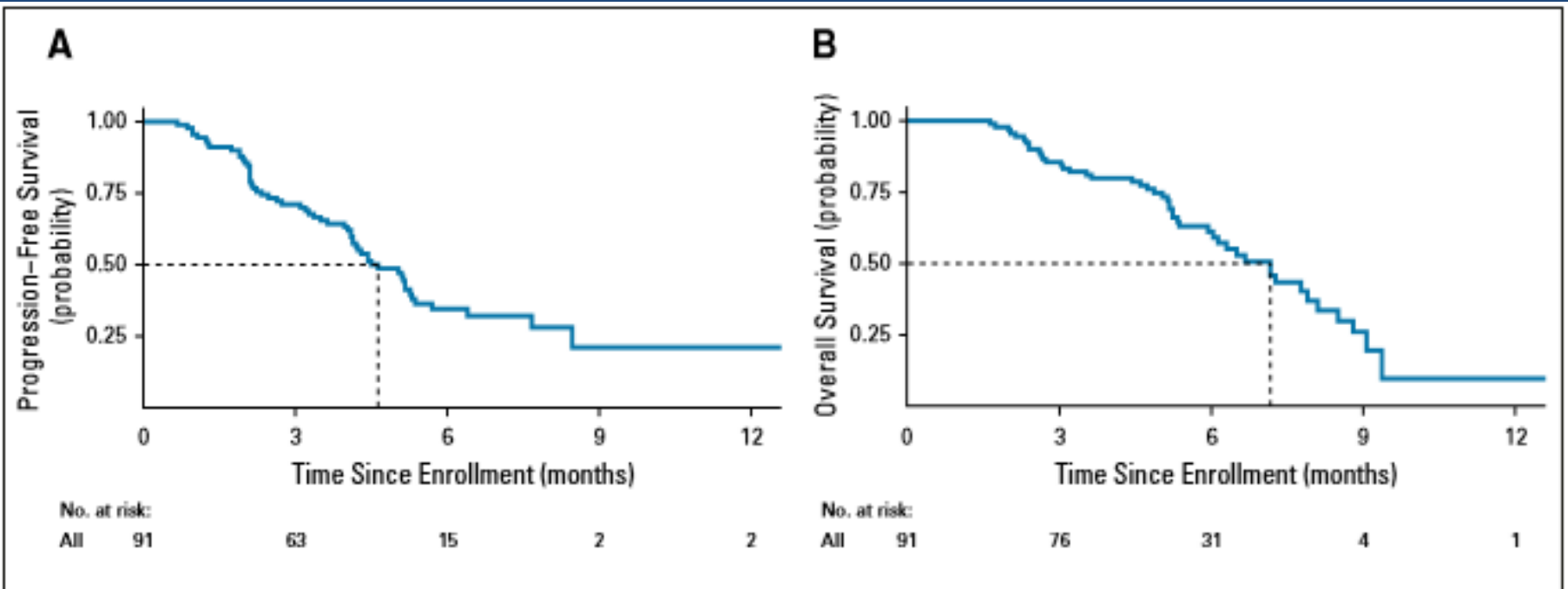
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7

Phase I/II Study of Palliative Triple Metronomic Chemotherapy in Platinum-Refractory/Early-Failure Oral Cancer

Vijay M. Patil, MBBS, MD, DM¹; Vanita Noronha, MBBS, MD, DM¹; Amit Joshi, MBBS, MD, DM¹; Sachin Dhumal, MSc¹; Manoj Mahimkar, PhD¹; Atanu Bhattacharjee, PhD¹; Vikram Gota, MBBS, MD¹; Manish Pandey, MScv¹; Nandini Menon, MBBS, MD, DNB¹; Abhishek Mahajan, MBBS, MD¹; Nilesh Sable, MBBS, MD¹; Suman Kumar, MBBS, MD¹; Kavita Nawale, MBA¹; Sadaf Mukadam, MSc¹; Bhavin Solanki, BMS¹; Sudeep Das, MBBS, MD¹; Vijai Simha, MBBS, MD¹; George Abraham, MBBS, MD¹; Arun Chandrasekharan, MBBS, MD, DM¹; Vikas Talreja, MBBS, MD, DM¹; Hollis DSouza, MBBS, MD¹; Sujay Srinivas, MBBS, MD¹; Lakhan Kashyap, MBBS, MD¹; Shripad Banavali, MBBS, MD¹; and Kumar Prabhash, MBBS, MD, DM¹



- RR-43%



Phase 3 randomized study evaluating the role of low dose nivolumab to palliative chemotherapy in head and neck cancer

Professor Vijay Maruti Patil

On behalf of Department of Medical Oncology

Head and Neck DMG

Tata Memorial Centre, Mumbai



TRIAL SCHEMA

- 1. Adult (>=18years)
- 2. HNSCC
- 3. Planned for palliative therapy
- 4. ECOG 0-1

Palliative Chemotherapy

Randomisation 1:1

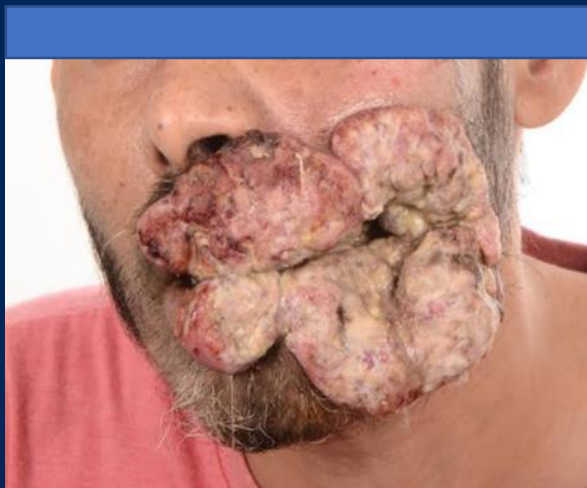
Stratification factors:

- Site
- Previous treatment
- Time to failure

Palliative Chemotherapy + Nivolumab 20 mg

- ✓ **Primary endpoint**
 - OS
- ✓ **Secondary endpoints**
 - PFS
 - QOL
 - Adverse events

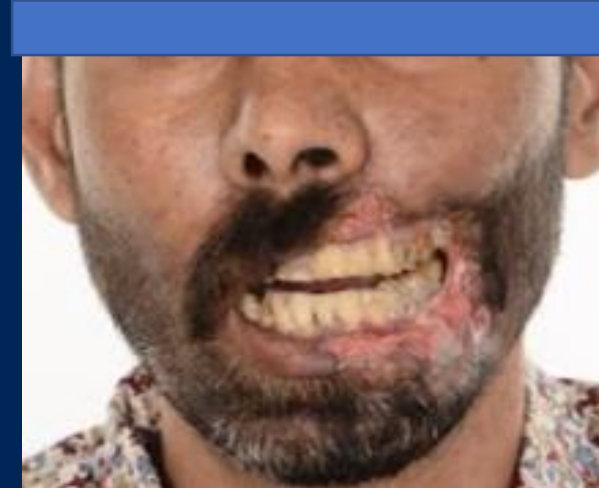
- Palliative chemotherapy- Triple oral metronomic regimen = Tablet Methotrexate 9 mg/m² weekly, tablet Erlotinib 150 mg daily and capsule Celecoxib 200 mg twice daily Nivolumab 20 mg intravenously every 3 weeks
- Response assessed every 2 monthly with axial imaging (RECIST version 1.1)
- Adverse events assessed on every visit recorded in accordance with CTCAE version 4.03



Baseline

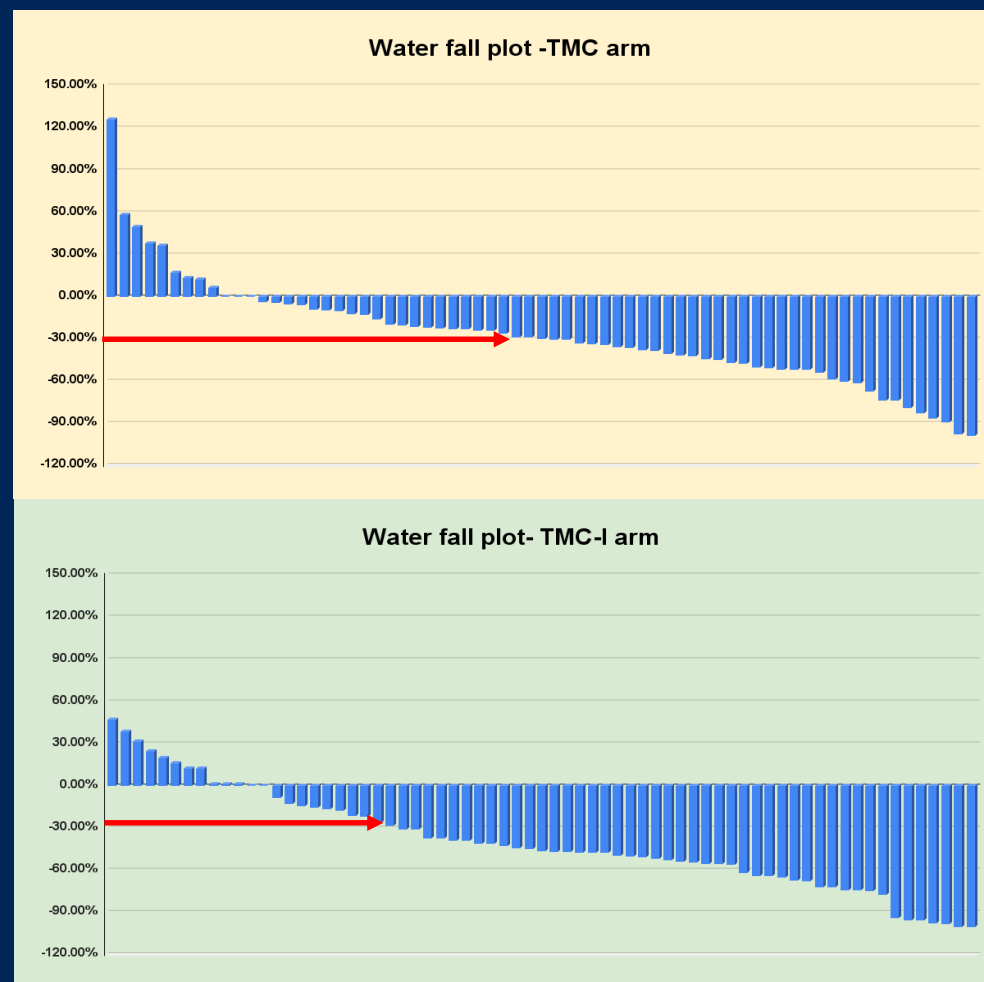
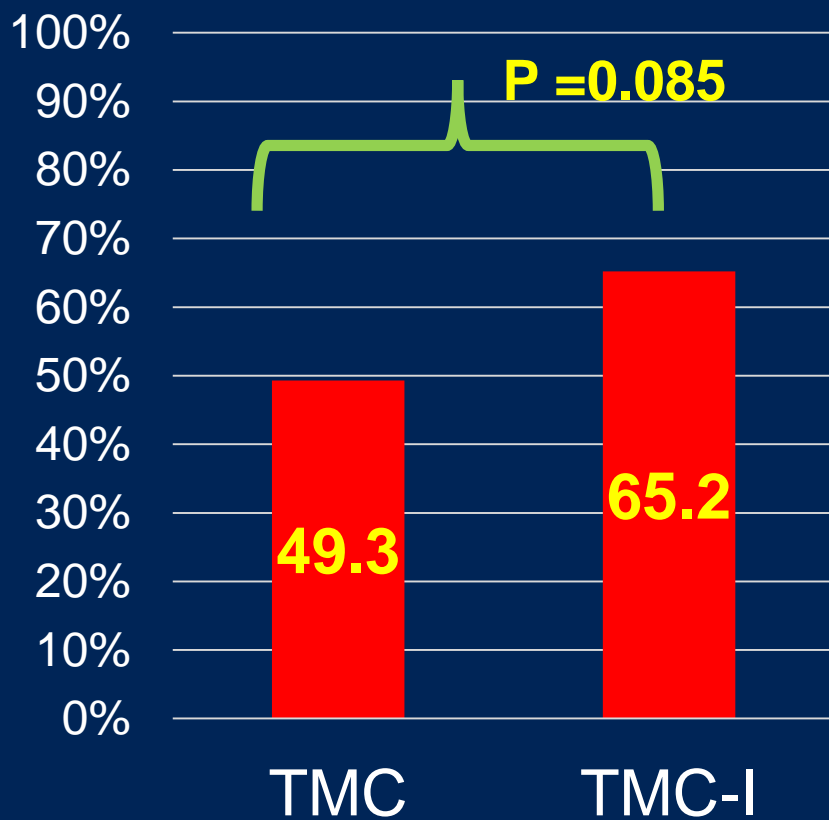


1 month



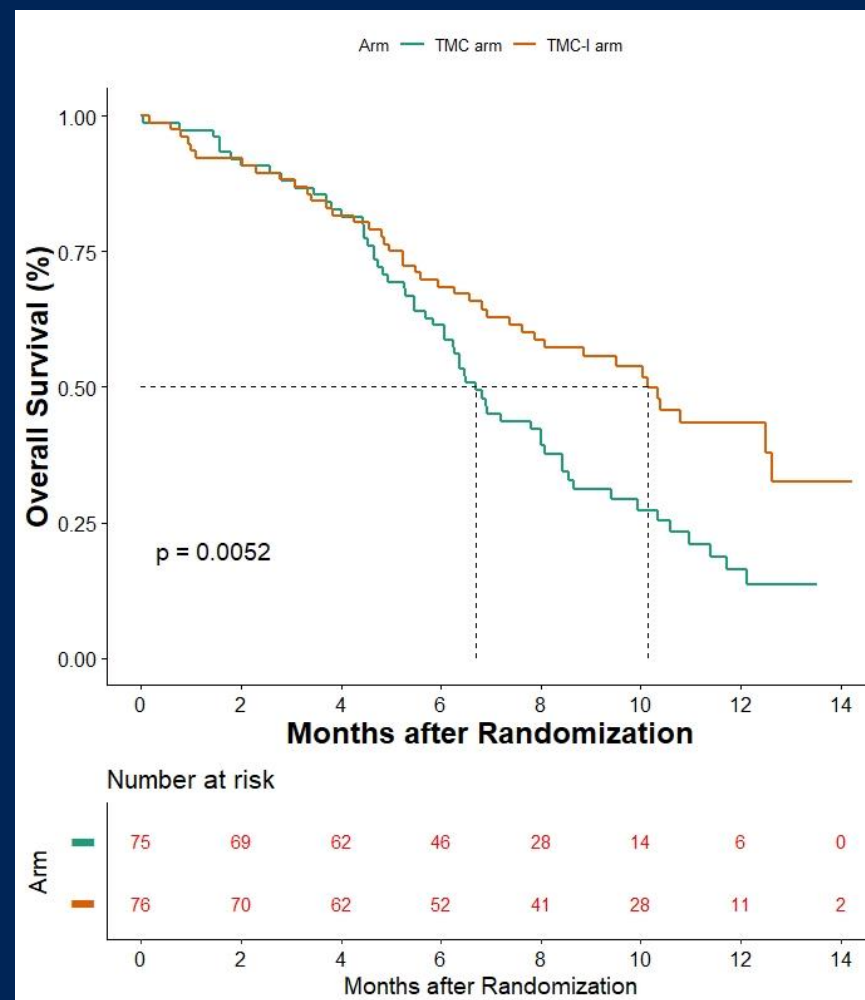
2 month

RESPONSE RATE



Overall survival

- The median overall survival in TMC and TMC-I arms was 6.7 months (95% CI 5.83 -8.07) and 10.1 months (95% CI 7.37-12.63) respectively
- Hazard ratio-0.545; 95% CI 0.362-0.82; P=0.00358
- 1 year OS improved from 16.3% to 43.4%



Conclusions

- Systemic therapy improves survival in adjuvant setting
- Systemic therapy helps select pts for surgery in technically un-resectable head and neck cancer and add life to patients
- Systemic therapy improves survival and also leads to good palliation in advanced disease
- **MOST IMPORTANT – CAN TRY TO LOOK BEYOND NCCN**



ACKNOWLEDGEMENTS -





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Pratik Chandrani
Nandini Menon**



Team of Medical Oncology-Molecular Laboratory





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- **Medgenome** – Dr Ramprasad, Dr Shekar
- **Bioserv** – Dr Mandar
- **Strand life sciences** – Dr Vaijanti
- **Students** – Dr Abhishek, Dr Rashmi, Dr Vaishakhi, Dr Pratik
- **Hyderabad university**- Dr Pallu Redanna
- **IIT Mumbai** – Dr Rinti Banerjee
- **IIT Kanpur** – Dr Bushra
- **IOB** – Dr Prashant
- **Members of Thoracic DMG at TMC**

Family



- THANKS

