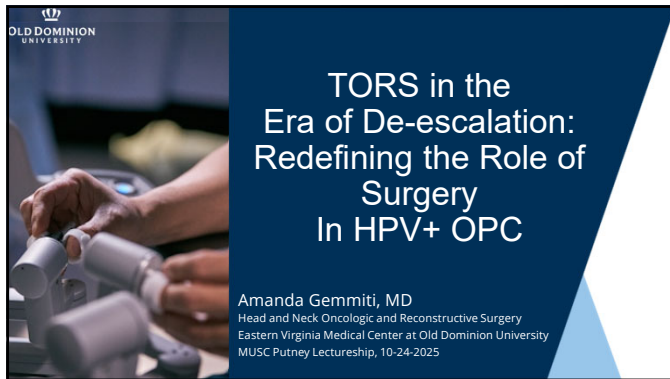
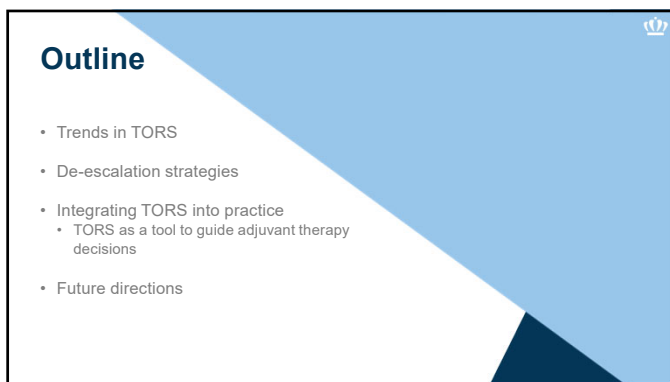




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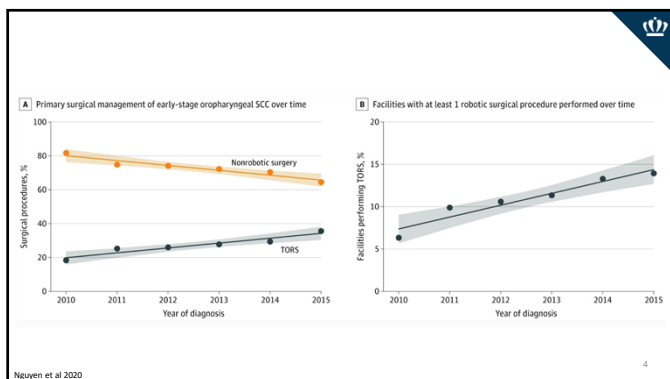
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- Chemotherapy & Radiation
 - Radiation volume
 - Adjuvant chemotherapy
 - Omit adjuvant radiation
- Surgery
 - Transoral surgery
- Adjuvant treatment
 - Risk-adapted definitive therapy



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- Chemotherapy & Radiation
 - Radiation volume
 - Adjuvant chemotherapy
 - Omit adjuvant radiation
- Surgery**
 - Transoral surgery
- Adjuvant treatment**
 - Risk-adapted definitive therapy



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TORS IN DE-ESCALATION TRIALS

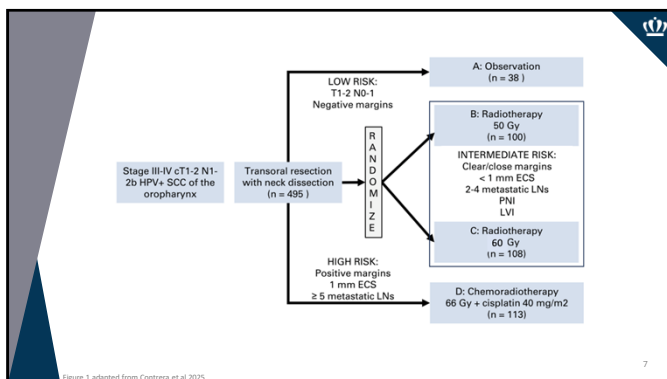
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Phase II Randomized Trial of Transoral Surgery and Low-Dose Intensity Modulated Radiation Therapy in Resectable p16+ Locally Advanced Oropharynx Cancer: An ECOG-ACRIN Cancer Research Group Trial (E3311)

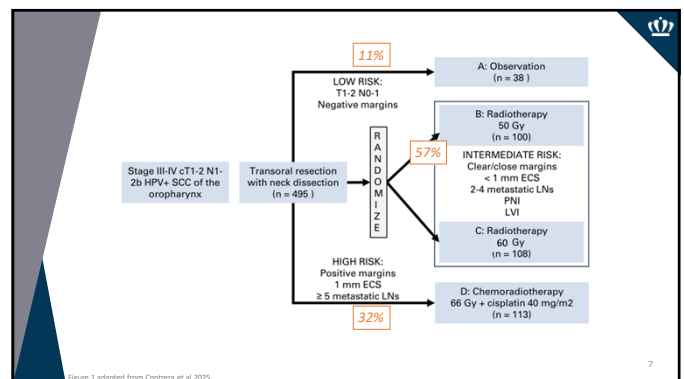
Robert L. Ferris, MD, PhD¹; Yael Farnoud, MD²; Gregory S. Weinstein, MD³; Shaili Li, PhD⁴; Harry Gao, MD⁵; Renee Mehra, MD⁶; Joseph J. Garcia, MD⁷; Christine H. Chung, MD⁸; Bruce L. Gillison, MD, PhD⁹; Unambaresu Deyar, MD, PhD¹⁰; But W. O'Malley Jr, MD¹¹; Evelyne Ossi, MD¹²; Giovanna R. Thomas, MD¹³; Wayne M. Koch, MD¹⁴; Neil D. Gross, MD¹⁵; R. Bryan Bell, MD¹⁶; Rauli F. Salo, MD¹⁷; William Lango, MD¹⁸; Eduardo Miranda, MD¹⁹; and Barbara Burtnick, MD²⁰

- Aim: Evaluate TOS + reduced adjuvant RT in intermediate risk HPV+ OPC
- Methods: Phase II RCT, reduced- vs standard-dose PORT for stage III-IVa HPV+ OPC
- Primary endpoint: 2yr-PFS

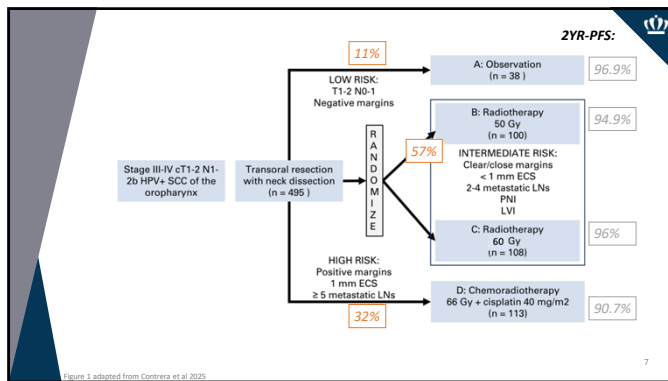
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Radiotherapy versus transoral robotic surgery and neck dissection for oropharyngeal squamous cell carcinoma (ORATOR): an open-label, phase 2, randomised trial

Randomized Trial of Radiotherapy Versus Transoral Robotic Surgery for Oropharyngeal Squamous Cell Carcinoma: Long-Term Results of the ORATOR Trial

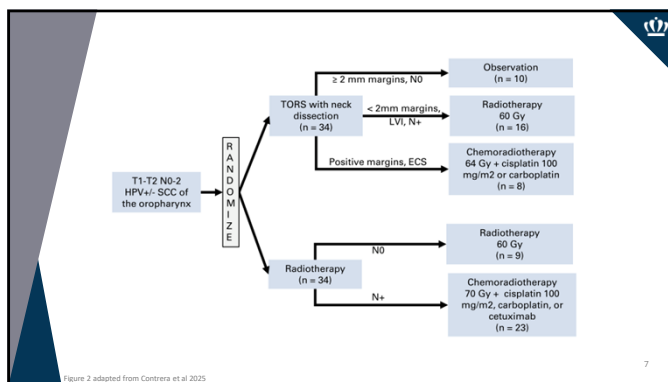
Aim: Evaluate long-term swallowing outcomes in patients after primary RT compared to primary TORS

Methods: Phase II RCT, RT or TORS + ND +/- adjuvant therapy in T1-2, N0-2 (<4cm)

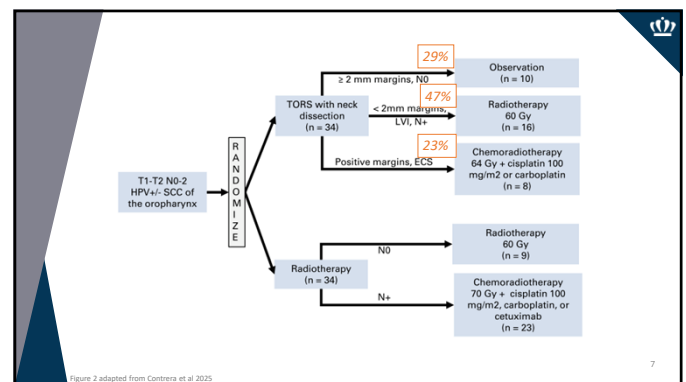
Primary endpoint: Swallowing QOL (MDADI)

Anthony C. Nichols, MD¹, John T. Hsu, PhD², Elise P. Pridgen, MD³, Nancy Reid, MD⁴, Eric Berthelot, MD⁵, Eric Tan, MD⁶, Kevin Fang, MD⁷, John R. J. de Bont, MD, PhD⁸, Andrew Barber, MD⁹, David P. Goldstein, MD¹⁰, Michael Hsu, MD¹¹, Khalil Subramaniam, MD¹², Keith Richardson, MD¹³, Alan Myerson, MD¹⁴, Susan Kishner, MD¹⁵, Han Li, MD¹⁶, John T. Hsu, MD¹⁷, S. Devaki MacNeil, MD, MSc¹⁸, Eric Renshaw, MD, MSc¹⁹, J. Alan Hammond, MBBCh²⁰, Tanya Krasnikova, MBBCh²¹, Sam Karamali, MD²², Andrew Warner, MD²³, Spela Mitcovich, MD²⁴, Jeff Chen, PhD²⁵, Marty Condon, MD²⁶, Stephanie Johnson-Ostrowski, MD, MPH²⁷, Michael David, MD²⁸, Christine Fisher, PhD²⁹, Ben Rietveld, MD³⁰, Keith Kears, MD³¹, and David A. Payne, MD, PhD³²

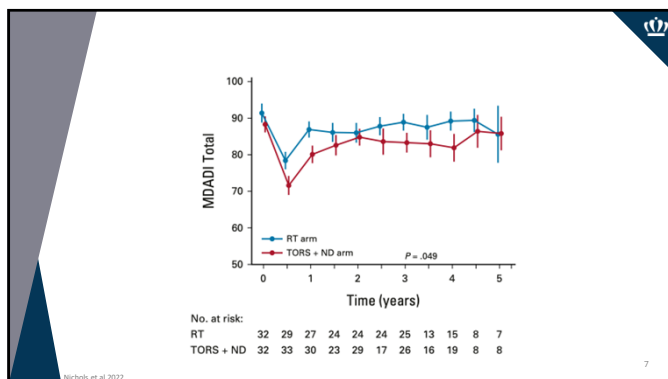
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JAMA Oncology | Original Investigation

Assessment of Toxic Effects and Survival in Treatment Deescalation With Radiotherapy vs Transoral Surgery for HPV-Associated Oropharyngeal Squamous Cell Carcinoma

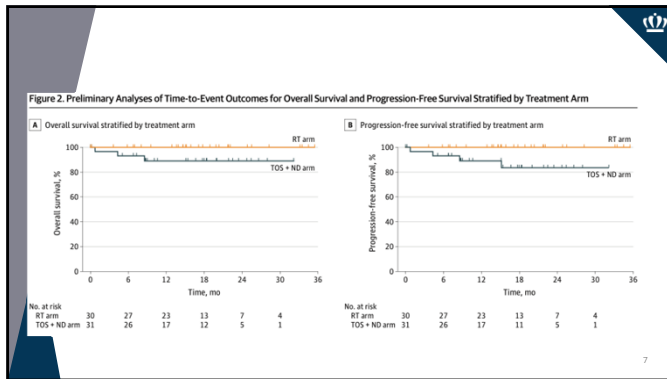
The ORATOR2 Phase 2 Randomized Clinical Trial

Aim: To compare survival, toxicities and QOL between primary reduced-dose CRT and TORS with reduced-dose PORT

Methods: Phase II RCT, reduced-dose RT or TORS + ND +/- reduced-dose adjuvant therapy in T1-2, N0-2

Primary endpoint: OS

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ORATOR/ORATOR2

- 4.6% TORS-related mortality
- 1cm margin goal
- Recommended tracheostomy in surgical arm

ECOG 3311

- 1/495 TORS-related mortality
- Surgeon margin discretion
- Reduced adjuvant CRT

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Studies including TORS for de-escalation

CLINICAL INVESTIGATION

Long-Term Toxic Effects, Swallow Function, and Quality of Life on MC1273: A Phase 2 Study of Dose De-escalation for Adjuvant Chemoradiation in Human Papillomavirus-Positive Oropharyngeal Cancer

Katherine Price, MD,¹ Kathryn M. Van Abel, MD,¹ Eric J. Moore, MD,¹ Samir H. Patel, MD,¹ Michael L. Hinni, MD,¹ Ashish V. Chitrakantawala, MBBS, PhD,² Darlene Greiner, SUPO,¹ Michelle Neben-Wittich, MD,³ Yolanda L. Garcia, MD,⁴ Daniel L. Price, MD,⁵ Jeffrey B. Janus, MD,⁶ Nathan B. Foster, MD,⁷ Brandon F. Gi Robert L. Foote, MD,⁸ and Daniel Ma, MD⁹

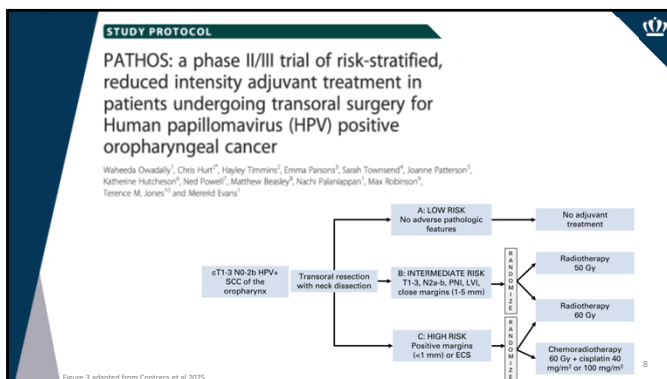
Long-Term Efficacy of Risk-Directed, De-Escalated Post-Operative Adjuvant Therapy for Surgically Resected Locally Advanced, Human Papillomavirus-Positive Oropharynx Squamous-Cell Carcinoma (HPV+ OPSCC): A Non-Randomized, Multi-Arm Phase 2 Trial

W.L. Thorstad,¹ R.S. Jackson,² P. Oppelt,³ P. Pipkorn,⁴ J. Rich,⁵ J. Ley,⁶ B. Thomeczek,⁷ J. Liu,⁸ J.P. Zevallos,⁹ S. Puram,¹⁰ and D. Adkins,¹¹ Depar-

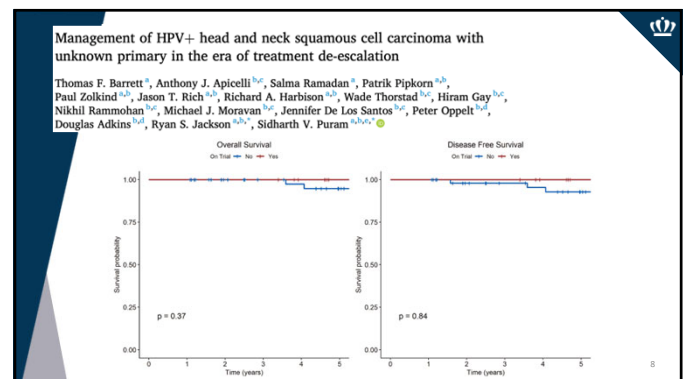
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FUTURE DIRECTIONS

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Summary

- TORS serves as an important tool for tailoring patient-specific treatment selection in the era of de-escalation for HPV-positive oropharyngeal cancer.
- Careful patient selection to optimize the benefits of treatment de-escalation.
- Further studies to evaluate the integration of TORS with emerging therapies and its role in the unknown primary setting to a guide adjuvant therapy de-escalation.

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Thank you!

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