

12th Annual Otolaryngology Literature Update

Head & Neck Oncology I

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Head & Neck Oncology

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Evan M. Graboyes, M.D, MPH, is an Associate Professor in the Departments of Otolaryngology-Head & Neck Surgery and Public Health Sciences at the Medical University of South Carolina. As a fellowship-trained head and neck microvascular reconstructive surgeon, Dr. Graboyes' clinical practice focuses on the removal and reconstruction of benign and malignant tumors of the head and neck. Specific areas of expertise include complex reconstruction for tumors and traumatic defects of the mouth, throat, voice box, skull base, and face. Dr. Graboyes is certified by the American Board of Otolaryngology-Head & Neck Surgery.

Dr. Graboyes is also the Director of Survivorship and Cancer Outcomes Research at Hollings Cancer Center and a member of the Cancer Control Program at the MUSC Hollings Cancer Center. His lab, funded through grants from the National Cancer Institute, American Cancer Society, and multiple foundations, focuses on developing, evaluating, and implementing behavioral and multilevel cancer care delivery interventions to improve quality, timeliness, and equity of care along the cancer care continuum. He has authored over 110 peer-reviewed publications related to cancer care delivery and survivorship.

Dr. Graboyes is also a leader in numerous regional and national organizations. He serves as the Vice-Chair of the American Head and Neck Society Value & Quality of Care Committee, as co-chair of the NRG Oncology Healthcare Disparities Committee Research Concept Development Group, as faculty for the NCI Multilevel Training Institute, and on the editorial board of JAMA-Otolaryngology Head & Neck Surgery. He is also the director of the South Carolina Cancer Alliance Head and Neck Cancer Workgroup.

Dr. Graboyes was born in St. Louis, Missouri, and raised in Wisconsin. He graduated summa cum laude from Princeton University with degrees in philosophy and public policy. He received his medical degree and completed his otolaryngology residency at Washington University School of Medicine in St. Louis. He completed his head and neck oncologic and reconstructive surgery fellowship at the Medical University of South Carolina, where he also received his Master of Public Health in Health Behavior and Health Promotion. He enjoys being outdoors in the Charleston area with his wife and three children.

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Medical University of South Carolina

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Farrokhian N, Holcomb AJ, Dimon E, Karadaghy O, Ward C, Whiteford E, Tolan C, Hanly EK, Buchakjian MR, Harding B, Dooley L, Shinn J, Wood CB, Rohde S, Khaja S, Parikh A, Bulbul MG, Penn J, Goodwin S, Bur AM. Assessing Prognostic Value of Quantitative Neck Dissection Quality Measures in Patients With Clinically Node-Negative Oral Cavity Squamous Cell Carcinoma. *JAMA Otolaryngol Head Neck Surg.* 2022 Oct 1;148(10):947-955. doi: 10.1001/jamaoto.2022.2312. PMID: 36074415; PMCID: PMC9459899.

Liu JC, Egleston BL, Blackman E, Ragin C. Racial survival disparities in head and neck cancer clinical trials. *J Natl Cancer Inst.* 2023 Mar 9;115(3):288-294. doi: 10.1093/jnci/djac219. PMID: 36477855; PMCID: PMC9996207.

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Potter AL, Haridas C, Neumann K, Kiang MV, Fong ZV, Riddell CA, Pope HG Jr, Yang CJ. Incidence, Timing, and Factors Associated With Suicide Among Patients Undergoing Surgery for Cancer in the US. *JAMA Oncol.* 2023 Mar 1;9(3):308-315. doi: 10.1001/jamaoncol.2022.6549. PMID: 36633854; PMCID: PMC9857808.

Head and Neck Oncology



**The Charleston Course
12th Annual Oto-HNS Literature Update
August 25, 2023**

**Evan M. Graboyes, MD, MPH
Medical University of South Carolina**



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JAMA Otolaryngology-Head & Neck Surgery | [Original Investigation](#) | FROM THE AMERICAN HEAD AND NECK SOCIETY

Assessing Prognostic Value of Quantitative Neck Dissection Quality Measures in Patients With Clinically Node-Negative Oral Cavity Squamous Cell Carcinoma

Nathan Farrokhan, MD; Andrew J. Holcomb, MD; Erin Dimon, MD; Omar Karadaghy, MD; Christina Ward, BS; Erin Whiteford, MS; Claire Tolan, BA; Elyse K. Hanly, MD; Marisa R. Buchakjian, MD, PhD; Brette Harding, MD; Laura Dooley, MD; Justin Shinn, MD; C. Burton Wood, MD; Sarah Rohde, MD; Sobia Khaja, MD; Anuraag Parikh, MD; Mustafa G. Bulbul, MD; Joseph Penn, BS; Sara Goodwin, BS; Andrés M. Bur, MD



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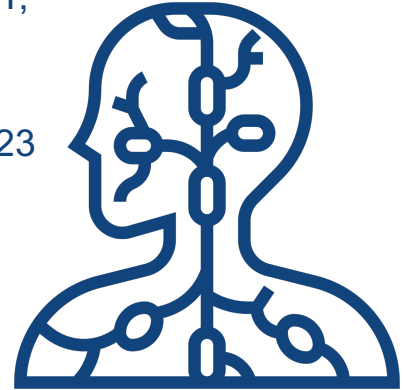
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Study Methods

- Objective: investigate prognostic value of LNY, LNR, and wLNR in pts w/ cT1-2N0 OCSCC
- Design: Retro chart review from 7 centers (523 pts) undergoing END
- Outcomes: LRC, DFS



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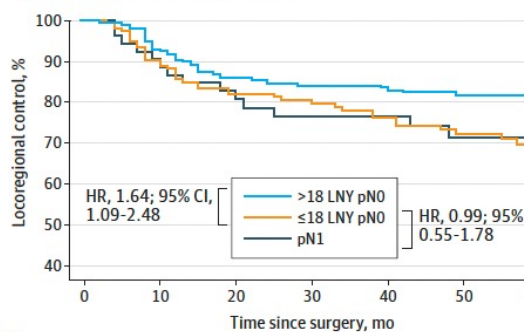
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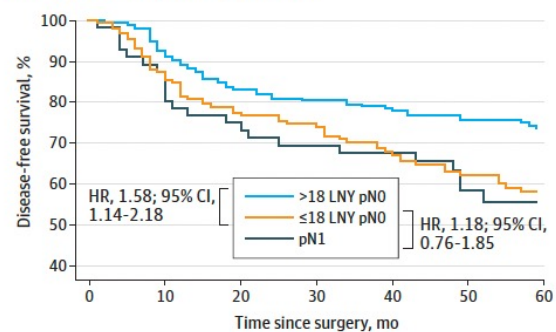

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LRC and DFS for pN0 vs pN1

A Locoregional control for pN0 and pN1 cohorts



B Disease-free survival for pN0 and pN1 cohorts



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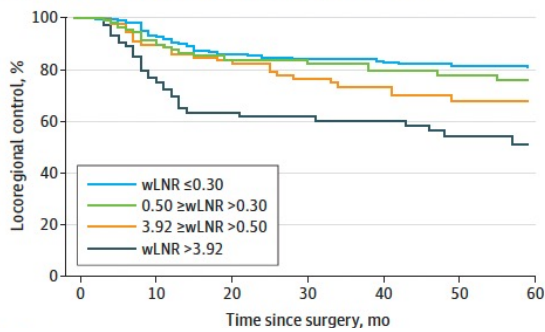
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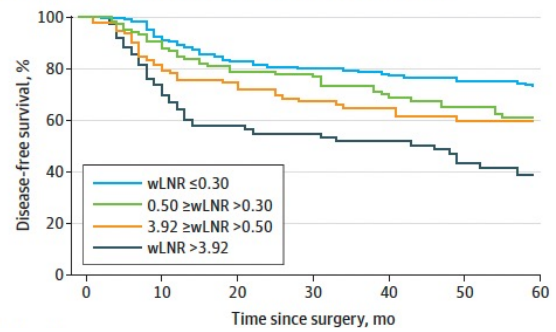

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LRC and DFS for by wLNR Thresholds

A Locoregional control for cN0 cohort stratified by wLNR thresholds



C Disease-free survival for cN0 cohort stratified by wLNR thresholds



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JNCI: Journal Of The National Cancer Institute, 2023, 115(3), 288–294

<https://doi.org/10.1093/jnci/djac219>

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Article

Racial survival disparities in head and neck cancer clinical trials

Jeffrey C. Liu , MD,^{1,2,*} Brian L. Egleston, MPP, PHD,³ Elizabeth Blackman, MPH,⁴ Camille Ragin, PhD, MPH⁴



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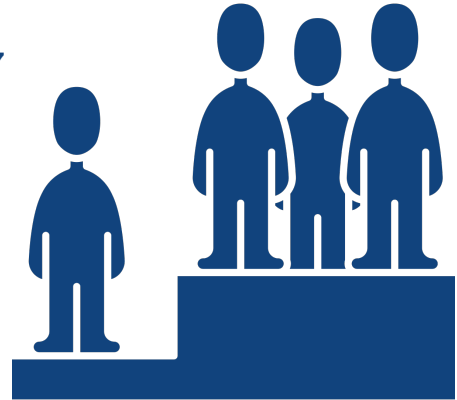
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Study Methods

- Objective: Assess association of race w/ survival in HN clinical trials
- Design: matched white-black pairs from 7 RTOG trials
- Outcomes: PFS/DFS, LRC, DM

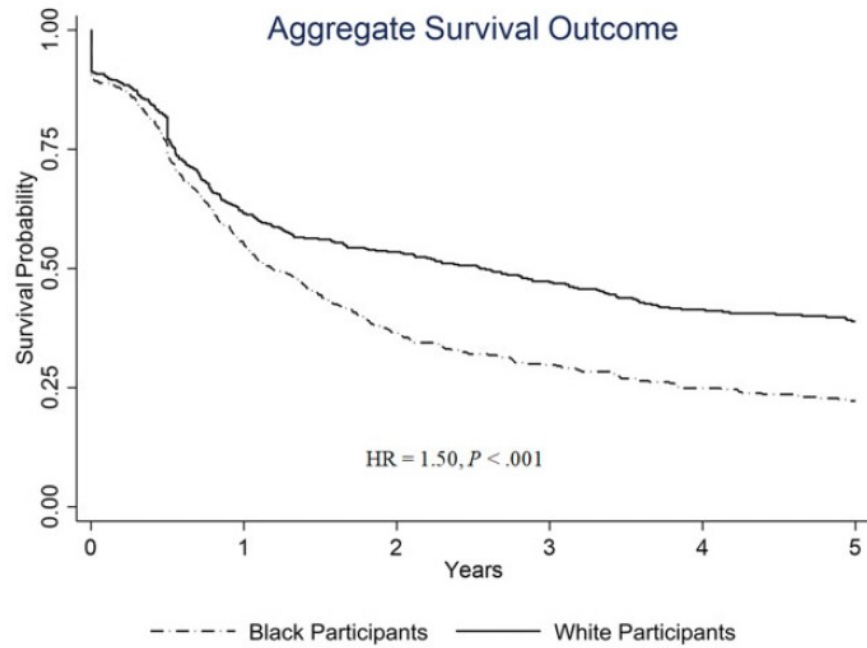


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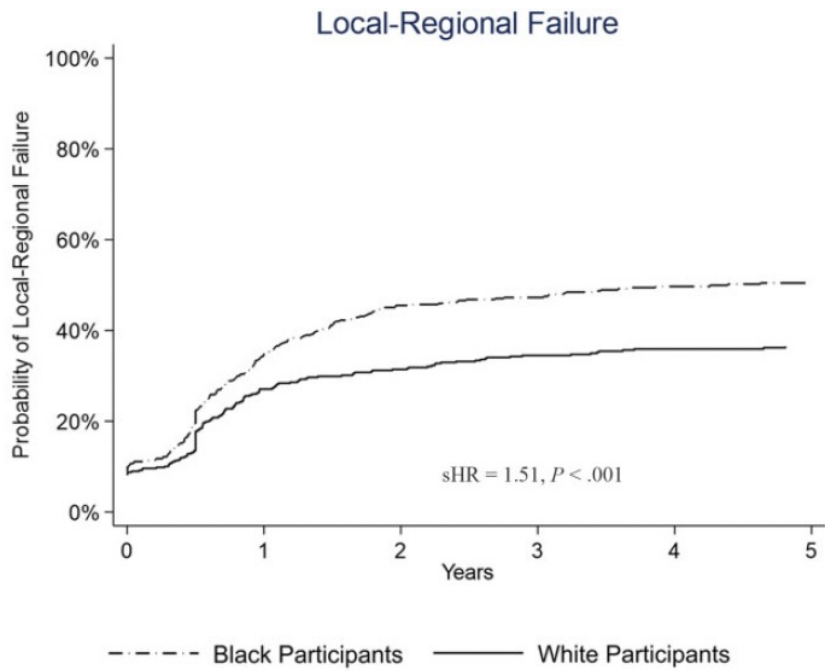
RTOG study ID	Study title	PubMed ID of publication	Reference	No. of patients enrolled
0129	A Phase III Trial of Concurrent Radiation and Chemotherapy (Followed by Surgery for Residual Primary/N2-3 Nodal Disease) for Advanced Head and Neck Carcinomas	25366680	Ang et al. (35)	743
0234	A Phase II Randomized Trial of Surgery Followed by Chemoradiotherapy Plus C225 (Cetuximab) for Advanced Squamous Cell Carcinoma of the Head and Neck	25002723	Harari et al. (36)	238
9703	A Randomized Phase II Trial of Concurrent Radiation and Chemotherapy for Advanced Squamous Cell Carcinomas of the Head and Neck	15254053	Garden et al. (37)	231
9512	A Randomized Study of Hyperfractionation Versus Conventional Fractionation in T2 Squamous Cell Carcinoma of the Vocal Cord	25035199	Trotti et al. (38)	250
9501	Phase III Intergroup Trial of Surgery Followed by (1) Radiotherapy vs. (2) Radiochemotherapy for Resectable High Risk Squamous Cell Carcinoma of the Head and Neck	22749632	Cooper et al. (39)	459
9111	Phase III Trial to Preserve the Larynx: Induction Chemotherapy and Radiation Therapy versus Concomitant Chemotherapy and Radiation Therapy versus Radiation Therapy	23182993	Forastiere et al. (40)	547
9003	A Phase III Randomized Study to Compare Twice Daily Hyperfractionation, Accelerated Hyperfractionation with a Split and Accelerated Fractionation with Concomitant Boost to Standard Fractionation Radiotherapy for Squamous Cell Carcinomas of the Head and Neck	24613816	Beitler et al. (41)	1113

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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

David A. Palma, MD, PhD; Eitan Prisman, MD; Eric Berthelet, MD; Eric Tran, MD; Sarah Hamilton, MD; Jonn Wu, MD; Antoine Eskander, MD, ScM; Kevin Higgins, MD, MSc; Irene Karam, MD; Ian Poon, MD; Zain Husain, MD; Danny Enepekides, MD, MPH; Michael Hier, MD; Khalil Sultanem, MD; Keith Richardson, MD; Alex Mlynarek, MD; Stephanie Johnson-Obaseki, MD, MPH; Michael Odell, MD; Andrew Bayley, MD; Samuel Dowthwaite, MBBS; James E. Jackson, MBBS, PhD; Marcin Dzienis, MBBS; John O'Neil, MBBS; Shamir Chandarana, MD; Robyn Banerjee, MD; Robert Hart, MD; Jeffson Chung, MD; Todd Tenenholtz, MD; Suren Krishnan, MD; Hien Le, MD; John Yoo, MD; Adrian Mendez, MD, PhD; Eric Winquist, MD, MSc; Sara Kuruvilla, MD; Paul Stewart, MBBS; Andrew Warner, MSc; Sylvia Mitchell, MRT; Jeff Chen, PhD; Christina Parker, AuD; Bret Wehrli, MD; Keith Kwan, MD; Julie Theurer, PhD; Jinka Sathya, MD; J. Alex Hammond, MBBCh; Nancy Read, MD; Varagur Venkatesan, MBBS; S. Danielle MacNeil, MD, MSc; Kevin Fung, MD; Anthony C. Nichols, MD



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Study Methods

- Objective: Assess RT vs TOS de-escalation approach for HPV OPC
- Design: phase II RCT at 9 centers in Canada + Australia from 2018-2020
- Pts: cT1-2 N0-3 p16+ OPC
- Interventions:
 - RT: 60 Gy +/- q wk Cisplatin if N+
 - TOS: TOS + ND + reduced dose adjuvant RT
- Outcomes: OS, PFS, AE, QOL



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Toxic Effects

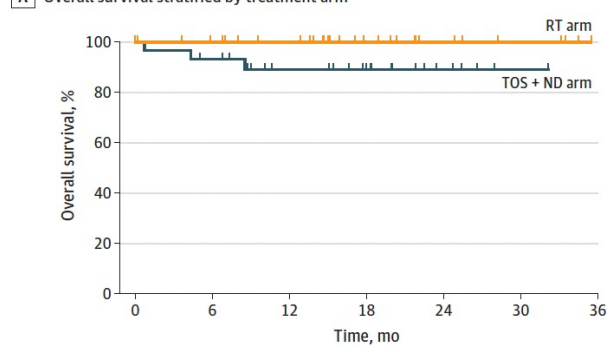
In the TOS and ND arm, 2 treatment-related deaths occurred among 31 patients randomized to that arm (7% grade 5 toxic effect rate), both of which occurred after the patients underwent TORS. One patient died of an oropharyngeal hemorrhage in hospital on day 4 after undergoing resection of a well-lateralized base of tongue cancer despite having a tracheostomy in place and having the ipsilateral external carotid artery ligated intraoperatively. A second patient died of cervical ver-

tebral osteomyelitis that occurred on the ipsilateral side of the spine to the resection approximately 1 month after completing treatment with adjuvant RT after undergoing TORS for a tonsil cancer (110 days postsurgery), a complication previously reported after TORS (associated with a 43% mortality rate),¹¹ also known as spondylodiscitis.¹² Overall rates of related grade 2 or greater toxic effects were similar between arms (occurring in 20 patients [67%] in the RT arm and 22 [71%] in the TOS and ND arm). Specific grade 2 to 5 adverse events are

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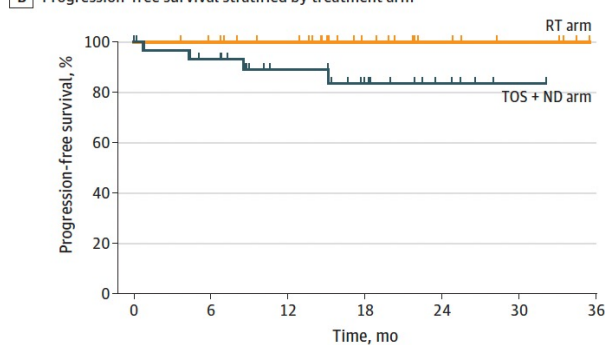
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A Overall survival stratified by treatment arm



No. at risk						
RT arm	30	27	23	13	7	4
TOS + ND arm	31	26	17	12	5	1

B Progression-free survival stratified by treatment arm



No. at risk						
RT arm	30	27	23	13	7	4
TOS + ND arm	31	26	17	11	5	1

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JAMA Oncology | Original Investigation

Incidence, Timing, and Factors Associated With Suicide Among Patients Undergoing Surgery for Cancer in the US

Alexandra L. Potter, BS; Chinmay Haridas, MBBS; Krista Neumann, BMath; Mathew V. Kiang, ScD;
Zhi Ven Fong, MD, MPH; Corinne A. Riddell, PhD, MSc; Harrison G. Pope Jr, MD, MPH; Chi-Fu Jeffrey Yang, MD



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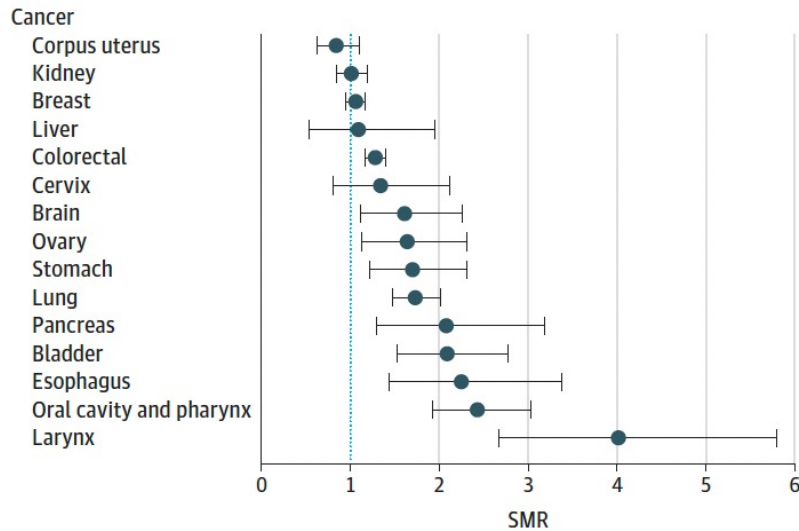
Study Methods

- Objectives: Assess timing, incidence, and factors associated with suicide
- Design: Retro cohort study from SEER 2000-2016 of 15 deadliest cancers vs US gen population
- Outcomes: incidence, timing, and factors associated w/ suicide mortality



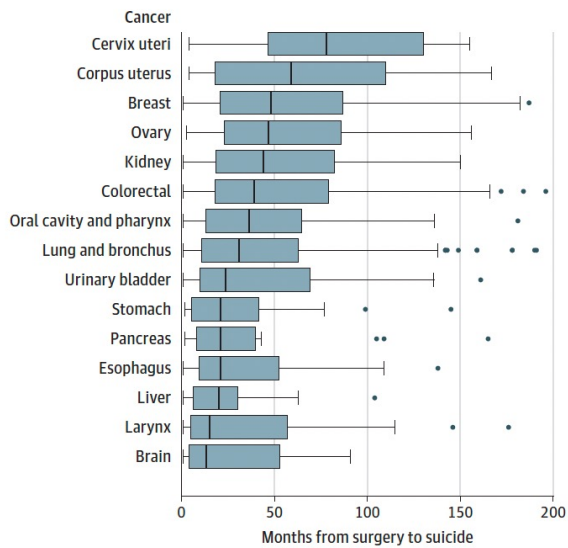
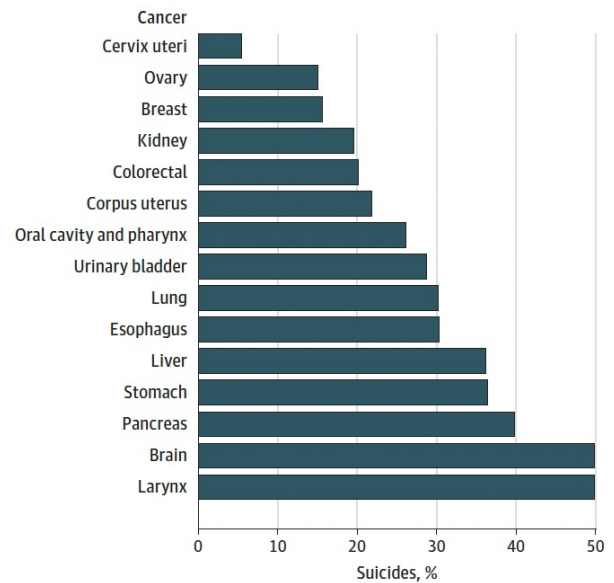
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Figure 1. Standardized Mortality Ratios (SMRs) of Suicide by Cancer Site

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C Median time from surgery to suicide by cancer site**D** Suicides ≤1 y after surgery by cancer site

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Questions



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