



PAD Resident Symposium
**Re-Evaluating Tumor Staging in Merkel Cell
Carcinoma**

Dylan Haynes, MD, MCR
9/21/23



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How Did We Arrive at T Staging for
MCC in AJCC?



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AJCC 1st Edition

- Melanoma
- Cancer of the Skin
 - T1: ≤2cm
 - T2: >2 but ≤5cm
 - T3: >5cm
 - T4: Deep extradermal structures



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AJCC 2nd Edition
No changes



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AJCC 3rd Edition

No changes



AJCC 2nd Edition

No changes



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No changes



AJCC 2nd Edition

No changes

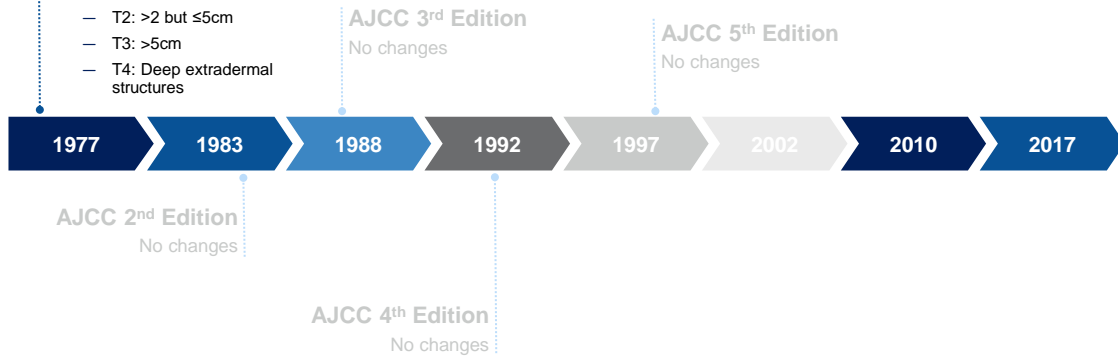
AJCC 4th Edition

No changes



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AJCC 2nd Edition
No changes

AJCC 3rd Edition
No changes

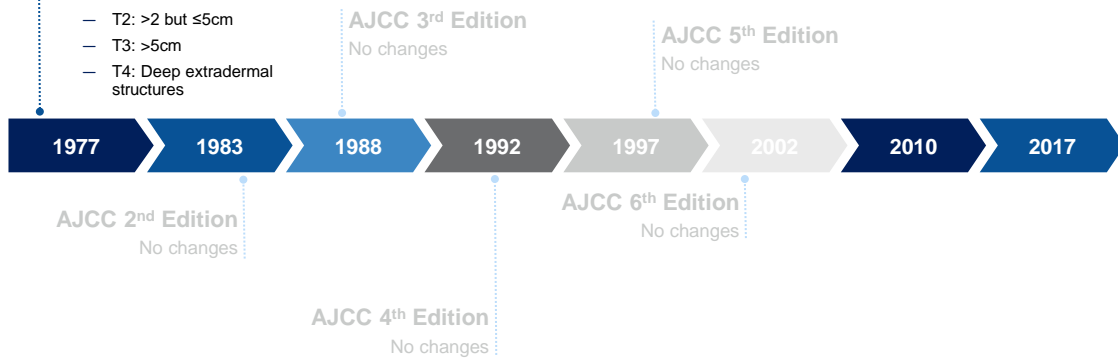
AJCC 5th Edition
No changes

AJCC 4th Edition
No changes

AJCC 6th Edition
No changes

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 - T4: Deep extradermal structures

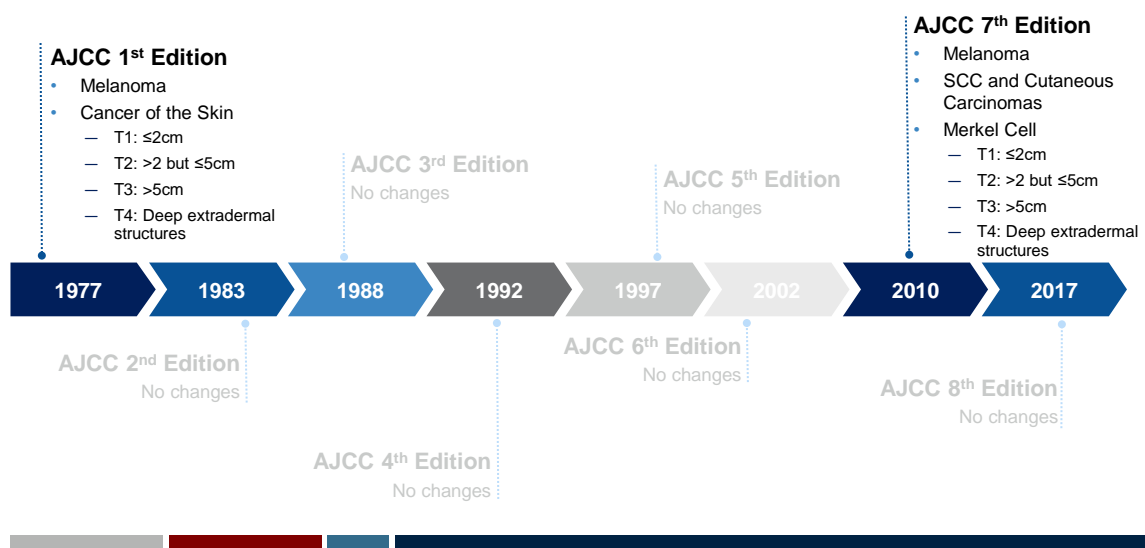
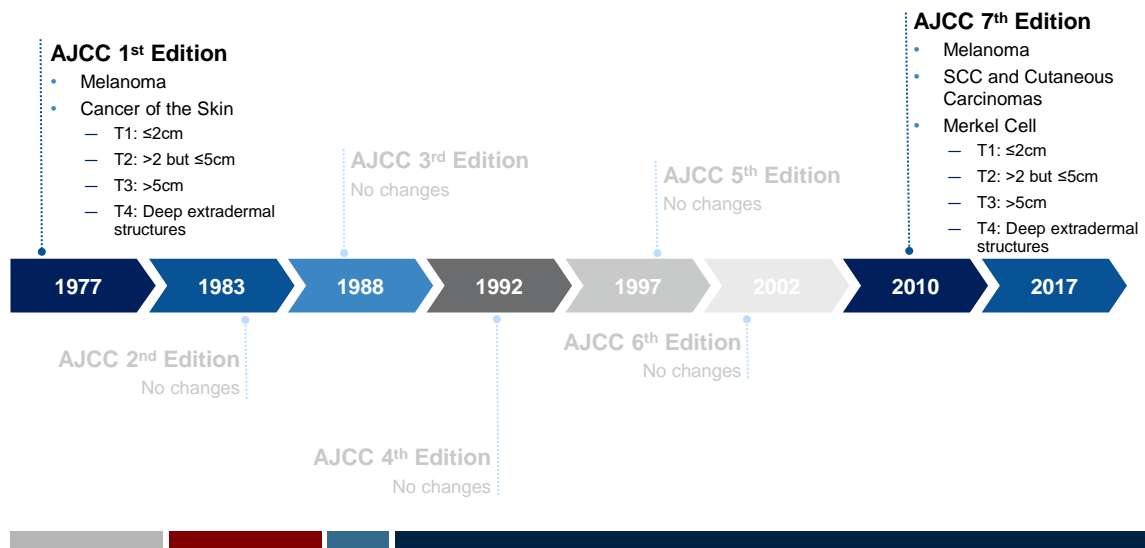


AJCC 2nd Edition
No changes

AJCC 3rd Edition
No changes

AJCC 5th Edition
No changes

AJCC 4th Edition
No changes



AJCC T Staging for MCC Hasn't Changed in 50 Years



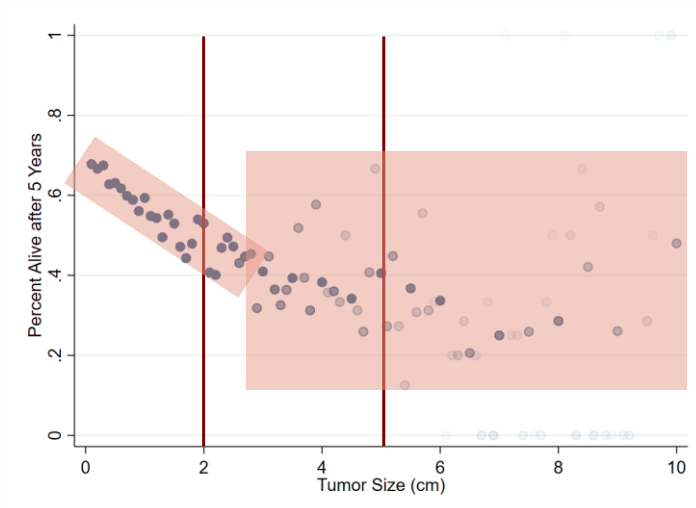
- ▶ TRS-80
 - 4 KB of memory
 - \$3,000 (inflation adjusted)



- ▶ Cigarettes in Hospitals
 - Outlawed by JCAHO in 1993

Can We Be Doing Better for Our Patients?

Correlating Survival with Tumor Size

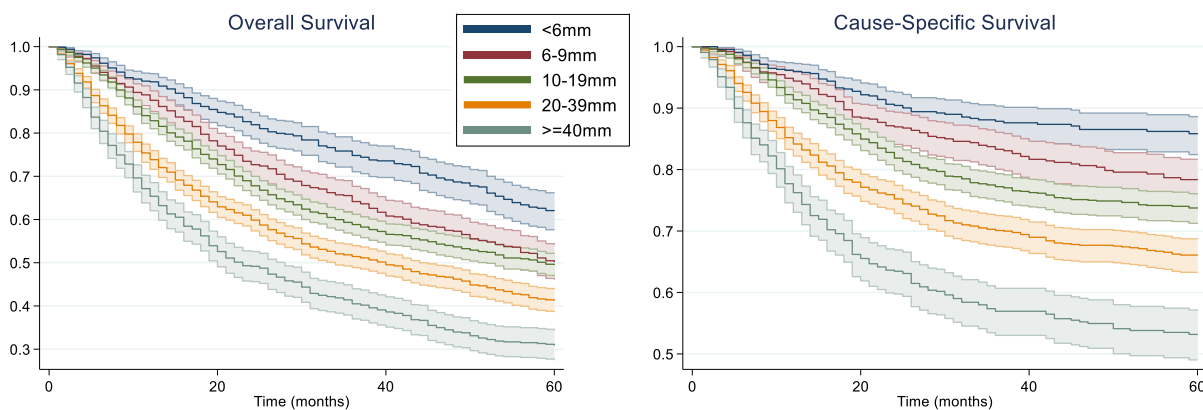


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National Cancer Database. Participant User File 2020 Submission.

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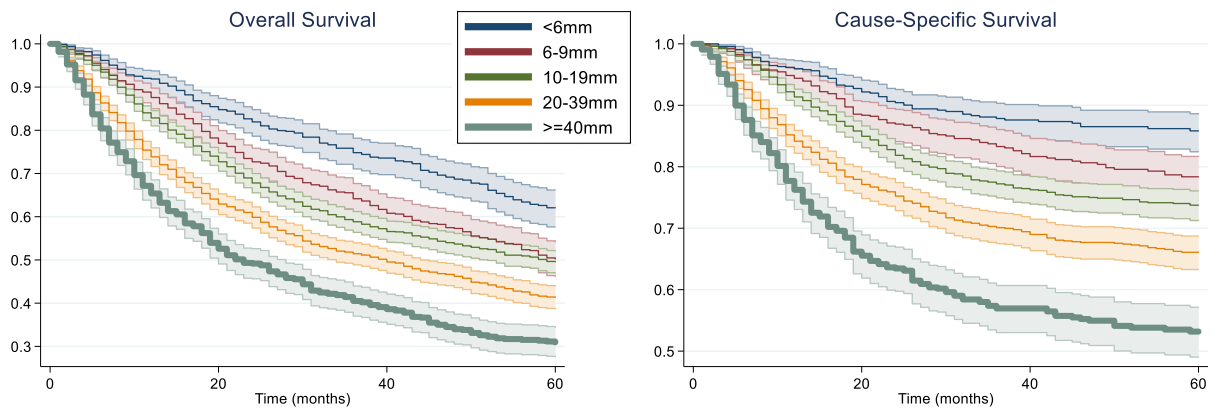
Increased Granularity of Tumor Size Predicts 5-Year Survival



Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Incidence - SEER Research Data, 17 Registries, Nov 2021 Sub (1975-2020) - Linked To County Attributes - Time Dependent (1990-2020) Income/Rurality, 1969-2020 Counties, National Cancer Institute, DCCPS, Surveillance Research Program, released April 2023, based on the November 2022 submission.

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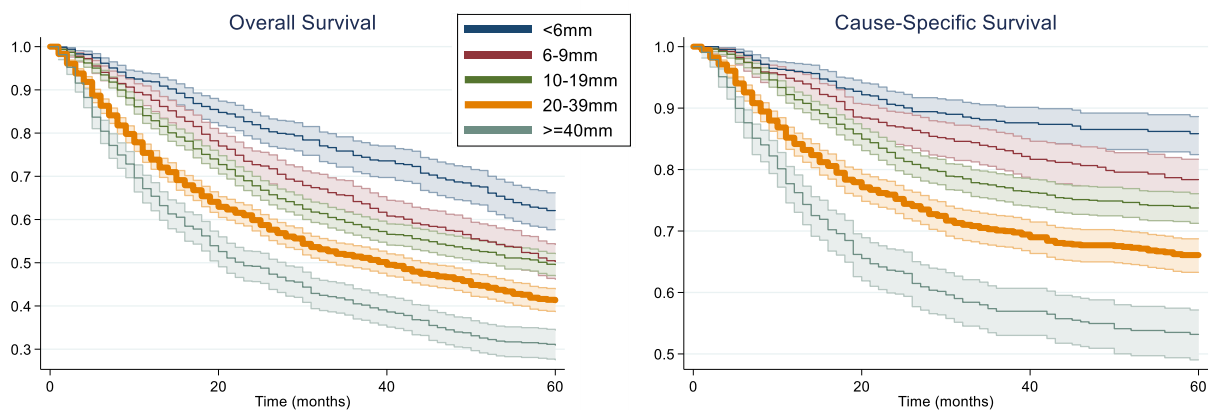
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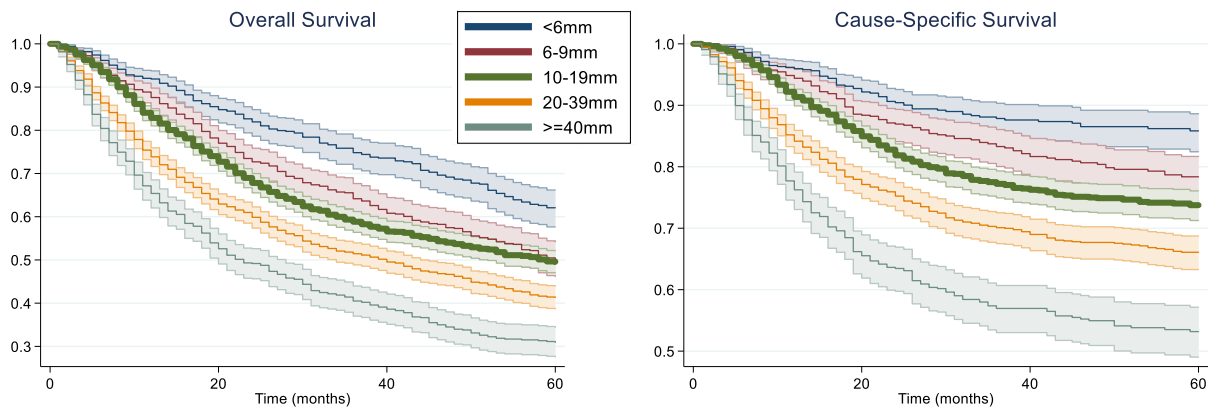
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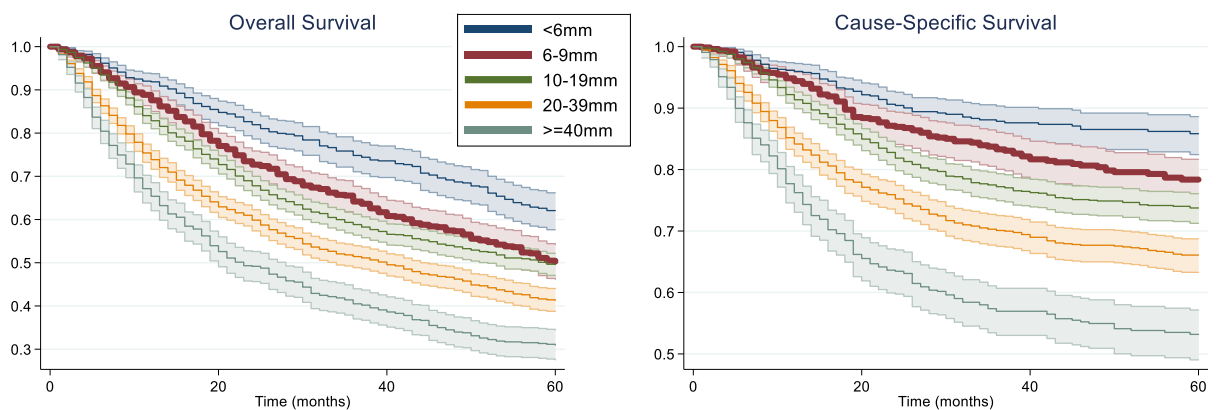
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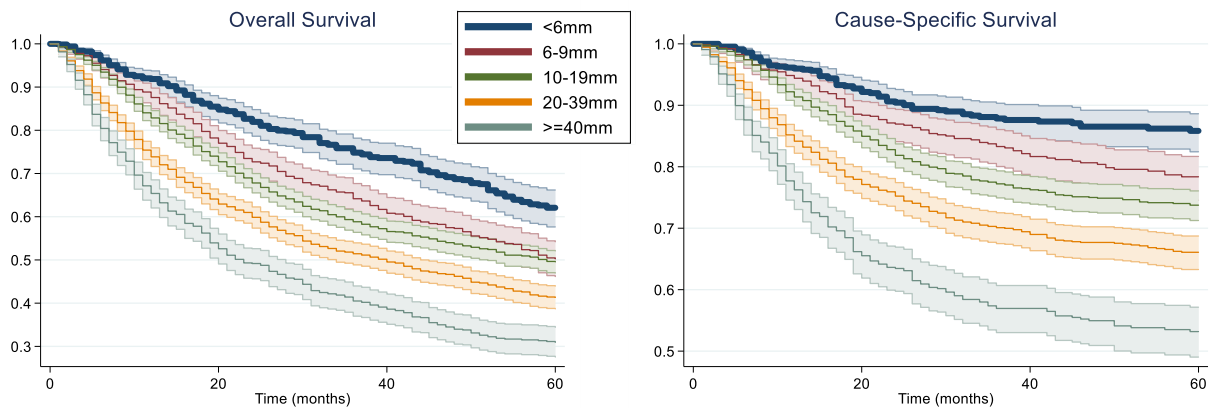
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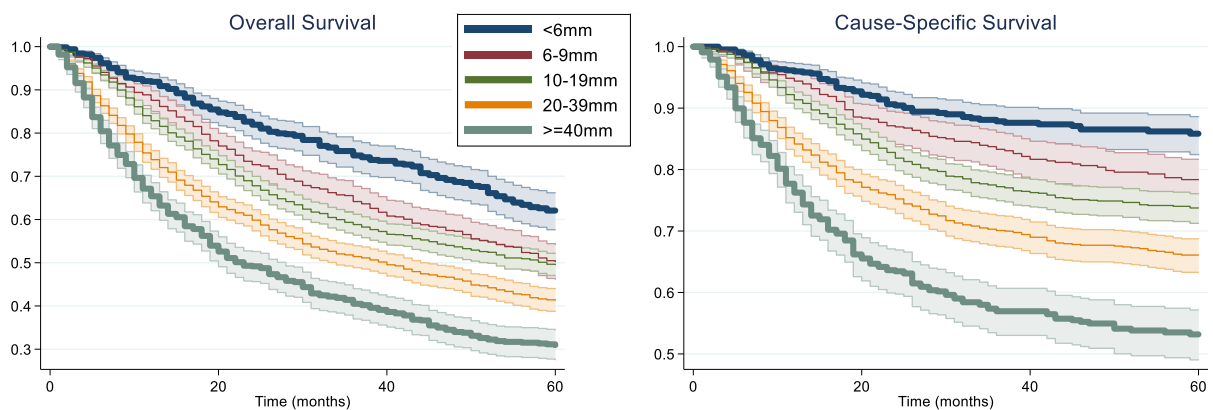
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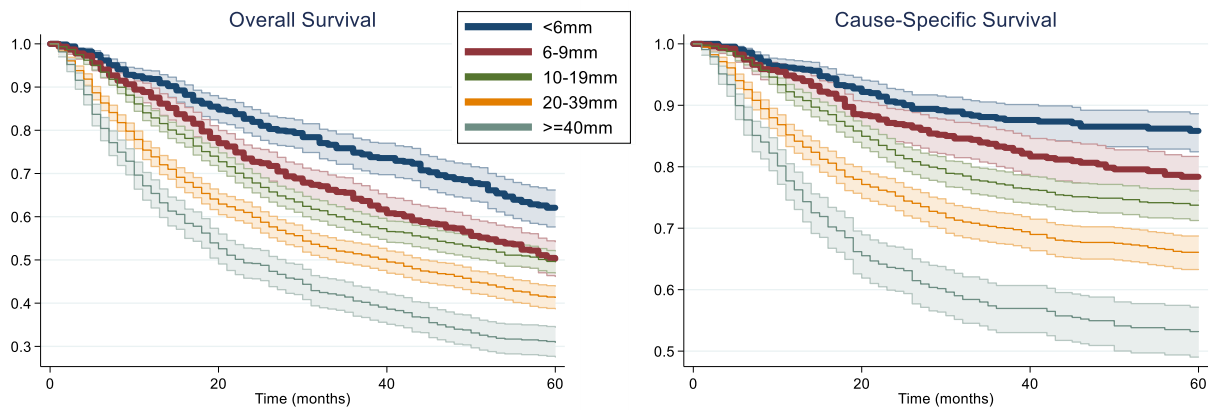
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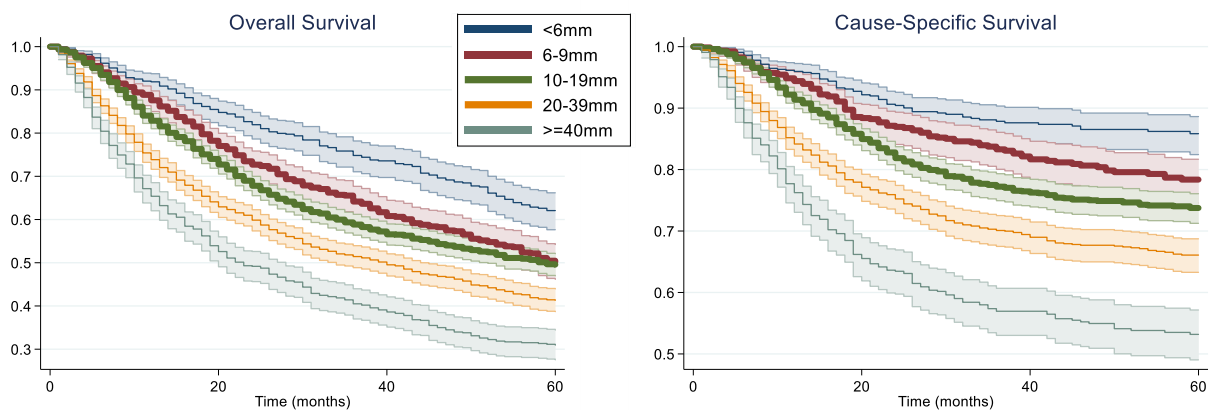
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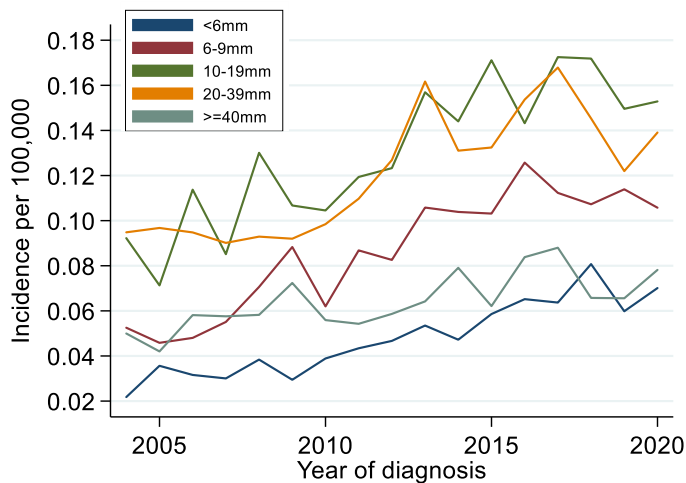
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Incidence of MCC is Rising, Particularly for Smaller Tumors



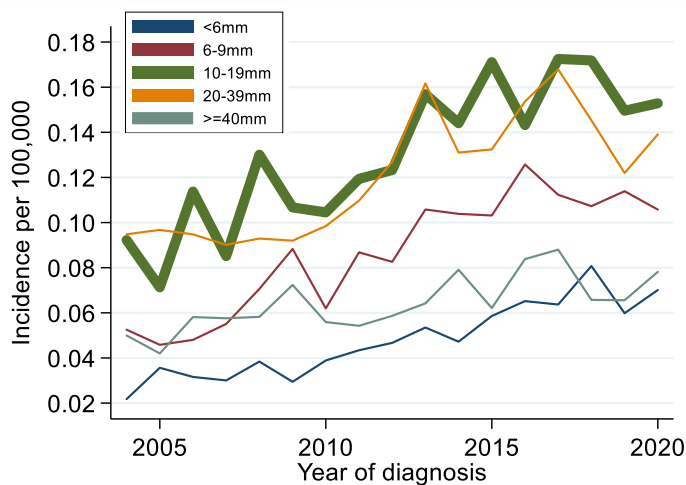
► Data from SEER (17 Registry)

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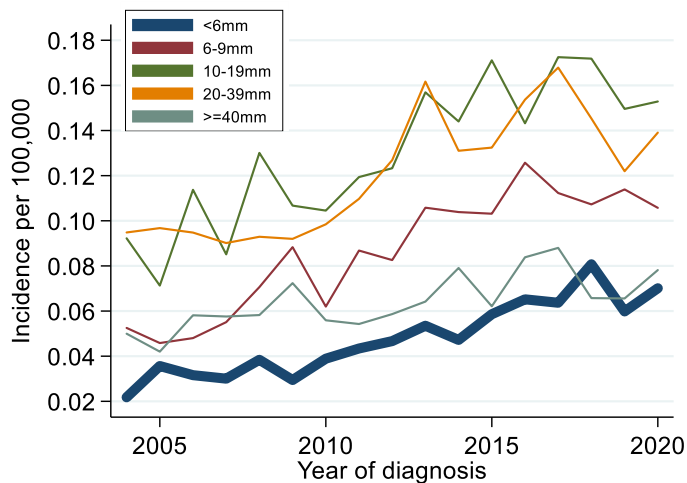
- Greatest absolute increase
- 10-19mm (0.061 per 100k)

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Incidence of MCC is Rising, Particularly for Smaller Tumors



► Data from SEER (17 Registry)

- Greatest absolute increase
 - 10-19mm (0.061 per 100k)
- Greatest relative increase
 - <6mm (222%)

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Conclusions

- T staging for MCC hasn't changed in roughly 50 years
- Smaller tumors are increasing in incidence
- Smaller tumors have distinct survival profiles



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Conclusions

- ▶ T staging for MCC hasn't changed in roughly 50 years
- ▶ **Smaller tumors are increasing in incidence**
- ▶ Smaller tumors have distinct survival profiles



Conclusions

- ▶ T staging for MCC hasn't changed in roughly 50 years
- ▶ Smaller tumors are increasing in incidence
- ▶ **Smaller tumors have distinct survival profiles**



Smaller Tumor Sizes May Be More Appropriate for AJCC T Staging of MCC

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Acknowledgments

► Penn Dermatology

- Program Directors
 - Misha Rosenbach, MD (PD)
 - Sara Samimi, MD (APD)
- Coresidents
 - Especially those here today
- Chair
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- PennDOC Faculty
 - Christopher Miller, MD
 - H. William Higgins, MD, MBE
 - Joseph Sobanko, MD
 - Cerrene Giordano, MD
 - Jun Zhang, MD
 - Joanna Walker, MD
 - Jeremy Etzkorn, MD

► Personal

- Taylor Reiter, PhD
- Alison Loren, MD; Rachel Cook, MD

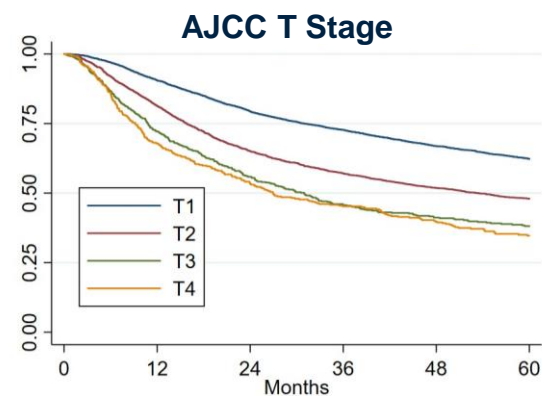
► Others

- Pennsylvania Academy of Dermatology
- Surveillance, Epidemiology, and End Results (SEER)
- National Cancer Database (NCDB)
- American Joint Committee on Cancer (AJCC)
- Stata

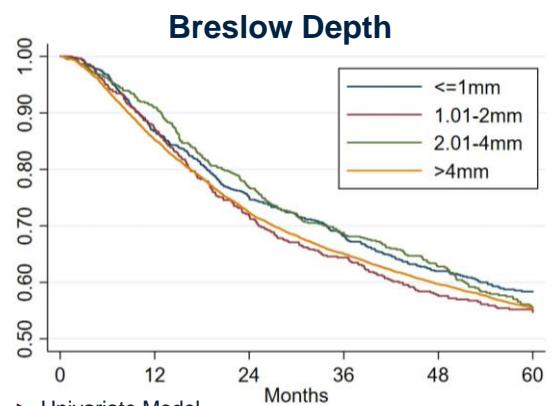
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Breslow Depth Does Not Correlate with 5-Year Survival



- ▶ Univariate Model
 - HR: 1.002 (95% CI 1.001-1.003), P<0.001
- ▶ Multivariate Model
 - HR: 1.002 (95% CI 1.001-1.003), P<0.001



- ▶ Univariate Model
 - HR: 1.000 (95% CI 1.000-1.000), P=0.885
- ▶ Multivariate Model
 - HR: 1.002 (95% CI 1.000-1.001), P=0.370

*Manuscript in preparation

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