ASSOCIATION OF COMMUNITY CANCER CENTERS

# MULTIDISCIPLINARY CUTANEOUS SQUAMOUS CELL CARCINOMA CARE

ACCC
Association of Community Cancer Centers

# Teledermatology: More than Skin Deep

Missouri Oncology Society Spring Conference
Friday, May 10

ACCC
Association of Community Cancer Centers

MISSOURI ONCOLOGY SOCIETY

# Speakers

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# Disclosures

I have no financial conflicts to declare.

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Missouri Telehealth Network

University of Missouri Health System

# Derm ECHO

- Benefits and challenges of teledermatology.
- Why should we all be doing Derm ECHO?
- What is it exactly and what is the impact of Derm ECHO?

# Skin Disease Is Common

- 25% (1/4) Americans under 65yo;
- 50% (1/2) 65yo or older;
- Were treated for skin disease in one year.

Lim, HW, et al. The burden of skin disease in the United States. J Am Acad Dermatol. 2017 May;76(5):958-972. Epub 2017 Mar 1.

Lim, HW, et al. Contribution of health care factors to the burden of skin disease in the United States. J Am Acad Dermatol. 2017 Apr 17.

Research Letter

FREE

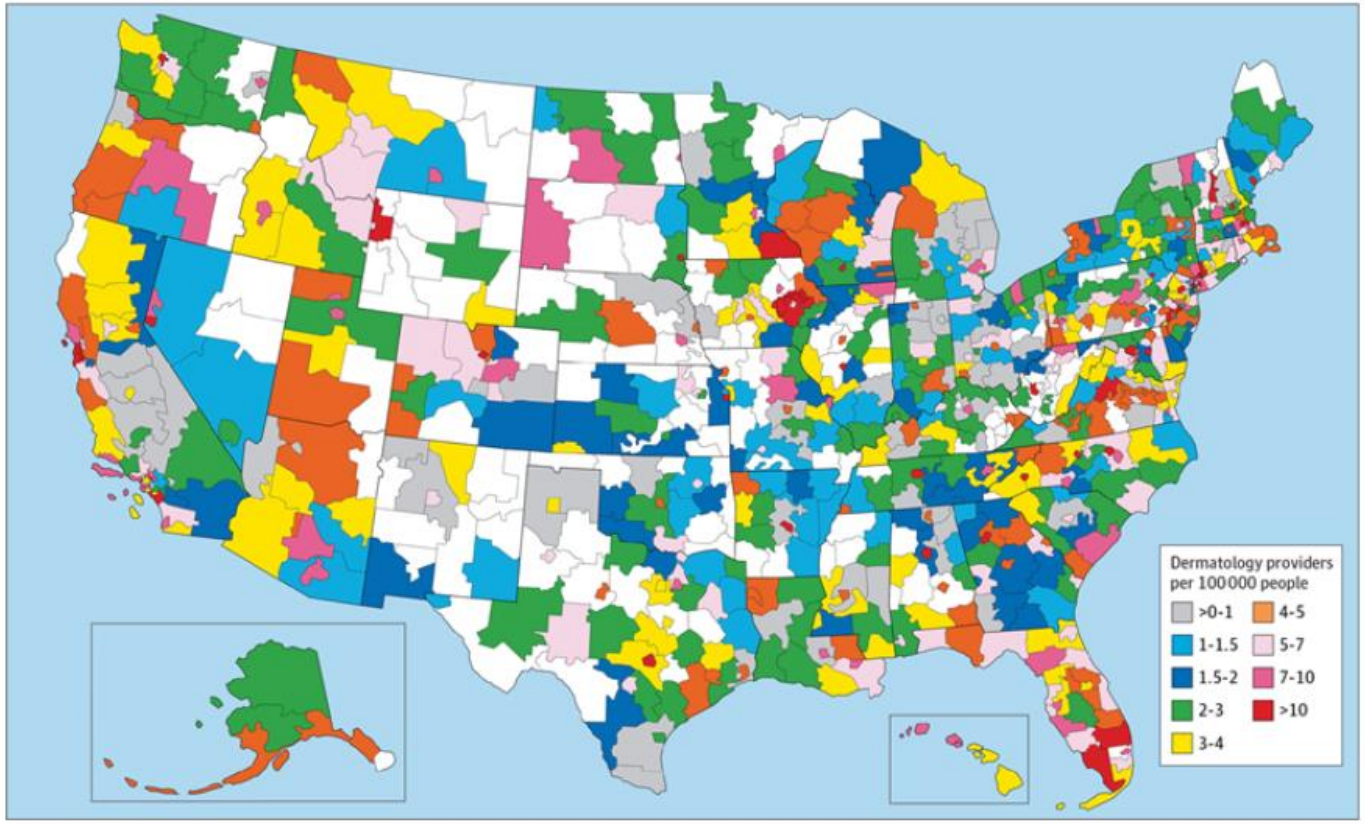
May 2017

# Analysis of Trends in Geographic Distribution of US Dermatology Workforce Density

Alex M. Glazer, MD[1]; Darrell S. Rigel, MD, MS[2]

» Author Affiliations | Article Information

*JAMA Dermatol.* 2017;153(5):472-473. doi:10.1001/jamadermatol.2016.6032




**US Dermatology Provider Density by 3-Digit ZIP Code**

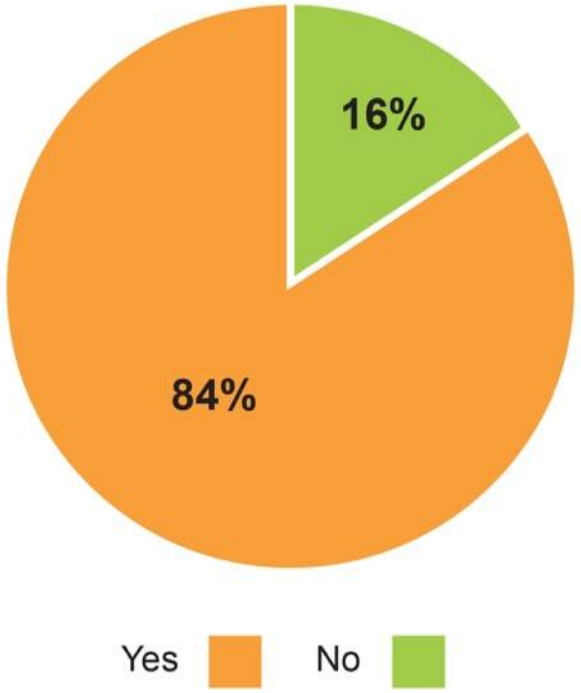
The number of dermatology providers practicing per 100 000 people in each 3-digit postal section code is indicated by the colors on the map. Section codes without a dermatology provider are included in white. Note that the Great Lakes are included in US section coding and do not appear on the map.

# Importance of Access for the Future of Dermatology

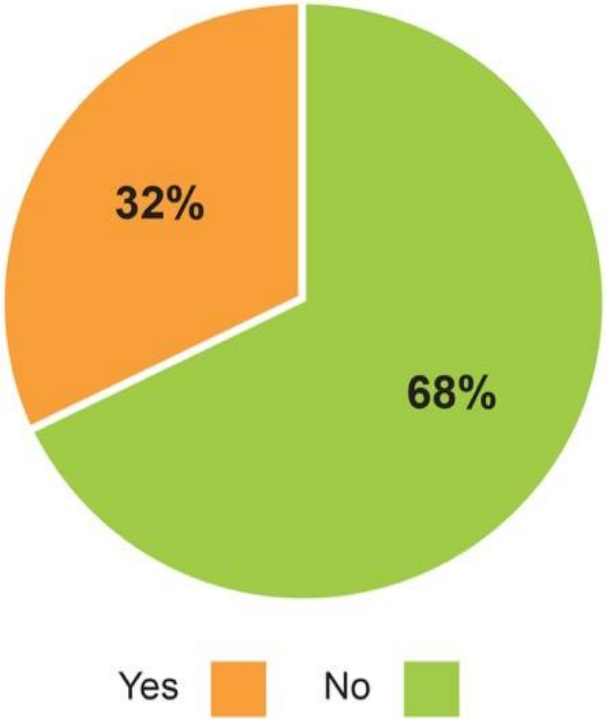
# Access Is Key

Other physicians respect and need dermatologists' expertise, but say they are often inaccessible.

Is it important to have a dermatologist available for the care of your patients?




Do you have trouble referring patients to a dermatologist?



# Ideas for Increasing Access

- Rethink how we choose residents.
- PAs and APNs in rural areas in close collaboration with board-certified dermatologists.
- Collaborate with and teach primary care providers.
- Teledermatology.

# Teledermatology Can Help with Access

- Improving access is important, especially for the underserved.
- AccessDerm goes where there is little or no access to derm expertise.

# MU Derm Teledermatology Experience (Dr. Karen Edison)

- Live-interactive (24 years);
- Store-and-forward (3 to 4 years);
- Direct-to-Patient eVisits (2 to 3 years);
- Weekly  hospital consults w/residents;
- Volunteer via Access Derm w/rural PCPs.

# Teledermatology

- Increases access by providing care that might not be available otherwise.
- Reduces need for travel, saves the patient money, provides earlier diagnosis, and appropriate treatment.
- But, it has its limitations…

# Sanjeev Arora, MD, Hepatologist

- University of New Mexico;
- Developed Project ECHO for Hep C in 2003;
- 10-month wait to see him in the Hep C clinic;
- Put together interdisciplinary team;
- Recruited willing primary care providers;
- Video Technology;
- Published study showed…
  - Reduced wait times;
  - Increased number of Hep C pts treated;
  - High-quality outcomes.

# ECHO

## Extension for Community Healthcare Outcomes

**ECHO**
**Moves Knowledge, Not Patients**

**Telementoring program that creates communities of learning.**

Missouri Telehealth Network
Project ECHO®

# Dermatology ECHO

- Multidisciplinary expert team - derm, dermpath, peds derm, nurse practitioner.
- Weekly mini lectures on basic derm topics & review of cases (submitted by PCPs).
- Collegial learning community for ongoing mentoring and support.

# Dermatology ECHO

**Team:**

Karen Edison, MD, Dermatologist

Kara Braudis, MD, Dermatopathologist

Jon Dyer, MD, Pediatric Dermatologist

Kari Martin, MD, Pediatric Dermatologist

Kristen Fernandez, MD, Dermatologist

Susan Zurowski, MD, Dermatologist

Emily Smith, MD, Dermatopathologist

Mirna Becevic, PhD, Research and evaluation

Dave Zellmer, Health Literacy Expert


Didactics: Full range of basic dermatology topics.

**60 melanomas detected by our PCPs!**

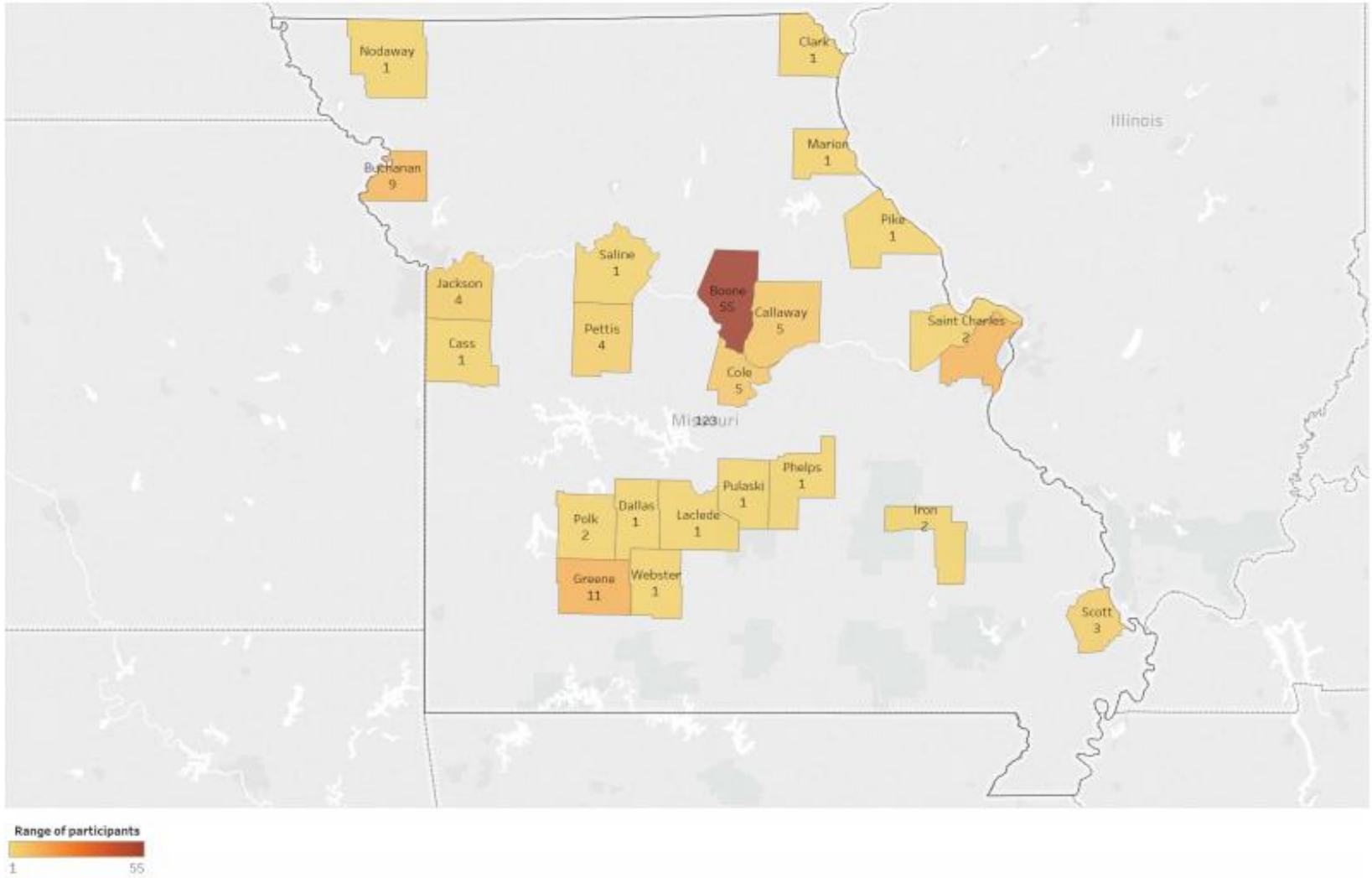
# Dermatology ECHO

- For 4 years, most Fridays from noon to 1 pm;
- 133 unique participants;
- 919 total attendees;
- 33 case presenters;
- 369 (347 new and 22 follow-ups) case presentations; and
- 320 CME hours awarded.

# Derm ECHO Benefits PCPs

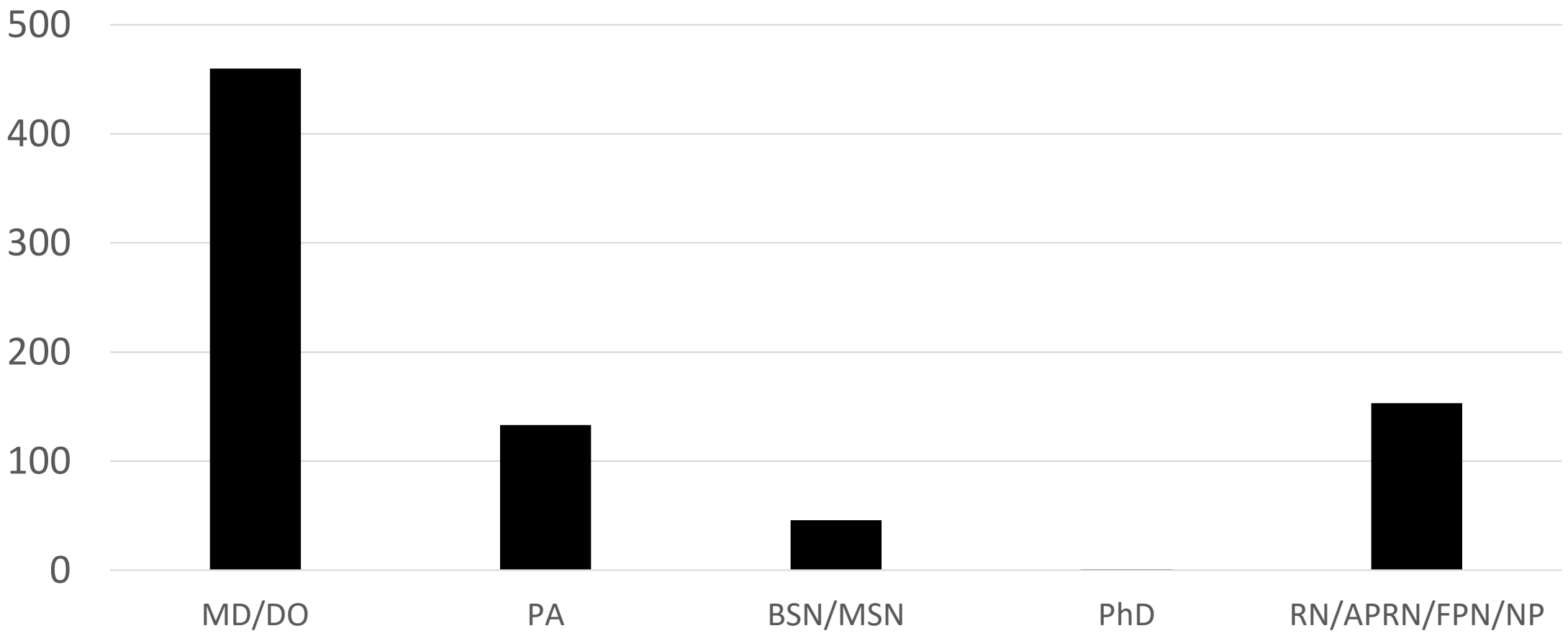
- Increased ability to diagnose and treat patients.
- Increased confidence about treatment of skin conditions.
- Access to academic dermatologists, dermatopathologists, pediatric dermatologists.
- Professional interaction with colleagues with similar interest.
- No-cost CMEs.
- A mix of work and learning.

# Derm ECHO Attendees



# Derm ECHO – Total Attendees

(10/2015-09/2018)



# Quotes from the Derm ECHO Participants

**“I appreciate the humility and the collegiality of the group. It helps to not be afraid to ask questions to advance our knowledge base.”**

**“I so appreciate this outlet for discussion/ education. Like a one hour a week residency again……..refreshing!!!”**

**“I look forward to this every Friday and am grateful that it exists. What a great resource!”**

**“Great forum! My favorite part of the week :)”**

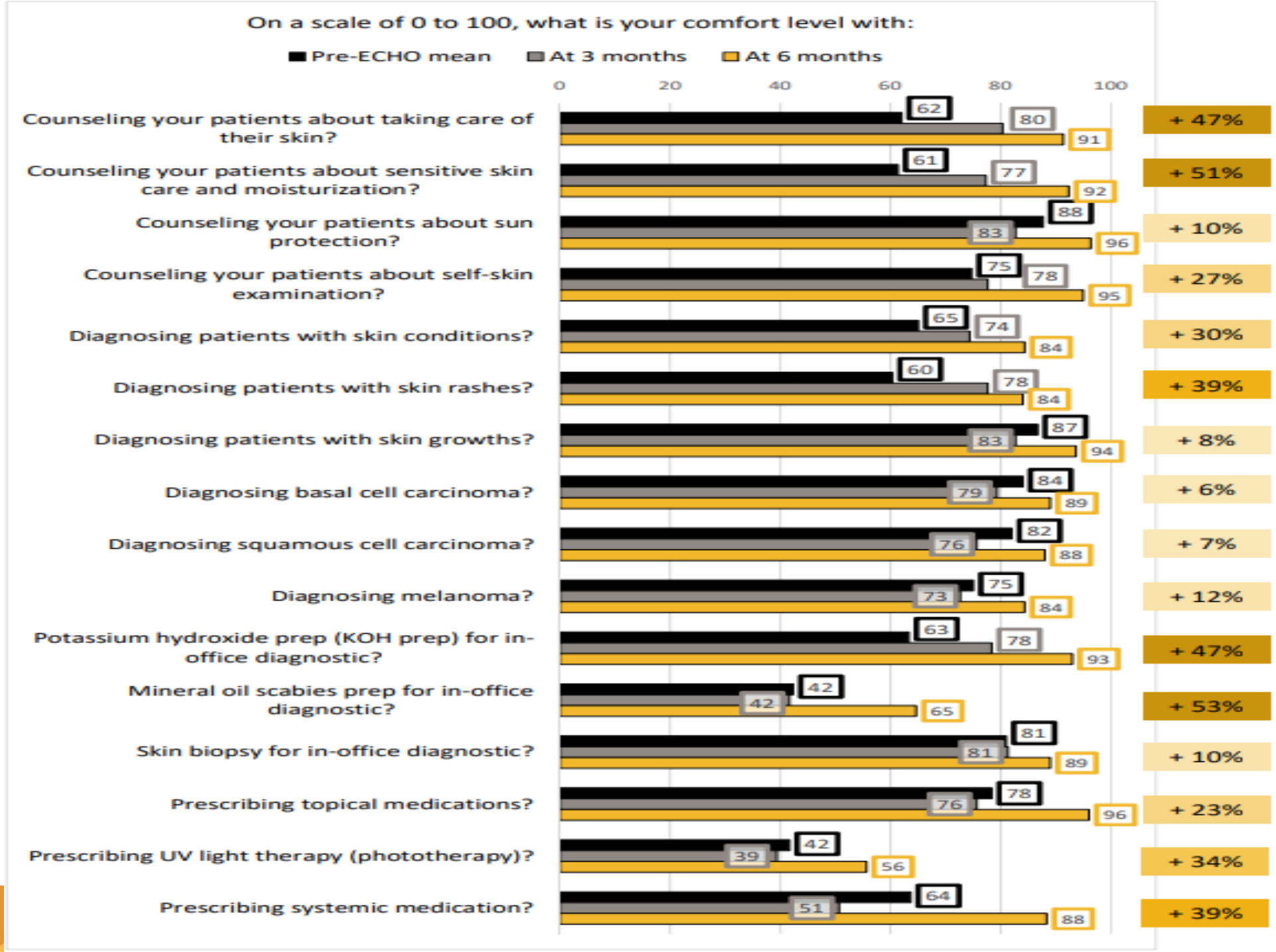
**“Thanks again for you efforts, it is helping rural patients get skin care.”**

Missouri Telehealth Network

Project ECHO®

# Derm ECHO – Self-Efficacy Surveys

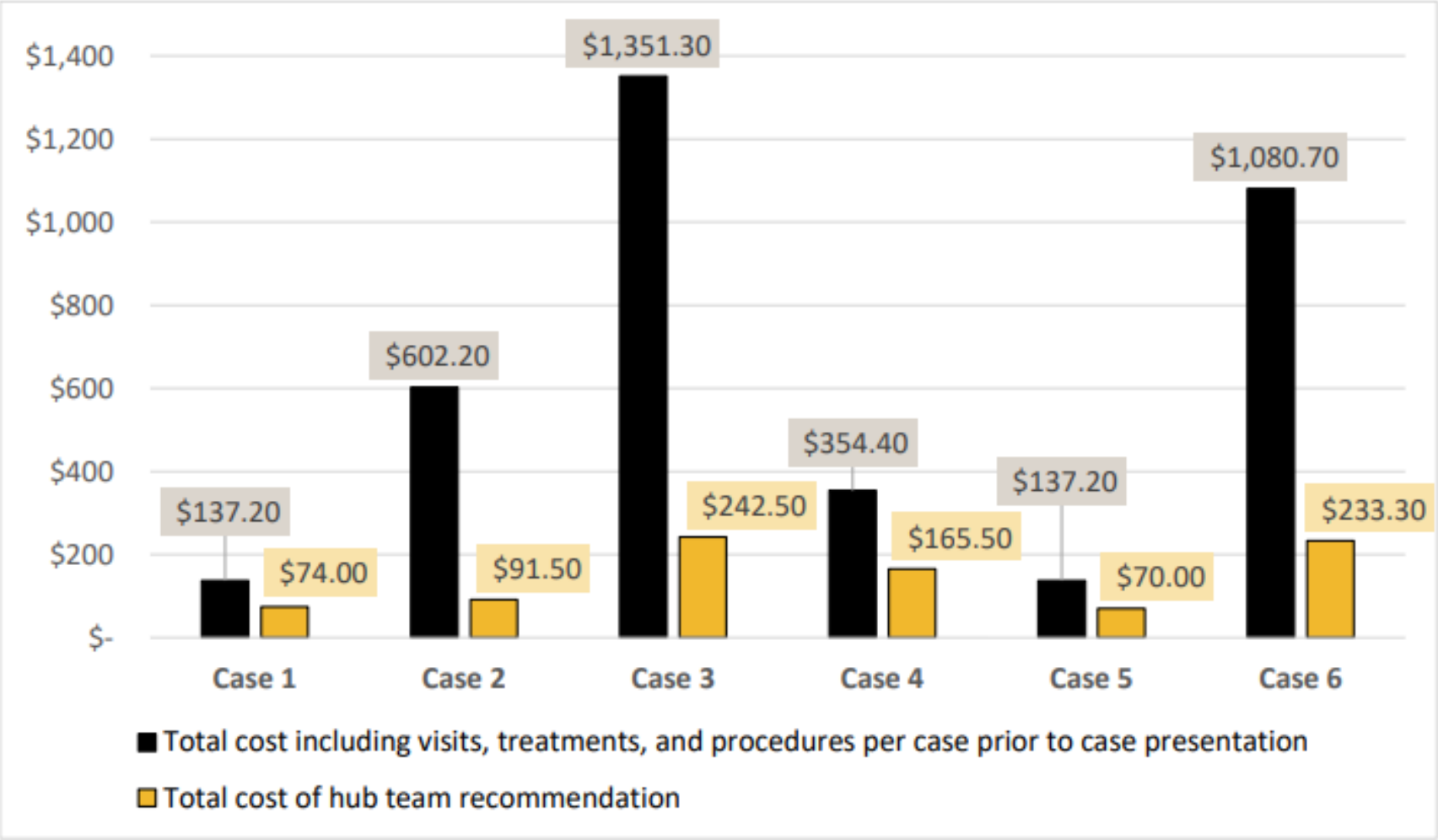
- Theoretical framework: Bandura's behavioral change and self-efficacy.
- Sliding scale: 0 (no confidence) - 100 (high confidence).


On a scale of 0 to 100, what is your comfort level with:
Pre-ECHO mean
At 3 months
At 6 months
0
20
40
60
80
100
Counseling your patients about taking care of their skin?
62
80
91
+ 47%
Counseling your patients about sensitive skin care and moisturization?
61
77
92
+ 51%
Counseling your patients about sun protection?
88
83
96
+ 10%
Counseling your patients about self-skin examination?
75
78
95
+ 27%
Diagnosing patients with skin conditions?
65
74
84
+ 30%
Diagnosing patients with skin rashes?
60
78
84
+ 39%
Diagnosing patients with skin growths?
87
83
94
+ 8%
Diagnosing basal cell carcinoma?
84
79
89
+ 6%
Diagnosing squamous cell carcinoma?
82
76
88
+ 7%
Diagnosing melanoma?
75
73
84
+ 12%
Potassium hydroxide prep (KOH prep) for in-office diagnostic?
63
78
93
+ 47%
Mineral oil scabies prep for in-office diagnostic?
42
42
65
+ 53%
Skin biopsy for in-office diagnostic?
81
81
89
+ 10%
Prescribing topical medications?
78
76
96
+ 23%
Prescribing UV light therapy (phototherapy)?
42
39
56
+ 34%
Prescribing systemic medication?
64
51
88
+ 39%

# Derm ECHO – Cost Analysis

- Convenience sample of 6 de-identified cases.
- Physician fee schedule from CMS used to calculate the cost.
- Goodrx.com used to calculate mediation costs.
- Analyzed the total cost of service pre-ECHO and compared to Derm ECHO recommendations.

# Derm ECHO – Cost Analysis



# Dermatology ECHO Model

## Increases

- Access to dermatology expertise;
- PCPs' self efficacy in basic dermatology;
- Respect for breadth and seriousness of skin diseases;
- Credibility of all dermatologists;
- Referrals for serious skin disease;
- Collaborative relationships b/t derms and PCPs.

## Decreases

- Costs of meds, labs, etc. from misdiagnosis of skin disease;
- Unnecessary deaths from melanoma;
- Patients suffering from skin diseases;
- Unnecessary office visits for patients with straightforward skin diseases.

# Positive Unintended Consequences

## Bringing Joy to Our Professional Lives

# Derm ECHO Benefits Dermatology Hub Team!

- Increases sense of purpose and joy:
  - ability to make a big difference in a short time.
- Supports % of base salaries for derm faculty;
- Supports learning through teaching and learning from each other;
- May help to decrease burnout;
- Improves reputation of academic dermatology department – out in community.

# Derm ECHO – Hub Team Survey

- 7 Hub team members completed the survey.
- 5 have been with Derm ECHO since the beginning of the project, and 2 joined later.
- The range of length of practice: 1 – 30 years; mean 12.7.

# Derm ECHO – Hub Team Survey

What do you enjoy most about serving on the Derm ECHO Hub team?

Learning myself from great cases, the **collegiality**, getting the opportunity to teach at a different level than I'm used to (residents, students) and to watch the participants grow in their dermatology knowledge.

**Collegiality**

**Sharing knowledge** with primary care providers across the state.

Enjoy **case-based discussion** with both the primary care providers as well as other dermatologists on the hub team - interesting to see our different and nuanced treatment approaches to common problems.

**Collaborating** with primary care physicians, providing knowledge to help them appropriately manage skin disease when their patients may not otherwise have had access to our services. I do feel that I am improving skin disease-specific outcomes for the citizens of Missouri.

I enjoy seeing them and find it gratifying because the PCPs are challenged with being able to **help manage** very easy to very difficult **patients**.

The ability to share my expertise with PCPs in underserved areas who are caring for patients who need our specialty knowledge.
I also love the **collegiality** we share with healthcare providers from all over the state.
Finally, I always learn something new from our junior faculty who participate.
Derm ECHO is the most rewarding professional activity I do every week.

# CME Surveys

In order to get CME, the participant must complete a short online survey after each ECHO session.

2 very useful outcomes of these surveys:

1. Suggestions for curriculum topics.
2. Comments from the providers.

**“You guys are my lifeline.”** **“I thought I was the only one…”**

**“We changed our practice based on the derm ECHOs […] and A couple of weeks ago found an “ugly duckling,” turned out to be early melanoma. I just thought I’d say thanks!”**

# Thank You

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*University of Missouri Health*

# High Risk Cutaneous Squamous Cell Carcinoma

## The Potential Role of Teledermatology and the Dermatology ECHO Program in Improving Patient Care and Outcomes

Emily Hoffman Smith, MD
Assistant Professor of Dermatology and Dermatopathology
Department of Dermatology
University of Missouri, Ellis Fischel Cancer Center

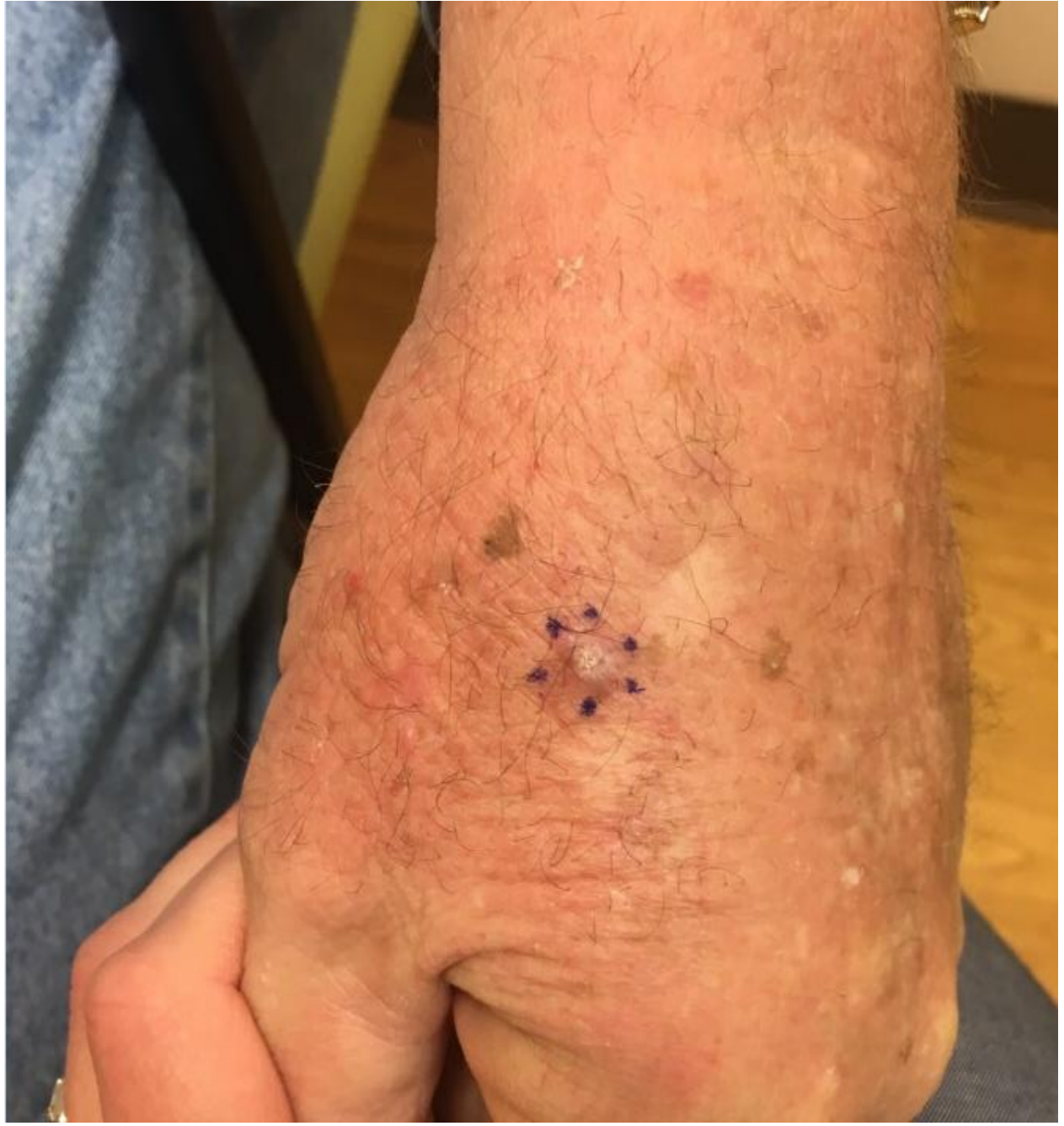
# Disclosures

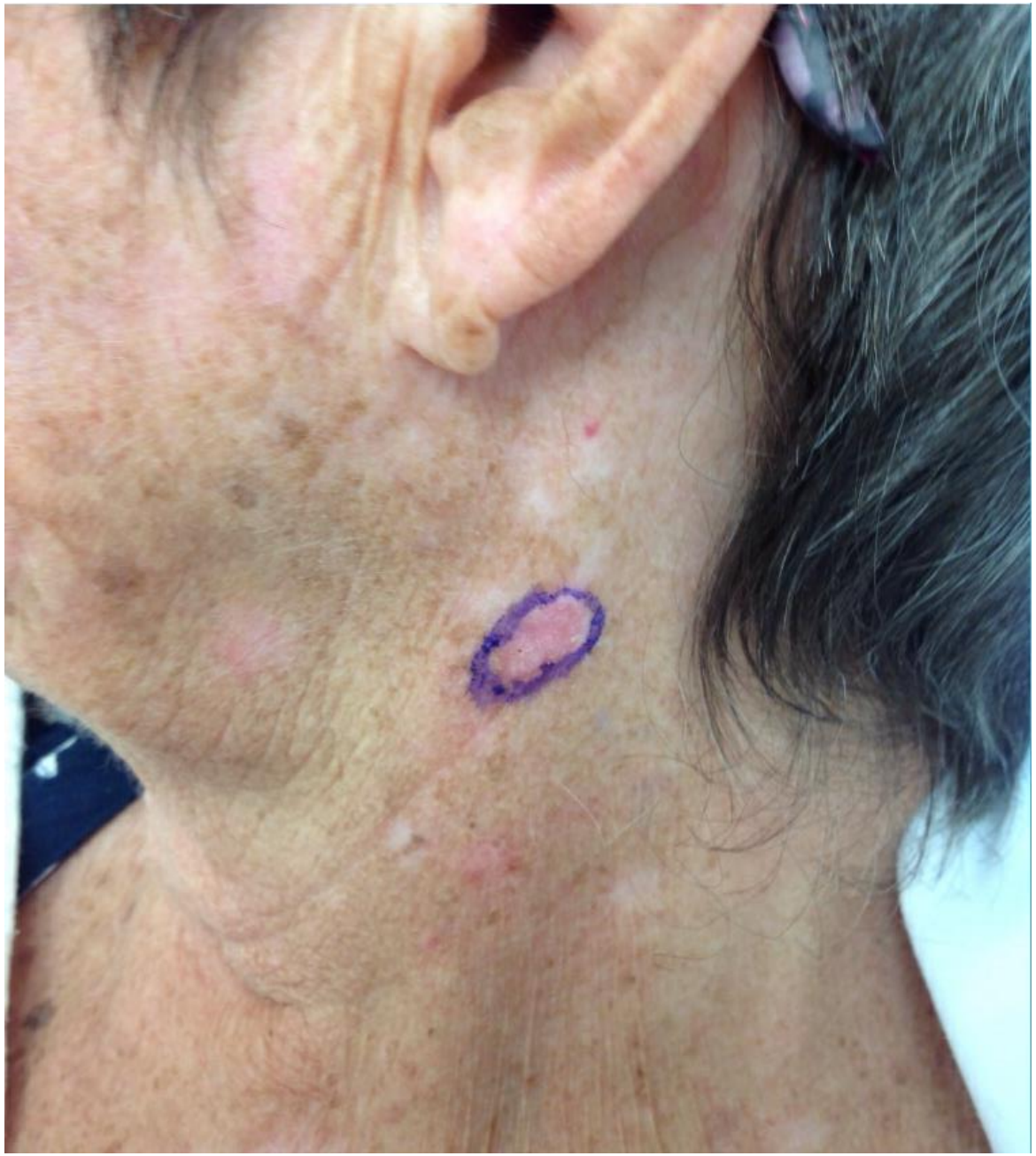
I have no financial conflicts of interests to declare.

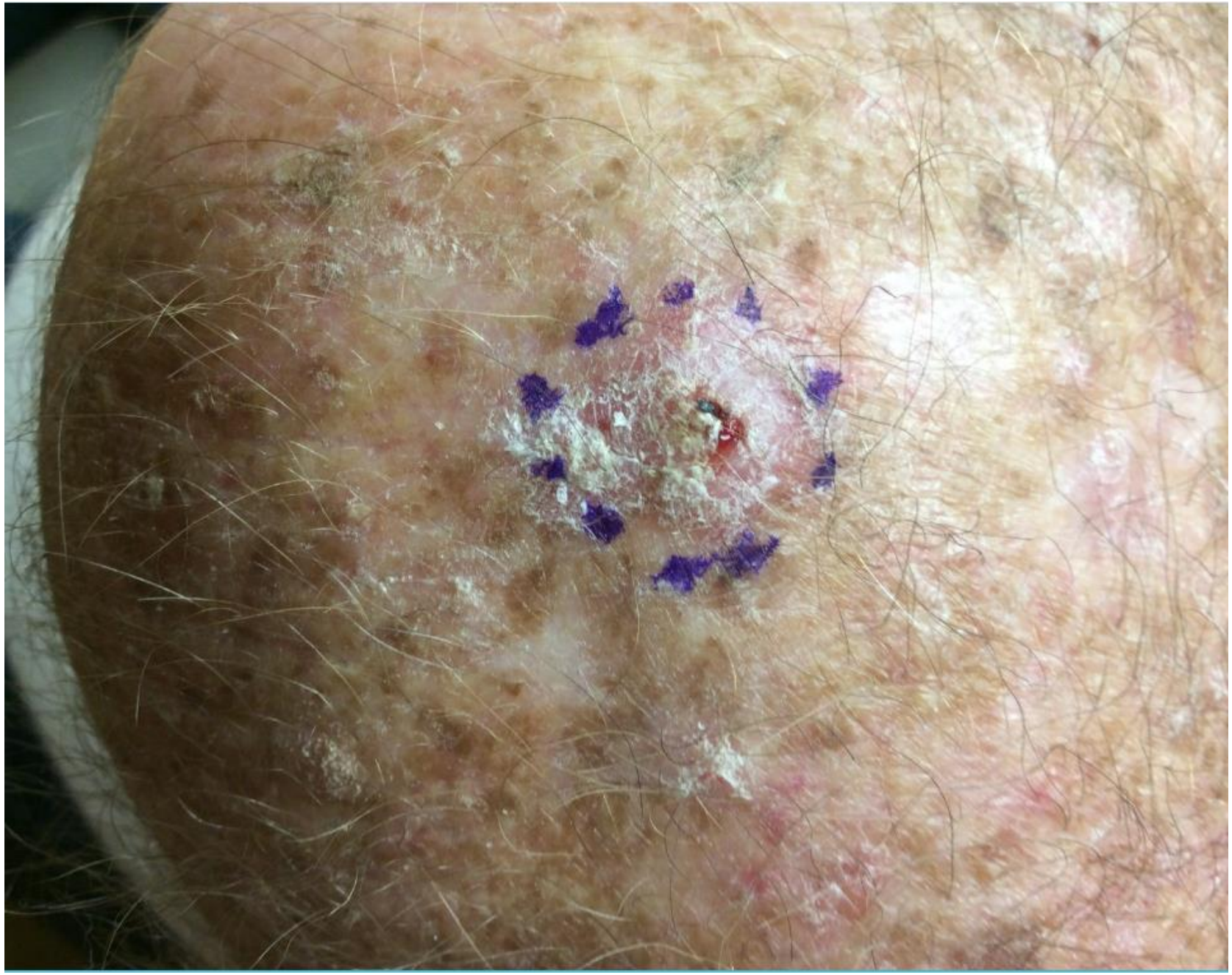
# Overview

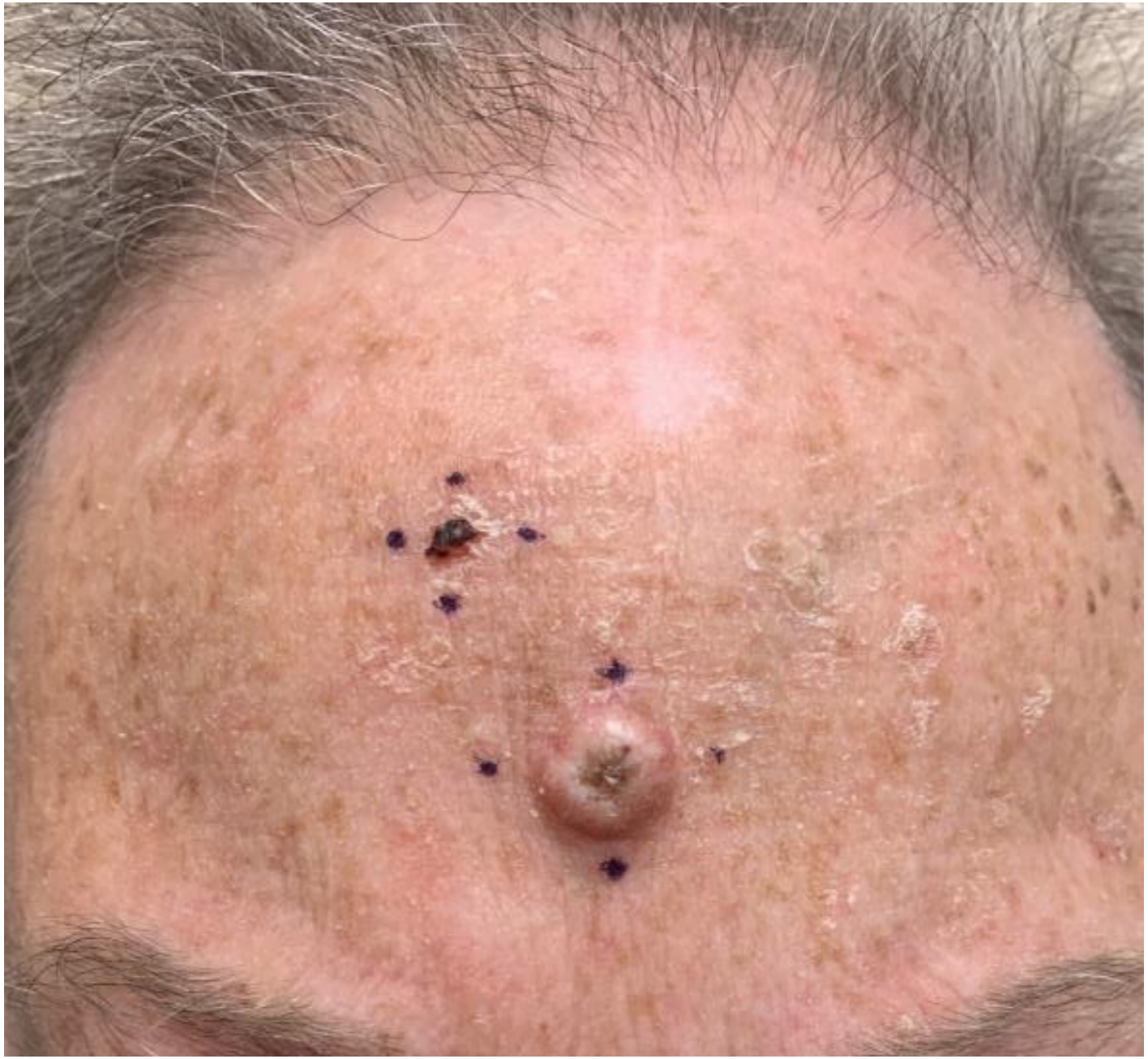
## High-risk cutaneous squamous cell carcinoma (cSCC)

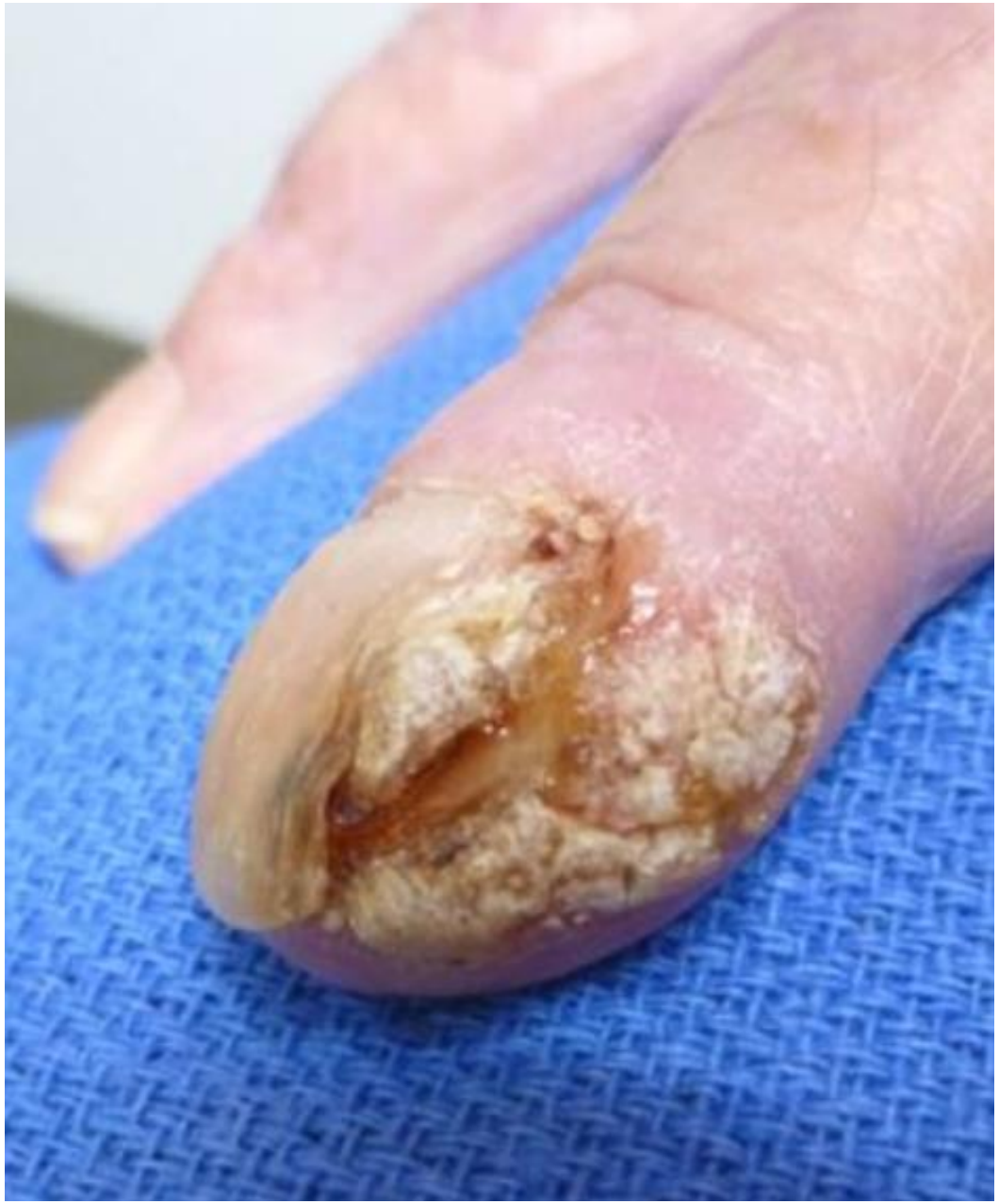
- Background: what is the current state of knowledge?
- How do we identify high-risk tumors?
- Shifting care models and treatment algorithms.
- The role of teledermatology and the ECHO platform.

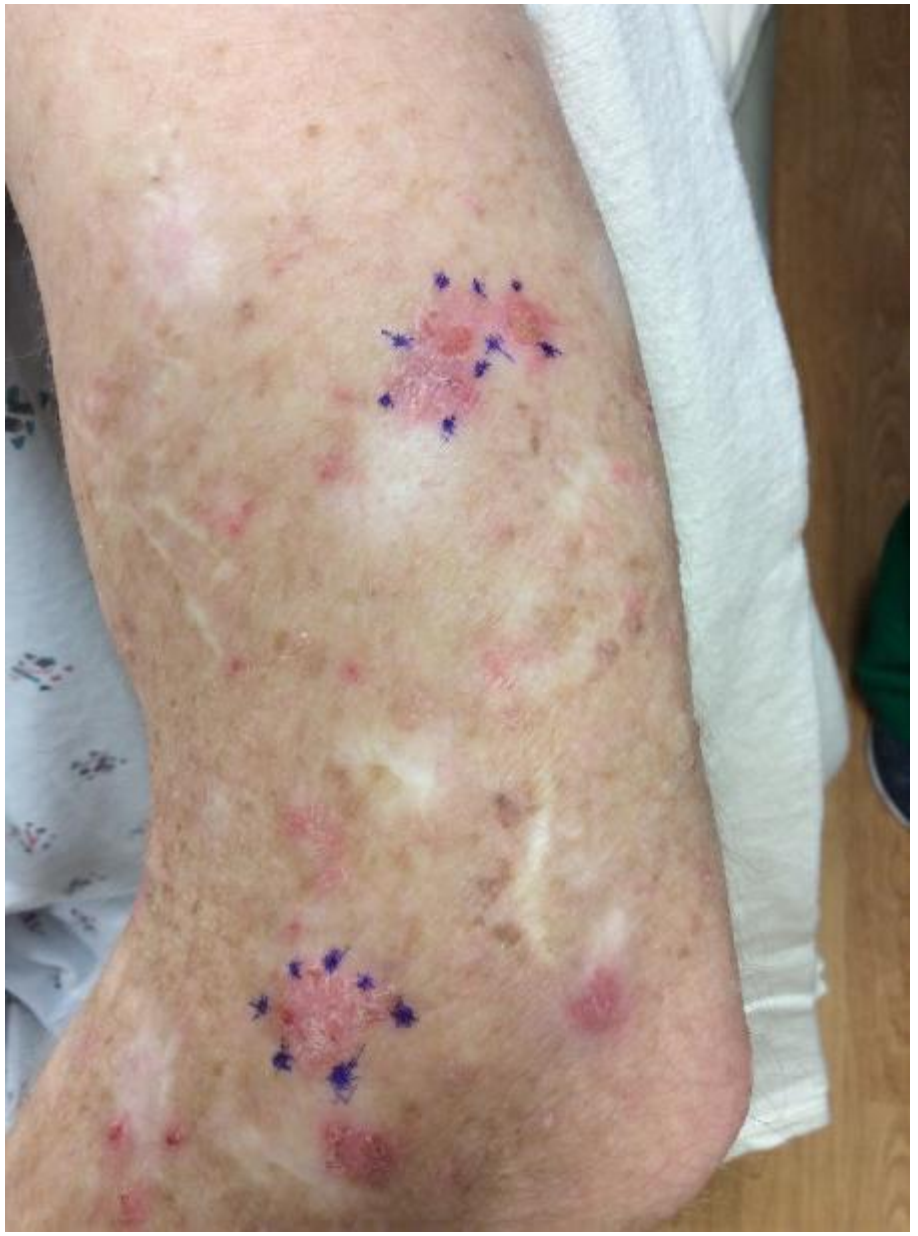


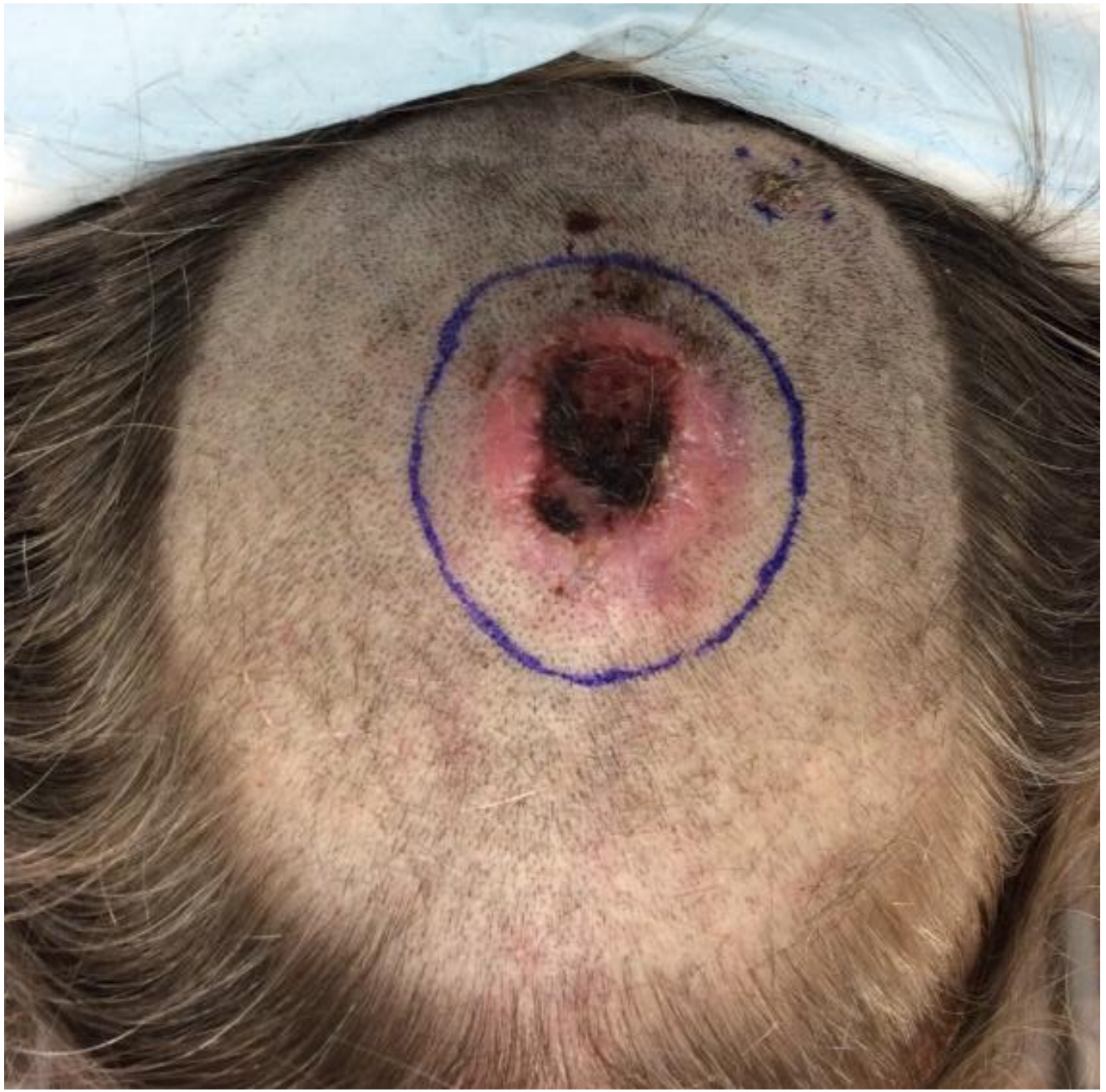


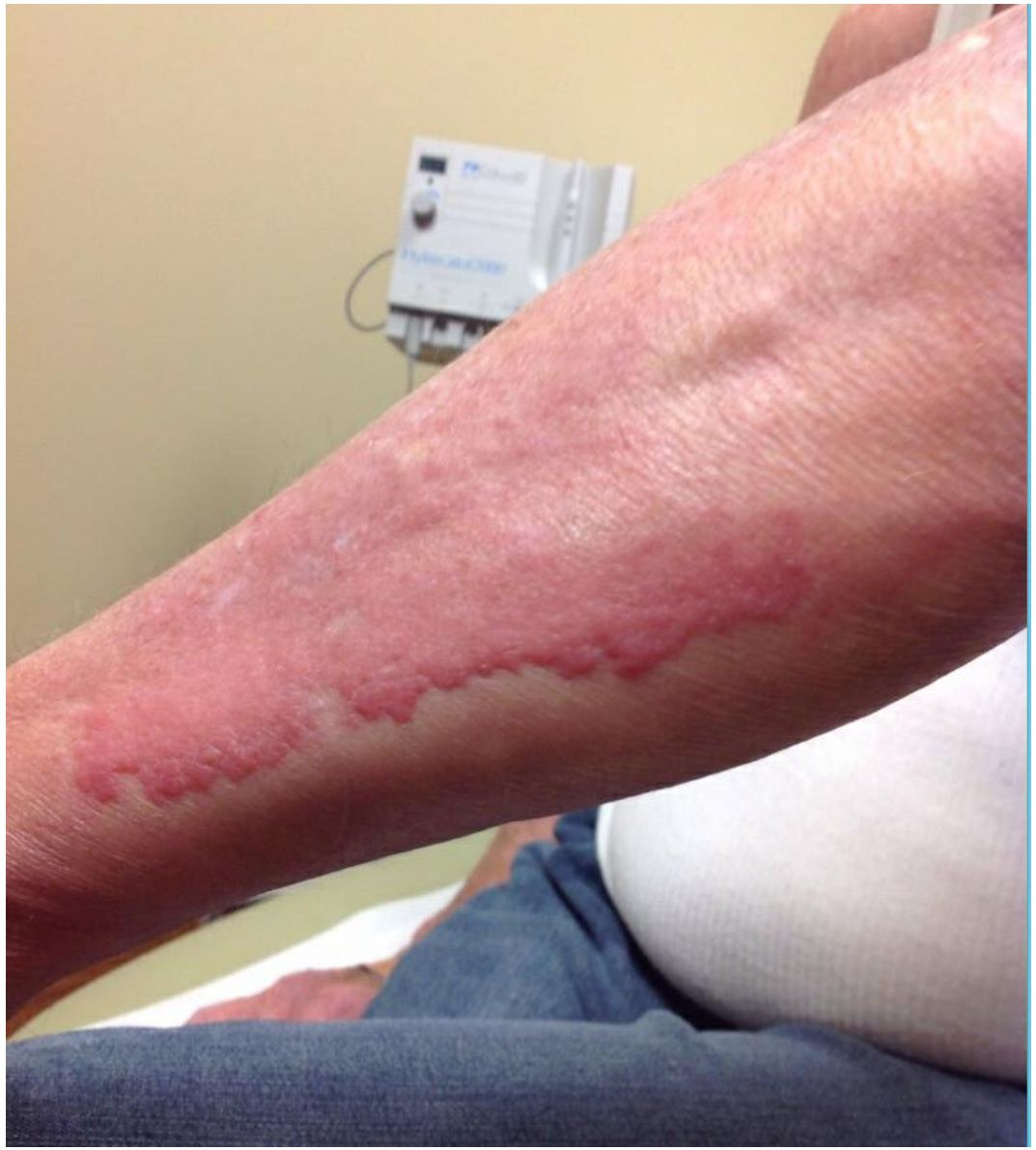


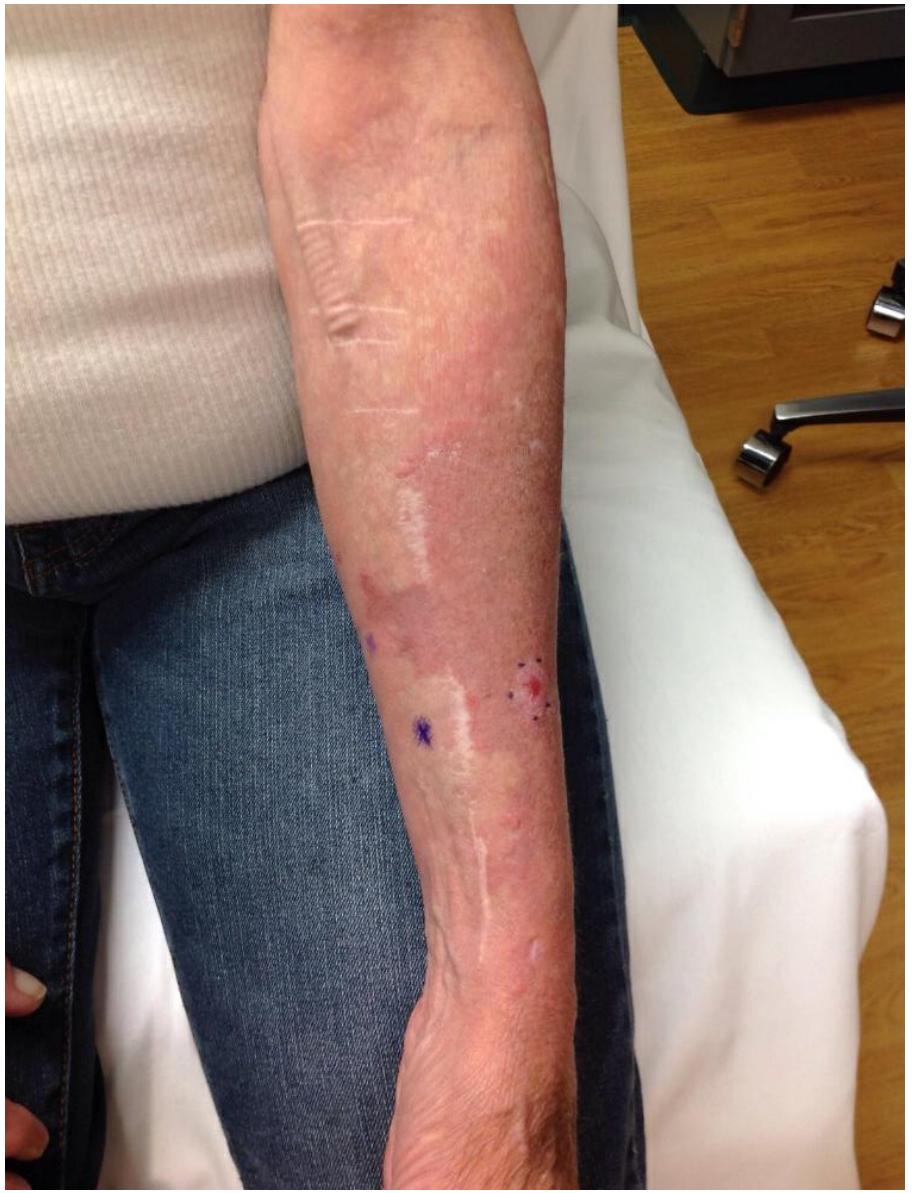






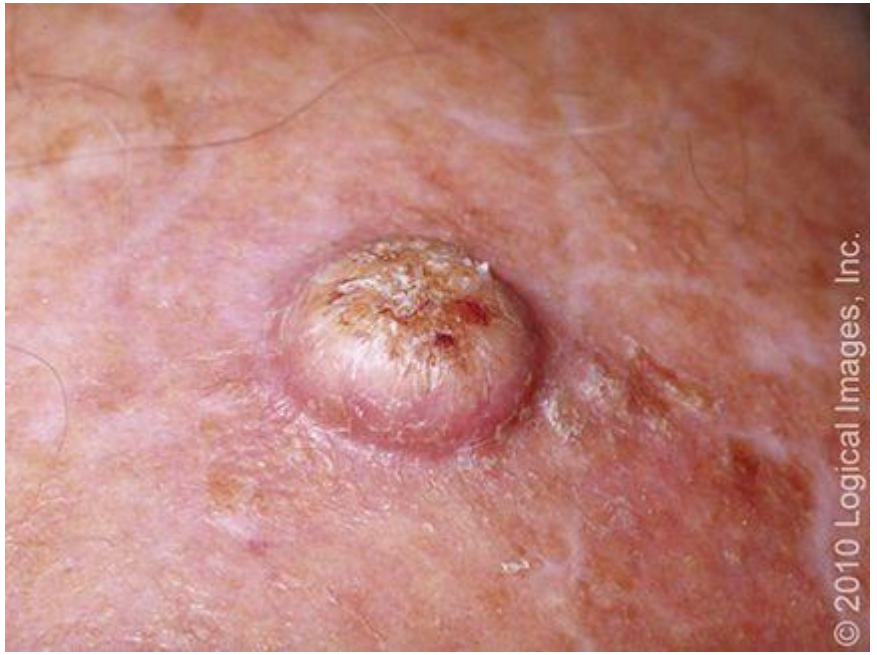






# Cutaneous Squamous Cell Carcinoma (cSCC)

- The second most common human cancer:
  - Basal cell carcinoma→most common.
  - Melanoma→5$^{th}$ most common.
- Localized disease is curable with surgery:
  - In up to 5% of cases, locoregional or distant metastases develop.
  - Up to approximately 8000 deaths annually.
    - = deaths from melanoma!




Rogers, HW et al. JAMA Dermatol. 2015;151(10):1081

# Identification and Management of High-Risk cSCC

- Who?
  - Primary Care Physicians
  - Dermatologists
  - Oncologists
  - Head and Neck Surgeons
  - Plastic Surgeons
  - Oncologists
  - Radiation Oncologists
  - Dermatopathologists
  - Surgical Pathologists
- What?
  - Do we have defined criteria for high-risk tumors?
- When?
  - Clinical diagnosis v. pathologic diagnosis v. other.
- Where?
  - Local v. tertiary care institution.

Why?
Identification and aggressive management of high- risk tumors improves outcomes.

# Step One:

Identify high-risk tumors.

# Traditional Factors Associated with Risk for Recurrence/Metastasis in cSCC

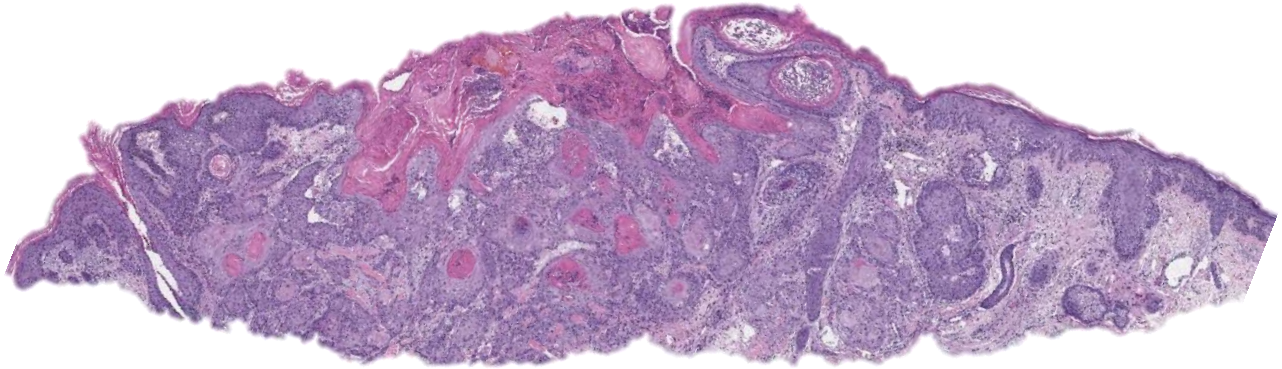
- **Tumor factors**
  - Size > or equal to 2cm
  - Location
    - Lip, ear, anogenital
    - Chronic wound/scar
    - Irradiated skin
  - Depth > 6mm
  - Recurrent tumor
  - Poorly differentiated histology
  - Perineural invasion (>0.1mm)
- **Host factors**
  - CLL/SLL
  - Solid organ transplant

Ross AS, Schmults CD. Dermatol Surg 2006; 32:1309.

# The Pathology Report

## High risk features

- **Degree of differentiation**
  - Poorly differentiated tumors
  - Variable interpretation across pathologists/institutions
- **Histologic subtype**
  - Desmoplastic/infiltrative, sarcomatoid/metaplastic
  - Single cell infiltration
  - Variable interpretation across pathologists/institutions
- **Depth of invasion**
  - >6mm
- **Perineural invasion**
  - >0.1mm or below the dermis



*Unfortunately, not all biopsies are sufficient to evaluate all components*

# Current Staging Models

## Atttempting to piece it all together

**Table II.** Summary of staging systems for cutaneous squamous cell carcinoma

| 2010 Summary of the 7th edition AJCC staging for cutaneous squamous cell carcinoma | | 2017 Summary of the 8th edition AJCC staging for cutaneous squamous cell carcinoma | | 2013 Brigham and Women's Hospital T staging for cutaneous squamous cell carcinoma | |
|---|---|---|---|---|---|
| Stage | Definition | Stage | Definition | Stage | Definition |
| T0 | No evidence of primary tumor | T1 | Tumor <2 cm in greatest dimension | T0 | In situ SCC |
| Tis | Carcinoma in situ | T2 | Tumor ≥2 cm, but <4 cm in greatest dimension | T1 | 0 risk factors* |
| T1 | Tumor ≤2 cm in greatest dimension with <2 high-risk features* | T3 | Tumor ≥4 cm in greatest dimension or minor bone erosion or perineural invasion or deep invasion† | T2a | 1 risk factor* |
| T2 | Tumor >2 cm in greatest dimension with or without one additional high-risk feature, or any size with ≥2 high-risk features* | T4a | Tumor with gross cortical bone/marrow invasion | T2b | 2-3 risk factors* |
| T3 | Tumor with invasion of maxilla, mandible, orbit, or temporal bone | T4b | Tumor with skull base invasion and/or skull base foramen involvement | T3 | 4 risk factors* or bone invasion |
| T4 | Tumor with invasion of skeleton (axial or appendicular) or perineural invasion of skull base | | | | |

*AJCC*, American Joint Committee on Cancer; *SCC*, squamous cell carcinoma.
Adapted from Edge et al,[9] Amin et al,[10] and Karia et al.[11]
*See Table I for AJCC 7th edition and Brigham and Women's Hospital risk factors.
†Deep invasion defined as invasion beyond the subcutaneous fat or >6 mm (as measured from the granular layer of adjacent normal epidermis to the base of the tumor); perineural invasion is defined as tumor cells within the nerve sheath of a nerve lying deeper than the dermis or measuring ≥0.1 mm in caliber or presenting with clinical or radiographic involvement of named nerves without skull base invasion or transgression.

# Current Staging Models
## Breaking It Down

- **AJCC 8th Edition**
  - Deep invasion=beyond SQ fat or >6mm
  - Perineural invasion=tumor cells in nerve sheath deeper than dermis or >0.1mm in caliber or clinical or radiographic involvement of named nerves without skull base invasion or transgression
- **BWH high risk factors**
  - Tumor diameter >2cm
  - Poorly differentiated histology
  - Perineural invasion > or = 0.1mm in caliber
  - Tumor invasion beyond subcutaneous fat
  - Bone invasion upgrades to stage T3

**Table 1. Summary of the BWH and AJCC 8 Tumor Classification Systems**

| Tumor Staging System | Definition |
|---|---|
| **AJCC 8th Edition** | |
| T1 | <2 cm in greatest diameter |
| T2 | ≥2 cm, but <4 cm in greatest diameter |
| T3 | Tumor ≥4 cm in greatest diameter or minor bone invasion or perineural invasion or deep invasion[a] |
| T4a | Tumor with gross cortical bone and/or marrow invasion |
| T4b | Tumor with skull bone invasion and/or skull base foramen involvement |
| **BWH** | |
| T1 | 0 High-risk factors[b] |
| T2a | 1 High-risk factor |
| T2b | 2-3 High-risk factors |
| T3 | 4 High-risk factors or bone invasion |

Ruiz, ES et al. JAMA Dermatol. Published online April 10, 2019.

# AJCC 8th Edition v. BWH System

- AJCC 8th edition
  - Limited to head and neck tumor.
  - T2 and T3 appear to have similar outcomes, likely due to exclusion of histologic differentiation.
  - Difficulty in predicting those who might benefit from SLNbx.
- BWH aims to prognostically stratify T2 tumors.
  - Can be used for any body site.
  - BWH T2b/T3 tumors have a 30% risk for sentinel lymph node positivity.
  - BWH model has high specificity and positive predictive value for identifying cases at risk for metastasis or death (captures up to 70% of metastases and 80% of deaths).

**BWH High-risk features**

- Tumor diameter >2cm
- Poorly differentiated histology
- Perineural invasion > or = 0.1mm in caliber
- Tumor invasion beyond subcutaneous fat
- Bone invasion upgrades to stage T3

**Table 4. Sensitivity, Specificity, Positive Predictive Value, and Negative Predictive Value of BWH and AJCC 8 Tumor Classification High Stages (AJCC 8, T3/T4 and BWH, T2b/T3) to Detect NM/DSD**

| Variable | AJCC 8 | BWH | *P* Value[a] |
|---|---|---|---|
| Sensitivity | 0.78 | 0.73 | .20 |
| Specificity | 0.85 | 0.93 | <.001 |
| Positive predictive value | 0.17 | 0.30 | NA[b] |
| Negative predictive value | 0.99 | 0.99 | NA[b] |

Abbreviations: AJCC, American Joint Committee on Cancer; BWH, Brigham and Women's Hospital; DSD, disease specific death; NM, nodal metastasis; T, tumor stage from TNM staging system.

[a] *P* values based on the McNemar test.

[b] *P* values cannot be estimated for positive and negative predictive values because they are based on prevalence of disease.

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Ruiz, ES et al. JAMA Dermatol. Published online April 10, 2019.

# Nodal Staging

- All patients with suspected cSCC warrant lymph node examination
- Non-palpable disease→role for imaging?
  - Ultrasound v. CT v. PET/CT.
  - 108 patients with BWH T2b/T3 tumors, imaged patients more frequently received adjuvant XRT and therapy, and had a lower risk of nodal recurrence and metastasis.
  - Early identification and treatment of nodal disease may improve outcomes.
- Non-palpable disease→role for sentinel lymph node biopsy?
  - More data needed to determine if early detection of nodal disease impacts survival though some studies have shown benefit
  - Reasonable to consider in higher risk tumors (BWH T2b and greater).
- We don't know outcomes data comparing SLNB over CT/US.
- Palpable disease→nodal dissection +/- RT and/or systemic therapy.

Fox et al. J Am Acad Dermatol https://doi.org/10.1016/ j.jaad.2018.09.006

# Incorporation of Biomarkers for Risk Stratification

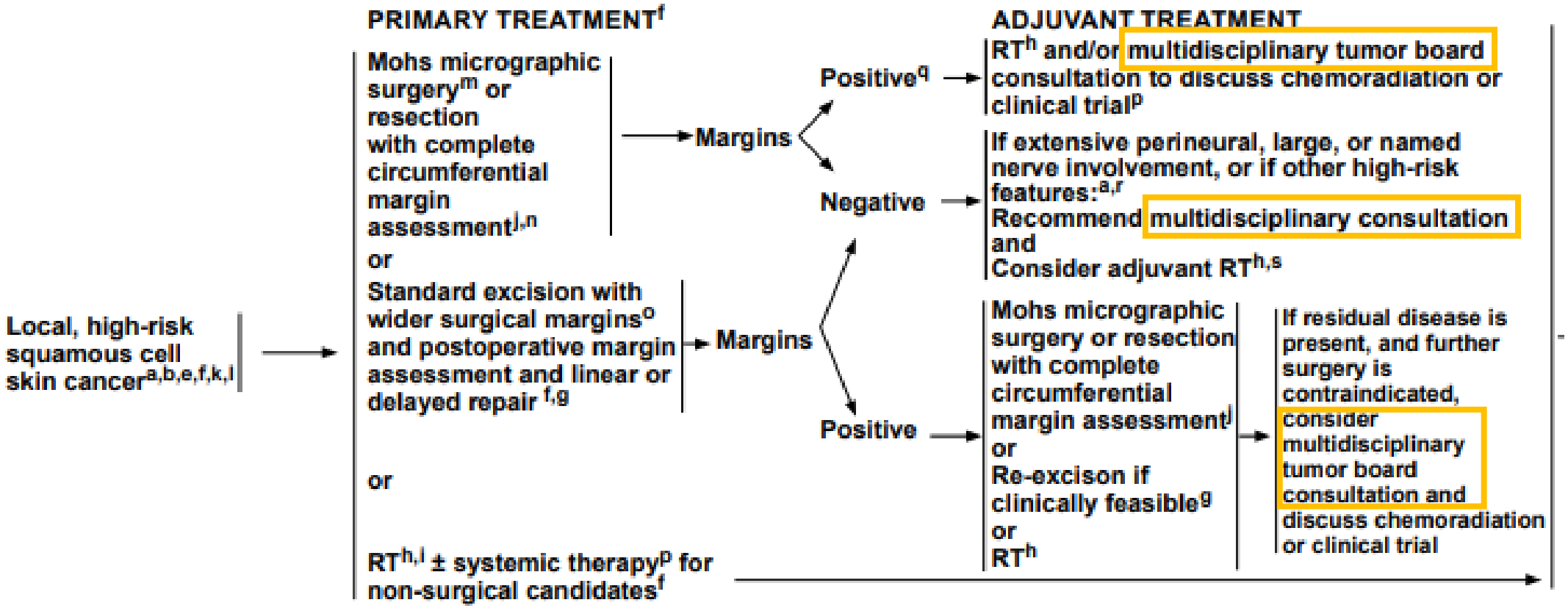
## Future Directions

- May provide additional information guiding composite definition of high-risk tumors.
- PDL1, INPP5A, p300, TERT promoter, CD133, nuclear morphometry, EGFRs.
- Gene expression profiling?

# Step Two:

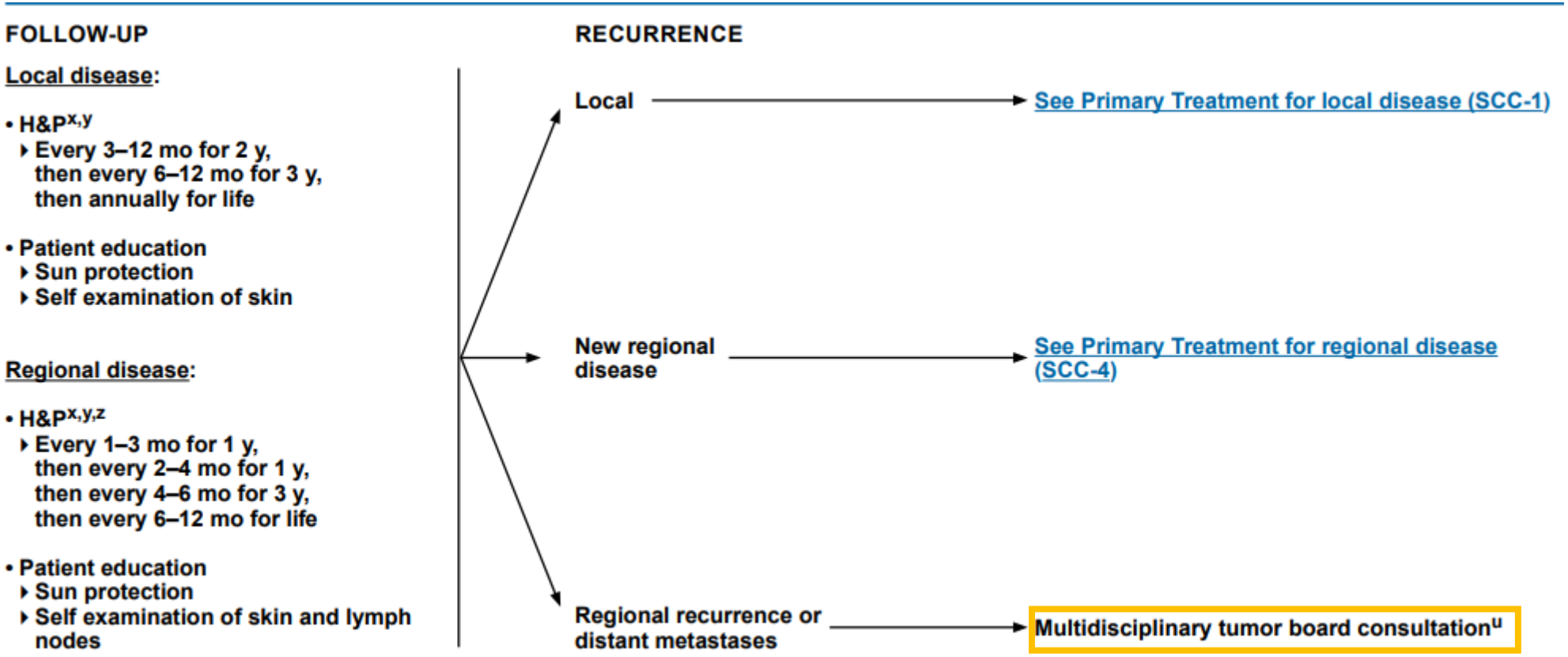
Management of high-risk tumors.

# Primary Management of High-Risk cSCC




NCCN Guidelines. Squamous cell skin cancer. Version 02.2019. Accessed 5/9/2019

# Management of Recurrence Metastasis



# Systemic Options

- Previously limited, all off-label
  - Cytotoxic chemotherapy
    - Cisplatin, Carboplatin, 5-FU
  - Targeted chemotherapy
    - Epidermal growth factor receptor inhibitors
      - Cetuximab
      - Gefitinib, erlotinib, panitumumab
  - Immunotherapy→cSCC has high TMB (UV signature)
    - Nivolumab and pembrolizumab

# Cemiplimab

ORIGINAL ARTICLE

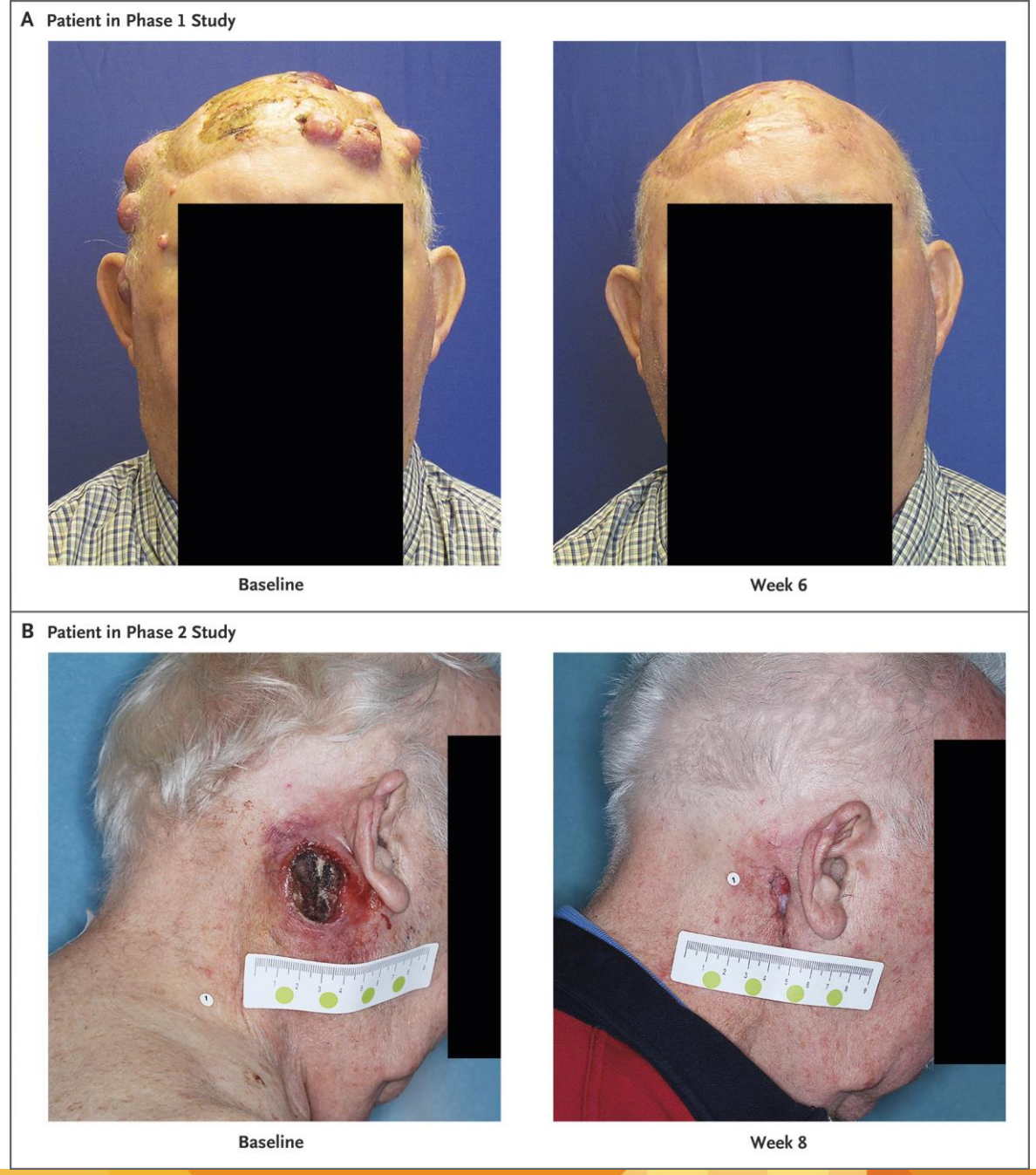
## PD-1 Blockade with Cemiplimab in Advanced Cutaneous Squamous-Cell Carcinoma

Michael R. Migden, M.D., Danny Rischin, M.D., Chrysalyne D. Schmults, M.D., Alexander Guminski, M.D., Ph.D., Axel Hauschild, M.D., Karl D. Lewis, M.D., Christine H. Chung, M.D., Leonel Hernandez-Aya, M.D., Annette M. Lim, M.D., Ph.D., Anne Lynn S. Chang, M.D., Guilherme Rabinowits, M.D., Alesha A. Thai, M.D., et al.

September 2018 approval for metastatic or locally advanced cSCC for which curative surgery or radiation therapy is not feasible.

[u]Clinical trials (eg, immune checkpoint inhibitors) are recommended for locally advanced and metastatic cutaneous squamous cell carcinoma. Cemiplimab may be considered as a systemic therapy option for patients with locally advanced or metastatic cutaneous squamous cell carcinoma, who are not candidates for curative surgery or curative radiation therapy; recently published phase I-II

Migden MR, et al. N Engl J Med 2018; 379:341-351
NCCN Guidelines. Squamous cell skin cancer. Version 02.2019. Accessed 5/9/2019




Migden MR, et al. N Engl J Med 2018; 379:341-351

# Tumor Response

- Overall response in 50%.
- Durable response exceeding 6 months in 57% of responders.

**Table 2. Tumor Response to Cemiplimab, as Assessed by Independent Central Review.***

| Outcome | Expansion Cohorts of the Phase 1 Study (N=26) | Metastatic-Disease Cohort of the Phase 2 Study (N=59) |
|---|---|---|
| Best overall response — no. (%)† | | |
| Complete response | 0 | 4 (7) |
| Partial response | 13 (50) | 24 (41) |
| Stable disease | 6 (23) | 9 (15) |
| Progressive disease | 3 (12) | 11 (19) |
| Could not be evaluated‡ | 3 (12) | 7 (12) |
| Nontarget lesions only§ | 1 (4) | 4 (7) |
| Objective response — % (95% CI) | 50 (30–70) | 47 (34–61) |
| Durable disease control — % (95% CI) | 65 (44–83) | 61 (47–74) |
| Median observed time to response (range) — mo¶ | 2.3 (1.7–7.3) | 1.9 (1.7–6.0) |

* The expansion cohorts of the phase 1 study involved patients with metastatic or locally advanced cutaneous squamous-cell carcinoma. The metastatic-disease cohort of the phase 2 study involved patients with metastatic cutaneous squamous-cell carcinoma.
† To determine the tumor response, results of whole-body imaging were evaluated according to Response Evaluation Criteria in Solid Tumors (RECIST), version 1.1. In the phase 2 study, digital medical photographs were evaluated according to protocol-specified composite response criteria.
‡ The data include patients who did not undergo imaging studies after the initiation of therapy or had imaging studies that could not be evaluated by independent central review.
§ The data include patients who had nontarget lesions only (i.e., lesions that could not be measured according to RECIST, version 1.1) and did not have disappearance of all lesions or unequivocal progression.
¶ The data are from patients who had a confirmed complete or partial response.

Migden MR, et al. N Engl J Med 2018; 379:341-351

# Immunotherapy Challenges

- Organ transplant patients
  - There appears to be a very real risk for graft rejection (10/19 patients in a systematic review).
  - Requires close consultation with transplant physicans
- Immune-related adverse events
  - Cemiplimab similar to other PD1 checkpoint inhibitors.

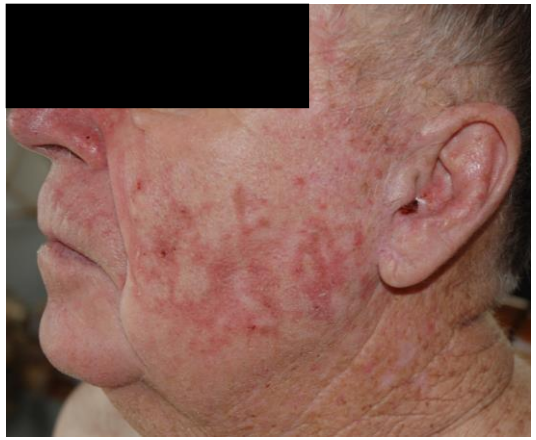
Hassan NA et al. *Journal of Clinical Oncology* 36, no. 5_suppl (February 10 2018) 41-41

# Prevention and Early Detection

## What More Can We Do?

# Chemoprophylaxis

- Topical 5-FU (+/- calcipotriene), imiquimod, photodynamic therapy
- Acitretin
- Niacinamide
- Sunscreen*





# Patient Education

- Self skin and lymph node examinations
- Signs and symptoms of cSCC and other skin cancers
  - EFGs
- Importance of photoprotection
  - Protective clothing, sun avoidance, sunscreen*
- Focus on high risk groups, immunosuppressed populations, patients with prior history of non-melanoma and melanoma skin cancer

# Provider Education

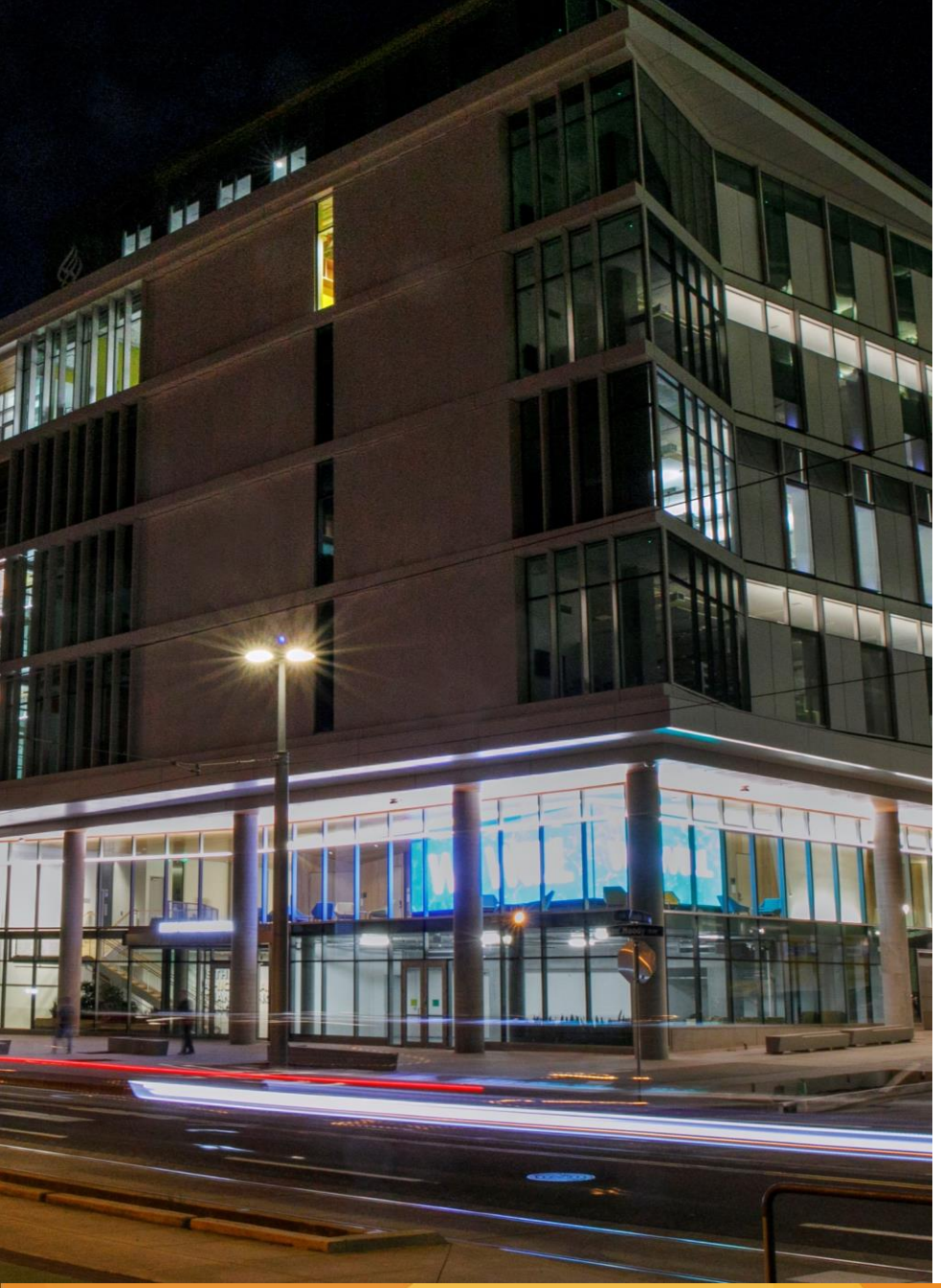
- **Facilitate early detection**
  - Transplant patients→transplant physicians
  - CLL/SLL patients→hematologists/oncologists
  - General population→primary care, dermatology
- **Early referral to dermatology** for counseling, education, and aggressive management of precursor lesions.
- Understanding need to **risk stratify cSCC patients at initial diagnosis**
- Know **when to refer** for multi-disciplinary care

# Importance of Multidisciplinary Care

- Emerging multidisciplinary care models across the country.
- Association of Community Cancer Centers education project on *Multidisciplinary Advanced Cutaneous Squamous Cell Carcinoma Care*.

# George Washington Cancer Center

- Academic Comprehensive Cancer Program accredited by American College of Surgeons Commission on Cancer (CoC).
- **Newly developed** cutaneous oncology program.
- Multidisciplinary team **led by dermatologic surgeons**.
- Focus on **personalized care**.
- **Ongoing clinical trials** in adjuvant therapy.

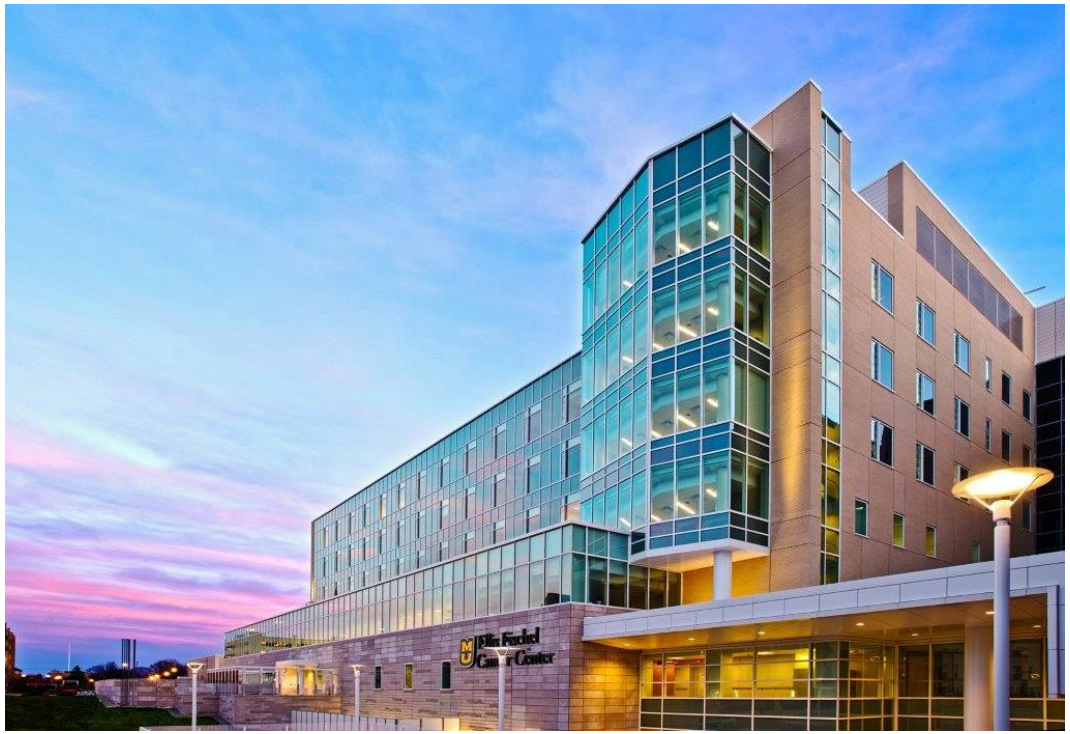


# Oregon Health Services University Knight Cancer Institute

- NCI-designated Comprehensive Cancer Center.
- Academic Comprehensive Cancer Program accredited by American College of Surgeons Commission on Cancer (CoC).
- Sees a **large volume** of high-risk cSCC patients.
- cSCC program **modeled after well-established melanoma program**.
- Expanding provider access via **virtual tumor boards**.
- Goal to increase access to clinical trials.

# University of Missouri-Ellis Fischel Cancer Center

- Certified member of MD Anderson Cancer Care Network.
- Academic Comprehensive Cancer Program accredited by American College of Surgeons Commission on Cancer (CoC).
- **Emerging multidisciplinary cutaneous oncology team** with a dedicated cutaneous oncology tumor board and board-certified dermatopathologists.
- Team involves social work, pharmacy, patient, and nurse navigators.
- **Teledermatology** and the **ECHO platform**.
- **Ongoing clinical trials** in biomarker assessment.



# Melanoma ECHO

- Integrated into Derm ECHO.
- Didactics every 3rd Friday of the month for 12 months.

| Date | Topic |
|---|---|
| 4/13/18 | Introduction to MFFH research project<br>Skin screening demo |
| 5/11/18 | Melanoma epidemiology, trends and risks |
| 6/8/18 | Melanoma diagnosis |
| 7/13/18 | Patient education |
| 8/10/18 | Melanoma staging and management |
| 9/14/18 | Melanoma systemic treatments |
| 10/12/18 | Dermatopathology of melanoma |
| 11/9/18 | Melanoma mimics |
| 12/14/18 | Pediatric melanoma |
| 1//11/19 | Non-cutaneous melanoma and melanoma in skin of color |
| 2/8/19 | Genetics of melanoma |

# Melanoma ECHO

- Implementation research focused on facilitators and barriers:
  - Of implementing high-risk surveys in primary care settings.
  - Screening high-risk patients for melanoma in primary care settings.
  - Collecting information on newly diagnosed melanomas.

# Melanoma ECHO

- 15 providers participated; 1 provider reported 13 melanomas from beginning of the project until January 2019.
- Providers continued to attend other Derm ECHO sessions as well.
- Data analysis is in progress.

# Using Technology to Improve Access and Quality of Care for cSCC Patients

- Teledermatology consultations.
- Virtual tumor boards as a means to improve access to high-level multidisciplinary care and state of the art treatment recommendations.
- ECHO platform.

# Take-Home Points

- With the availability of **new treatment options** for patients with advanced cSCC, particularly immunotherapy, there is an emerging trend toward algorithmic, while still individualized, care that is best facilitated in multi-disciplinary fashion.
- **Defined staging criteria** and **treatment recommendations** need to be **evaluated systematically.**
- Education on **identification of high-risk patients** is of utmost importance.
- Teledermatology and the ECHO platform can serve as a means to accomplish these goals!

# Thank You

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