
AAD ANNUAL MEETING
AEDV
highlights
SAN DIEGO
8-12 MARZO
#AEDVENAAD2024
AEDV
1909
ACADEMIA ESPAÑOLA
DE DERMATOLOGÍA
Y VENEREOLOGÍA

DERMATOLOGÍA ONCOLÓGICA Y CIRUGÍA

ACADEMIA ESPAÑOLA DE DERMATOLOGÍA Y VENEREOLOGÍA

ACADEMIA ESPAÑOLA DE DERMATOLOGÍA Y VENEREOLOGÍA

AAD ANNUAL MEETING AEDV highlights

SAN DIEGO 8-12 MARZO

Dermatología Oncológica y Cirugía

Enrique Rodríguez Lomba

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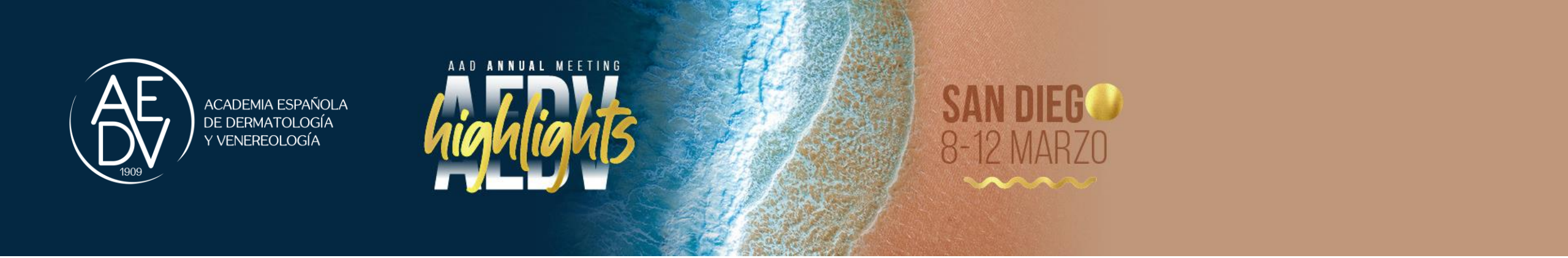
SaludMadrid Hospital General Universitario Gregorio Marañón

CLÍNICA DERMATOLÓGICA



NO TENGO CONFLICTOS DE INTERÉS

Update on cutaneous reactions to targeted and immune cancer therapy (Dra. Patel)

Targeted inhibitor	Generic drug names	Common CAEs
EGFR inhibitors	*Erlotinib, Gefitinib, Cetuximab, Pantitumumab*	Acneiform eruption, Paronychia
BRAF inhibitors	*Vemurafenib, Dabrafenib, Encorafenib*	Keratinocytic neoplasms, Keratosis pilaris, Erythema nodosum, Phototoxicity
Multikinase inhibitors	*Sorafenib, Sunitinib, Regorafenib, Pazopanib*	Hand foot skin reaction
MEK inhibitors	*Trametinib, Cobimetinib, Binimetinib*	Acneiform eruption, Paronychia
mTOR inhibitors	*Sirolimus, Everolimus, Temsirolimus, Ridaforolimus*	Acneiform eruption, Paronychia, Eczema
VEGFR inhibitors	*Pazopanib, Regorafenib, Lenvatinib, Motesanib*	Hand foot skin reaction
RET inhibitors	*Vandetanib, Cabozantinib*	Phototoxicity
Bcr-Abl TKIs	*Imatinib, Dasatanib, Nilotinib, Ponatinib, Bosutinib*	Periorbital edema, Pigment d/o, Scarring alopecia
PI3K inhibitors	*Idelalisib, Gedatolisib, Pilaralisib, Alpelisib, Duvelisib*	Eczema, Morbilliform, SCARs
FGFR inhibitors	*Infigratinib, Erdafitinib, Derazantinib, Pemigatinib, Futibatinib*	Xerosis, Xerostomia, Alopecia, Onycholysis, Paronychia, Palmoplantar erythrodysesthesia, Calcinosis cutis
Nectin-4 inhibitors	*Enfortumab vedotin*	Morbilliform drug, SCARs, TEC

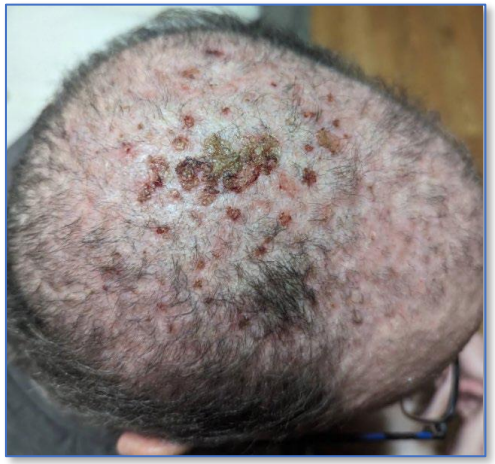
Update on cutaneous reactions to targeted and immune cancer therapy (Dra. Patel)

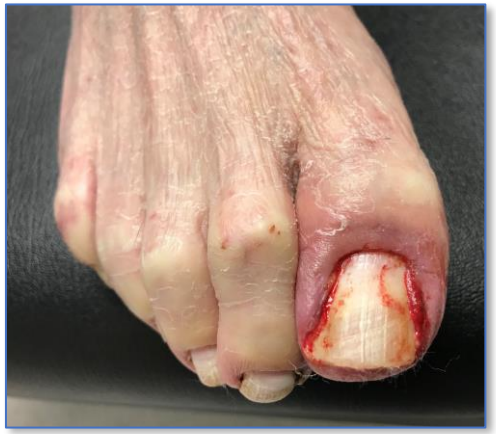
AAD ANNUAL MEETING AEDV highlights

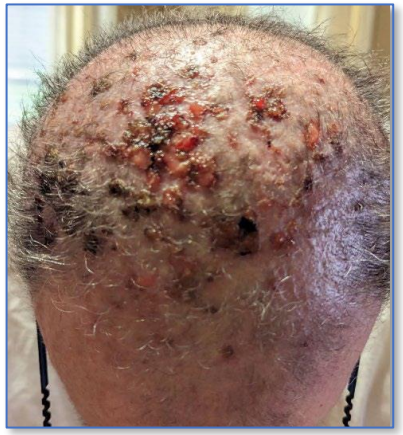
SAN DIEGO 8-12 MARZO

Casos refractarios

- **Erupción papulopustulosa 2º EGFR**
  - Cultivos: detección SAMR y guiar antibioterapia
  - Sobreinfeccion *S. aureus*: AB prolongado y retinoides VO -> emplear antisepticos
  - Dupilumab (influencia via Th2 pendiente publicación)
- **Reacción mano-pie**
  - Dupilumab y ruxolitinib 1.5% tópico
- **Paroniquia:** fenolización de la matriz
- **Dermatosis pustulosa erosiva CC:** anti IL36?







Update on cutaneous reactions to targeted and immune cancer therapy (Dra. Heberton)

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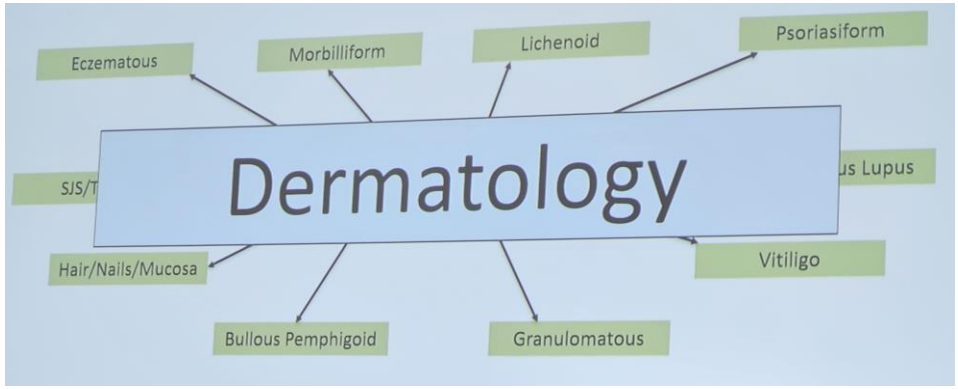
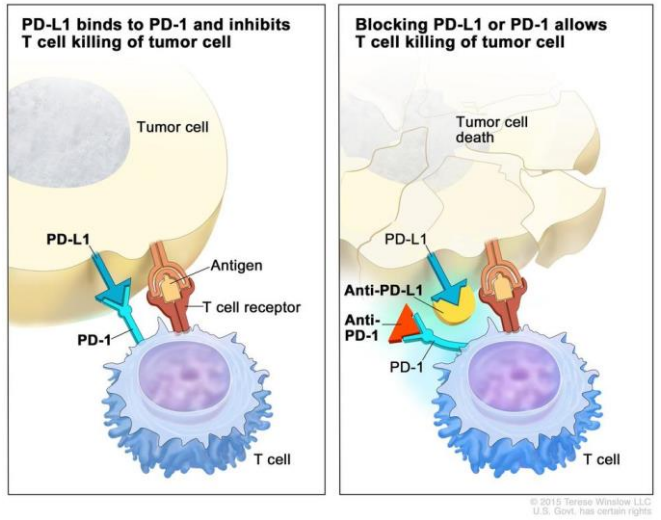
Casos refractarios

- **Erupción liquenoide**: apremilast
- **Prurigo nodular:** dupilumab
- **Psoriasis:** biológicos específicos (risankizumab) aunque escasos estudios en esta población
- **Penfigoide ampollar:** dupilumab
  - Asociación con pronóstico favorable
  - Causa suspensión tto frecuente
- **Vitiligo:** fototerapia UVB-be tras estabilización
  - Desaconseja inmunosupresores sistémicos en fase de progresión





Updates in Cutaneous Oncology – Carcinoma epidermoide (Dr. Joo)

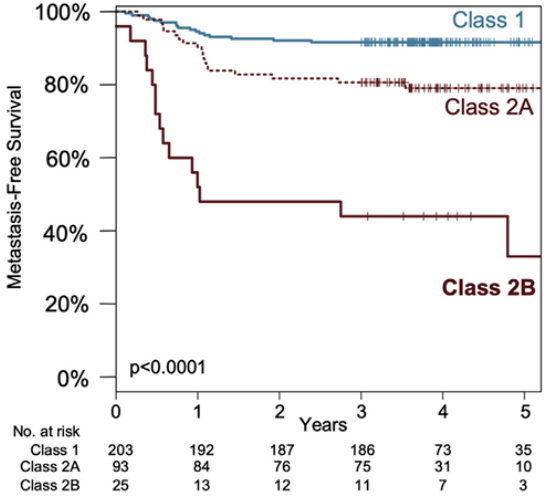
AAD ANNUAL MEETING AEDV highlights SAN DIEGO 8-12 MARZO

- Controversias sobre grupos pronósticos en sistemas estadificación AJCC 7th, 8th y BWH
  - Sistemas actuales no diseñados para CEC fuera de cabeza y cuello
  - Nuevos enfoques: Perfiles de expresión génica (40-GEP test)
    - Class 1 (low risk)
    - Class 2A (high risk)
    - Class 2B (highest risk)

Multicenter Study > J Am Acad Dermatol. 2021 Feb;84(2):361-369.
doi: 10.1016/j.jaad.2020.04.088. Epub 2020 Apr 25.

Validation of a 40-gene expression profile test to predict metastatic risk in localized high-risk cutaneous squamous cell carcinoma

Ashley Wysong [1], Jason G Newman [2], Kyle R Covington [3], Sarah J Kurley [3], Sherrif F Ibrahim [4], Aaron S Farberg [5], Anna Bar [6], Nathan J Cleaver [7], Ally-Khan Somani [8], David Panther [9], David G Brodland [9], John Zitelli [9], Jennifer Toyohara [10], Ian A Maher [11], Yang Xia [12], Kristin Bibee [13], Robert Griego [14], Darrell S Rigel [15], Kristen Meldi Plasseraud [3], Sarah Estrada [16], Lauren Meldi Sholl [17], Clare Johnson [17], Robert W Cook [18], Chrysalyne D Schmults [19], Sarah T Arron [20]



40-GEP Class	n	3-year MFS (95% CI)	Overall Event Rate
Class 1	203	91.6% (87.9-95.5%)	8.9%
Class 2A	93	80.6% (73.0-89.1%)	20.4%
Class 2B	25	44.0% (28.3-68.5%)	60%

> Dermatol Surg. 2024 Feb 1;50(2):121-124. doi: 10.1097/DSS.0000000000003999. Epub 2023 Nov 2.

Performance of Staging Systems for Non-Head and Neck Cutaneous Squamous Cell Carcinoma

Ricardo Guerra [1], Kathryn T Shahwan [1 2], Melica Nikahd [3], Madison Hyer [3], David R Carr [1]
Affiliations + expand
PMID: 37962141 DOI: 10.1097/DSS.0000000000003999

> Future Oncol. 2022 Mar;18(7):833-847. doi: 10.2217/fon-2021-1277. Epub 2021 Nov 25.

Enhanced metastatic risk assessment in cutaneous squamous cell carcinoma with the 40-gene expression profile test

Sherrif F Ibrahim [1 2], Julia M Kasprzak [3], Mary A Hall [4], Alison L Fitzgerald [4], Jennifer J Siegel [4], Sarah J Kurley [4], Kyle R Covington [4], Matthew S Goldberg [4 5], Aaron S Farberg [6], Shannon C Trotter [7], Kenneth Reed [8], David G Brodland [9], Shlomo A Koyfman [10], Ally-Khan Somani [11], Sarah T Arron [12], Ashley Wysong [13]

Review > Cancers (Basel). 2023 Apr 25;15(9):2456. doi: 10.3390/cancers15092456.

The Prognostic Value and Clinical Utility of the 40-Gene Expression Profile (40-GEP) Test in Cutaneous Squamous Cell Carcinoma: Systematic Review and Meta-Analysis

Razan Masarwy [1 2], Shahaf Shilo [1 2], Narin Nard Carmel Neiderman [1 2], Liyona Kampel [1 2], Gilad Horowitz [1 2], Nidal Muhanna [1 2], Jobran Mansour [1 2]

> Dermatol Ther (Heidelb). 2024 Mar 1. doi: 10.1007/s13555-024-01111-5. Online ahead of print.

Integrating the 40-Gene Expression Profile (40-GEP) Test Improves Metastatic Risk-Stratification Within Clinically Relevant Subgroups of High-Risk Cutaneous Squamous Cell Carcinoma (cSCC) Patients

Ashley Wysong [1], Ally-Khan Somani [2 3], Sherrif F Ibrahim [4], Javier Cañueto [5 6 7], Alison L Fitzgerald [8], Jennifer J Siegel [8], Anesh Prasai [8], Matthew S Goldberg [8 9], Aaron S Farberg [10], Christie Regula [11], Anna Bar [12], Julia Kasprzak [13], David G Brodland [14], Shlomo A Koyfman [15], Sarah T Arron [16]

Updates in Cutaneous Oncology – Carcinoma epidermoide (Dr. Joo)

AAD ANNUAL MEETING AEDV highlights SAN DIEGO 8-12 MARZO

- **Cemiplimab y trasplante órgano sólido**
  - Fase 1
  - 12 pacientes con trasplante renal y CEC avanzado
  - Inmunosupresion rapamicina + prednisona
  - **Seguimiento 6.8 meses**
  - **No rechazo renal**
  - 4.2% AE (diarrea, infeccione, metabolic disturbance)

J Clin Oncol. 2024 Jan 22:JCO2301498. doi: 10.1200/JCO.23.01498. Online ahead of print.

Cemiplimab for Kidney Transplant Recipients With Advanced Cutaneous Squamous Cell Carcinoma

Glenn J Hanna [1], Harita Dharanesswaran [2], Anita Giobbie-Hurder [3], John J Harran [2], Zixi Liao [2], Lori Pai [4], Vatche Tchekmedyian [5], Emily S Ruiz [2], Abigail H Waldman [2], Chrysalyne D Schmults [2], Leonardo V Riella [6], Patrick Lizotte [7], Cloud P Paweletz [7], Anil K Chandraker [8], Naoka Murakami [8], Ann W Silk [2]

Abstract

Purpose: Cemiplimab is approved for treating locally advanced or metastatic cutaneous squamous cell carcinoma (CSCC). Solid organ transplant recipients have been excluded from immunotherapy trials, given concern for allograft rejection despite their increased risk of skin cancers. Chronic immunosuppression is necessary to prevent organ rejection but may attenuate antitumor response with PD-1 inhibitors.

Methods: We report a phase I study of cemiplimab for kidney transplant recipients (KTRs) with advanced CSCC. After cross-taper to a mammalian target of rapamycin (mTOR) inhibitor and pulsed dose corticosteroids (prednisone 40 mg once daily, the day before and on days 1-3 of each cycle, followed by 20 mg once daily on days 4-6, then 10 mg once daily until the day before each subsequent cycle), patients received cemiplimab 350 mg intravenously once every 3 weeks for up to 2 years and were assessed for response every 8 weeks. The primary end point was the rate of kidney rejection, with key secondary end points including rate and duration of response, and survival.

Results: Twelve patients were treated. No kidney rejection or loss was observed. A response to cemiplimab was observed in five of 11 evaluable patients (46%; 90% CI, 22 to 73), including two with durable responses beyond a year. Median follow-up was 6.8 months (range, 0.7-29.8). Treatment-related grade 3 or greater adverse events occurred in five patients (42%), including diarrhea, infection, and metabolic disturbances. One patient died of angioedema and anaphylaxis attributed to mTOR inhibitor cross-taper.

Conclusion: mTOR inhibitor and corticosteroids represent a favorable immunosuppressive regimen for KTRs with advanced CSCC receiving immunotherapy. This combination resulted in durable antitumor responses with no kidney rejection events (funded by Regeneron Pharmaceuticals; ClinicalTrials.gov identifier: NCT04339062).

Updates in Cutaneous Oncology – Carcinoma basocelular (Dr. Weinkle)

AAD ANNUAL MEETING AEDV highlights SAN DIEGO 8-12 MARZO

- Carcinoma basocelular
  - 1 de cada 5 americanos.
  - 50% todos los tumores de US
  - Incidencia creciente. 40% segundo NMSC en 4 años; 82% si >1 previo
  - **Estrategias de prevención**

NOT YET RECRUITING

Basal Cell Carcinoma Chemoprevention Trial (B3C)

ClinicalTrials.gov ID NCT05212246

Sponsor VA Office of Research and Development

Information provided by VA Office of Research and Development (Responsible Party)

Last Update Posted 2024-01-26

- Intent-to-treat, multicenter, double-blinded RCT
- Imiquimod vs. placebo daily for 12 weeks for preventing BCC on the face

J Am Acad Dermatol. 2021 Jul;85(1):56-61. doi: 10.1016/j.jaad.2021.02.042. Epub 2021 Feb 19.

Metformin is associated with decreased risk of basal cell carcinoma: A whole-population case-control study from Iceland

Jonas A Adalsteinsson [1], Sonal Muzumdar [2], Reid Waldman [2], Rong Wu [3], Désirée Ratner [4], Hao Feng [2], Jonathan Ungar [5], Jonathan I Silverberg [6], Gudridur H Olafsdottir [7], Arni Kjalar Kristjansson [8], Laufey Tryggvadottir [9], Jon Gunnlaugur Jonasson [10]

Abstract

Background: Metformin has anticarcinogenic properties and is also known to inhibit the sonic hedgehog pathway, but population-based studies analyzing the potential protective effect for basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) are needed.

Objectives: To delineate the association between metformin use and invasive SCC, SCC in situ (SCCis), and BCC.

Methods: A population-based case-control study design was employed using all 6880 patients diagnosed in Iceland between 2003-2017 with first-time BCC, SCCis, or invasive SCC, and 69,620 population controls. Multivariate odds ratios (ORs) were calculated using conditional logistic regression.

Results: Metformin was associated with a lower risk of developing BCC (OR, 0.71; 95% confidence interval [CI], 0.61-0.83), even at low doses. No increased risk of developing SCC was observed. SCCis risk was mildly elevated in the 501-1500 daily dose unit category (OR, 1.40; 95% CI, 1.00-1.96).

Limitations: This study was retrospective in nature with the inability to adjust for ultraviolet exposure, Fitzpatrick skin type, and comorbidities.

Conclusion: Metformin is associated with decreased risk of BCC development, even at low doses. Metformin might have potential as a chemoprotective agent for patients at high risk of BCC, although this will need confirmation in future studies.

Keywords: basal cell carcinoma; keratinocyte carcinoma; metformin; squamous cell carcinoma; squamous cell carcinoma in situ.

Updates in Cutaneous Oncology - Carcinoma basocelular (Dr. Weinkle)

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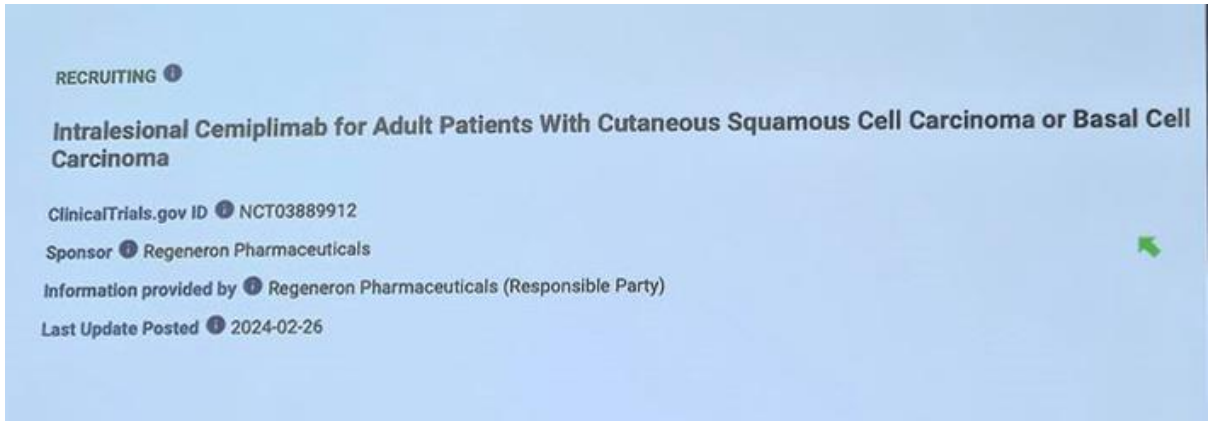
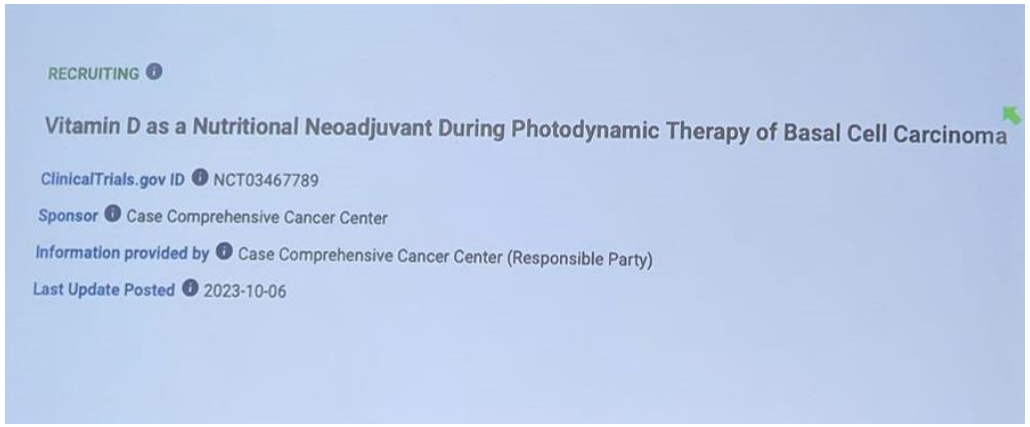
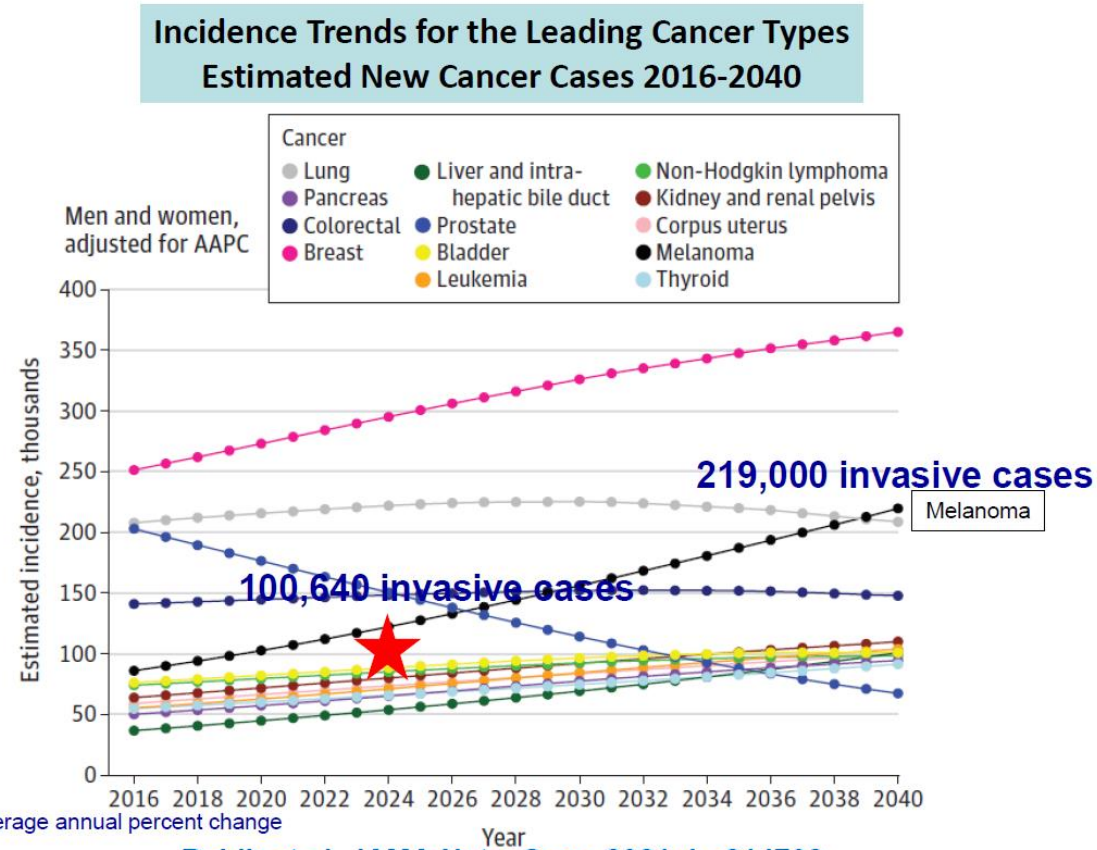
- Ensayos clínicos





Updates in Cutaneous Oncology – Melanoma (Dr. Sondak)



Rahib et al. JAMA Netw Open 2021;4:e214708

American Academy of Dermatology Association

Cutaneous Melanoma Update

Recent Advances In Treatment

Does sentinel node biopsy still have a role to play in localized melanoma?	Yes!
Should sentinel node-positive patients receive adjuvant therapy?	Most of the time!
Should sentinel node-negative patients receive adjuvant therapy?	Some of the time!
Should clinically node-positive patients get adjuvant or neoadjuvant therapy?	Neoadjuvant!
Can we avoid lymph node dissections in node-positive patients altogether?	A lot of the time!
Are we making progress in treating stage IV melanoma?	Amazing progress!

Updates in Cutaneous Oncology – Melanoma (Dr. Sondak)

AAD ANNUAL MEETING AADV highlights

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- Are there **prospectively validated** ways to identify patients with melanomas ≥0.8 mm thick whose risk of having a positive sentinel node is so low they could safely avoid having the sentinel node biopsy procedure?

Clinical Trial of CP-GEP Sentinel Node Prediction

MERLIN_001 TRIAL

Study Objectives:
Determine **(1) predictive capability of CP-GEP model to identify primary cutaneous melanoma patients who can safely forgo sentinel lymph node biopsy** and **(2)** to predict recurrence of melanoma after a negative sentinel node biopsy.

Inclusion criteria
- Newly diagnosed melanoma:
  - T1b-T3 (BT <4.0mm) N0M0
  - T1a (BT <0.8 mm) with other adverse features (very high mitotic index [>2/mm2], young age [<40 years], lymphovascular invasion, combination of these factors)
- Male or female, age ≥18 years
- Elected to undergo SLN biopsy per treating physician's recommendation

Prospective Registry Study of a Primary Melanoma Gene-Signature to Predict Sentinel Lymph Node (SN) status and Determine its Prognostic Value for more Accurate Staging of SN-Negative Melanoma Patients

MAYO CLINIC · MOFFITT CANCER CENTER · UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE

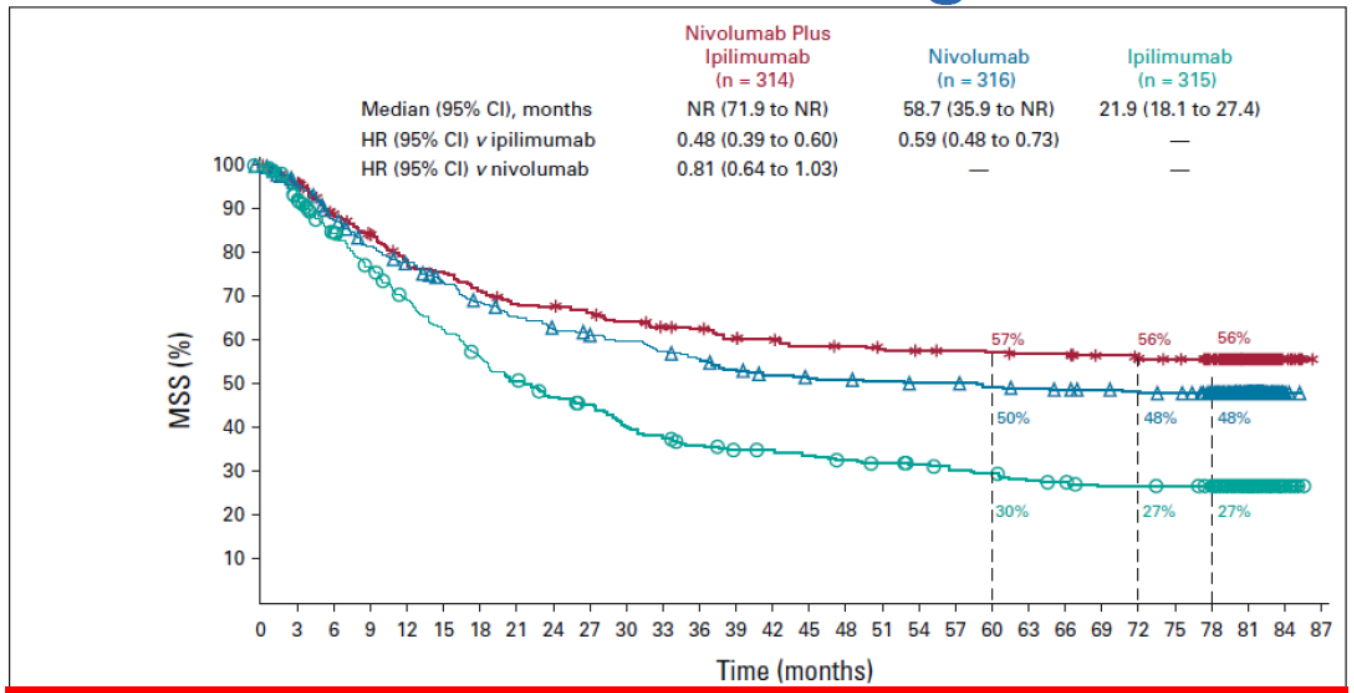
1637 sentinel node biopsies completed, 1466 tissue samples received
(as of 1 March 2024)

SkylineDx

Updates in Cutaneous Oncology – Melanoma (Dr. Sondak)

Checkmate-067 Randomized Trial of Nivo + Ipi vs Either One Alone

Survival for Unresectable Stage IV Melanoma



Up to 60% of patients surviving at least 5 years after diagnosis of metastatic melanoma

Wolchok et al, *J Clin Oncol* 2021;40:127

Updates in Cutaneous Oncology – Melanoma (Dr. Sondak)

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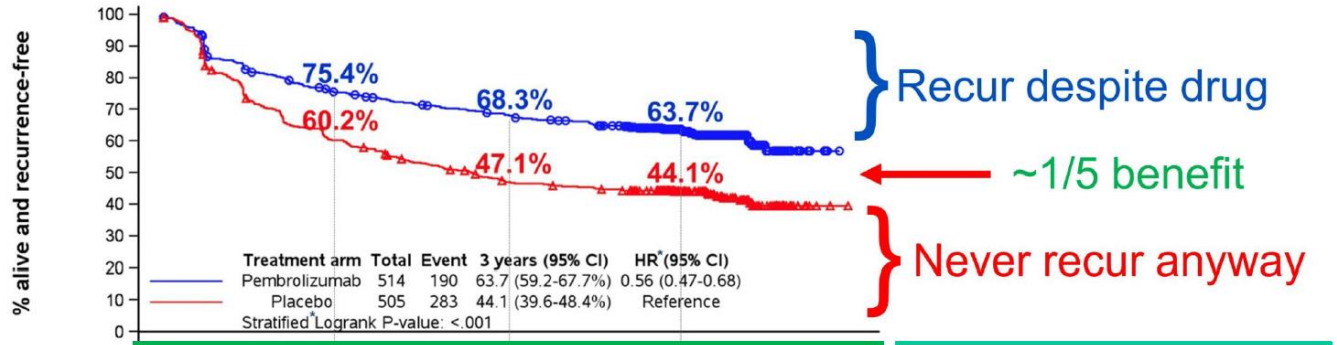
- Controversias de situación actual
- Adyuvancia y neoadyuvancia

The current problem with adjuvant therapy



Even though we know some people are benefiting, we don't know who they are!

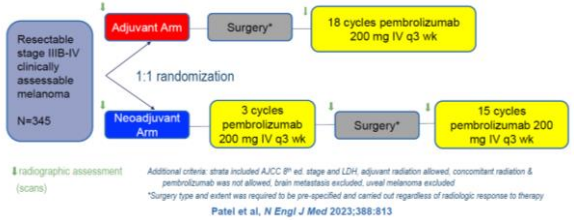
EORTC 1325
(KEYNOTE-054)
RFS
Stage III

Presented By: Alexander M. Menzies

2021 ASCO ANNUAL MEETING

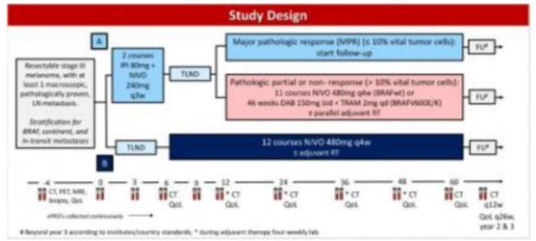
S1801 Randomized Trial of Neoadjuvant vs Adjuvant Therapy

Primary endpoint: Event-free survival



Patel et al, *N Engl J Med* 2023;388:813

NADINA Trial – Neoadjuvant Ipi-Nivo vs Adjuvant Nivo

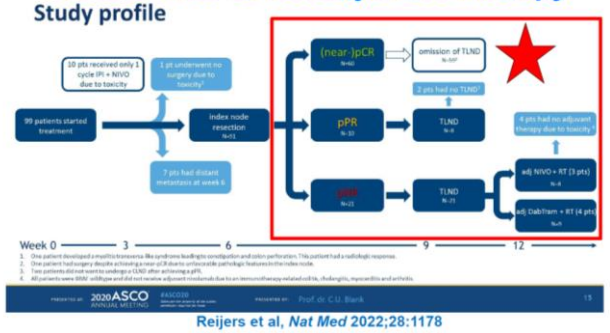


Initial results expected as soon as May 2024

Omission of LND in Clinical Stage III Melanoma

PRADO Trial of Neoadjuvant Therapy

Study profile



Reijers et al, *Nat Med* 2022;28:1178

Updates in Cutaneous Oncology – Melanoma (Dr. Sondak)

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JUST FDA APPROVED Feb 2022

Cryopreserved Autologous TIL: AMTAGVI™ (lifileucel)

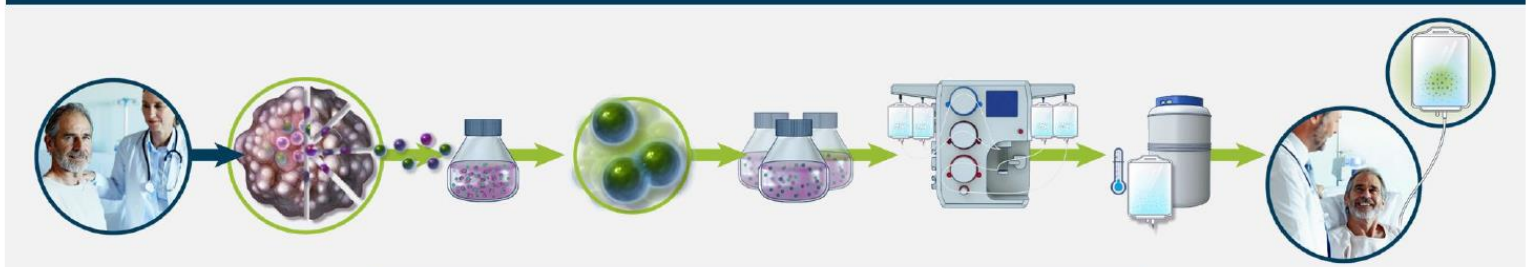
Manufacturing Process: 22 Days

EXCISE: Patient's tumor is removed via surgical resection of a lesion

EXTRACT: Tumor is fragmented and placed in media for TIL to leave the tumor and enter media

EXPAND: TIL expanded via IL-2 + OKT3 exponentially *ex vivo* to yield 10^9 – 10^{11} TIL

PREPARE & INFUSE: Patient receives non-myeloablative lymphodepletion and is infused with their expanded TIL and IL-2

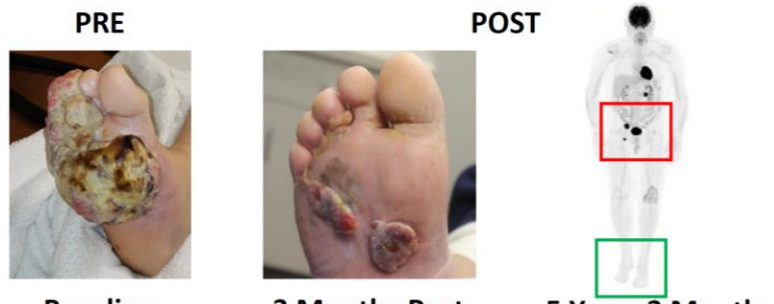


Process time: 22 days

- Courier from clinical site
- Co-culture TIL and feeder cells for expansion *ex vivo*
- Harvest and cryopreserved TIL infusion product
- Courier to clinical site for infusion

Clinical Response of Bulky Melanoma to Lifileucel TIL Therapy

PRE POST



Baseline 3 Months Post 5 Years 3 Months

Clinical Trial > J Immunother Cancer. 2022 Dec;10(12):e005755. doi: 10.1136/jitc-2022-005755.

Efficacy and safety of lifileucel, a one-time autologous tumor-infiltrating lymphocyte (TIL) cell therapy, in patients with advanced melanoma after progression on immune checkpoint inhibitors and targeted therapies: pooled analysis of consecutive cohorts of the C-144-01 study

Jason Chesney [1], Karl D Lewis [2], Harriet Kluger [3], Omid Hamid [4], Eric Whitman [5], Sajeve Thomas [6], Martin Wermke [7], Mike Cusnir [8], Evidio Domingo-Musibay [9], Giao Q Phan [10], John M Kirkwood [11], Jessica C Hassel [12], Marlana Orloff [13], James Larkin [14], Jeffrey Weber [15], Andrew J S Furness [14], Nikhil I Khushalani [16], Theresa Medina [2], Michael E Egger [1], Friedrich Graf Finckenstein [17], Madan Jagasia [17], Parameswaran Hari [17], Giri Sulur [17], Wen Shi [17], Xiao Wu [17], Amod Sarnaik [18]

Multicenter Study > J Clin Oncol. 2021 Aug 20;39(24):2656-2666. doi: 10.1200/JCO.21.00612. Epub 2021 May 12.

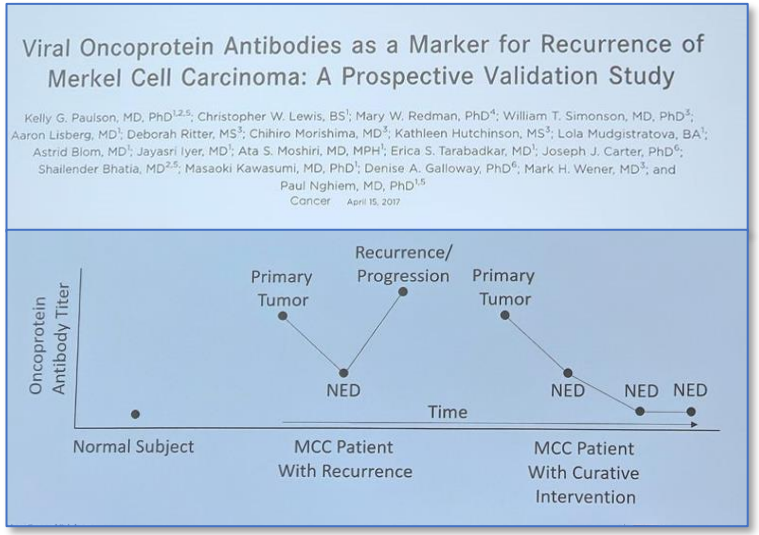
Lifileucel, a Tumor-Infiltrating Lymphocyte Therapy, in Metastatic Melanoma

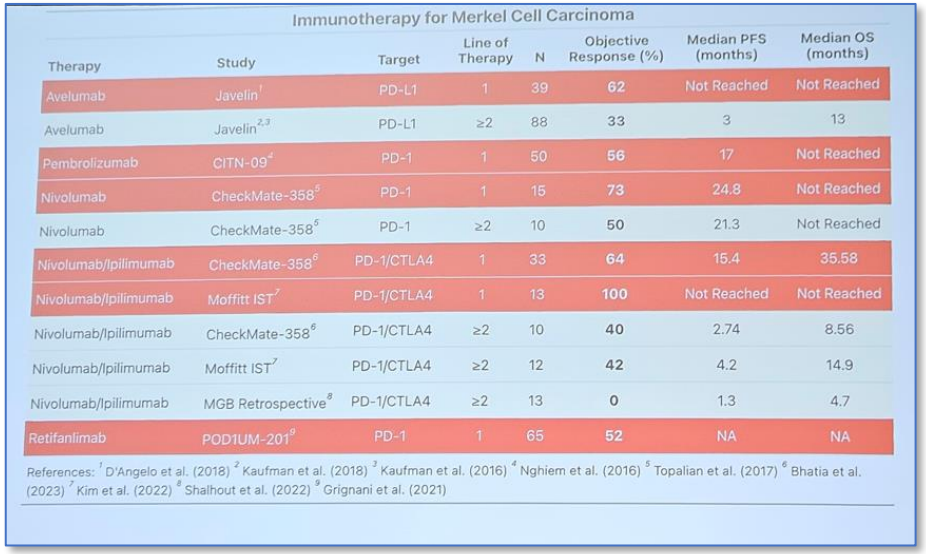
Amod A Sarnaik [1], Omid Hamid [2], Nikhil I Khushalani [1], Karl D Lewis [3], Theresa Medina [3], Harriet M Kluger [4], Sajeve S Thomas [5], Evidio Domingo-Musibay [6], Anna C Pavlick [7], Eric D Whitman [8], Salvador Martin-Algarra [9], Pippa Corrie [10], Brendan D Curti [11], Judit Oláh [12], Jose Lutzky [13], Jeffrey S Weber [7], James M G Larkin [14], Wen Shi [15], Toshimi Takamura [15], Madan Jagasia [15], Harry Qin [15], Xiao Wu [15], Cecile Chartier [15], Friedrich Graf Finckenstein [15], Maria Fardis [15], John M Kirkwood [16], Jason A Chesney [17]

Updates in Cutaneous Oncology – Carcinoma de Merkel (Dr. Miller)

AAD ANNUAL MEETING AADV highlights SAN DIEGO 8-12 MARZO

- Nuevas técnicas diagnósticas
  - **Serología de anticuerpos anti MCPyV:**
    - Marcador de pronóstico al diagnóstico inicial
    - Marcador de recurrencia en seguimiento
  - **ctDNA:** identificar fenotipo de progresor rápido y respuesta al tratamiento
- Importancia de técnicas de imagen: **PET-TC** preferible
- Múltiples ensayos de inmunoterapia en **adyuvancia** y **neoadyuvancia** para pacientes de alto riesgo





Immunotherapy for Merkel Cell Carcinoma

Therapy	Study	Target	Line of Therapy	N	Objective Response (%)	Median PFS (months)	Median OS (months)
Avelumab	Javelin[1]	PD-L1	1	39	62	Not Reached	Not Reached
Avelumab	Javelin[2,3]	PD-L1	≥2	88	33	3	13
Pembrolizumab	CITN-09[4]	PD-1	1	50	56	17	Not Reached
Nivolumab	CheckMate-358[5]	PD-1	1	15	73	24.8	Not Reached
Nivolumab	CheckMate-358[5]	PD-1	≥2	10	50	21.3	Not Reached
Nivolumab/Ipilimumab	CheckMate-358[6]	PD-1/CTLA4	1	33	64	15.4	35.58
Nivolumab/Ipilimumab	Moffitt IST[7]	PD-1/CTLA4	1	13	100	Not Reached	Not Reached
Nivolumab/Ipilimumab	CheckMate-358[6]	PD-1/CTLA4	≥2	10	40	2.74	8.56
Nivolumab/Ipilimumab	Moffitt IST[7]	PD-1/CTLA4	≥2	12	42	4.2	14.9
Nivolumab/Ipilimumab	MGB Retrospective[8]	PD-1/CTLA4	≥2	13	0	1.3	4.7
Retifanlimab	POD1UM-201[9]	PD-1	1	65	52	NA	NA

References: [1] D'Angelo et al. (2018) [2] Kaufman et al. (2018) [3] Kaufman et al. (2016) [4] Nghiem et al. (2016) [5] Topalian et al. (2017) [6] Bhatia et al. (2023) [7] Kim et al. (2022) [8] Shalhout et al. (2022) [9] Grignani et al. (2021)

Vulvar neoplasms: Benign and malignant (Dra Shah, Mercurio y Lambert Smith)

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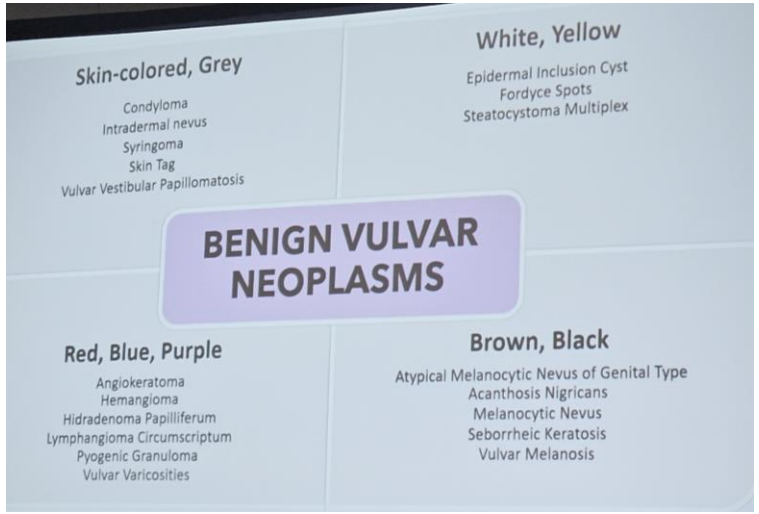

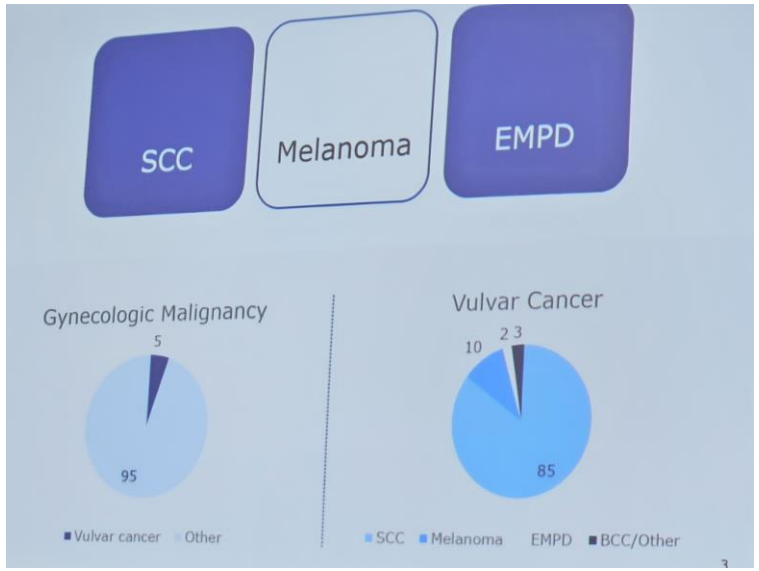

National Comprehensive Cancer Network®

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)

Vulvar Cancer

Version 3.2024 — December 21, 2023

NCCN.org

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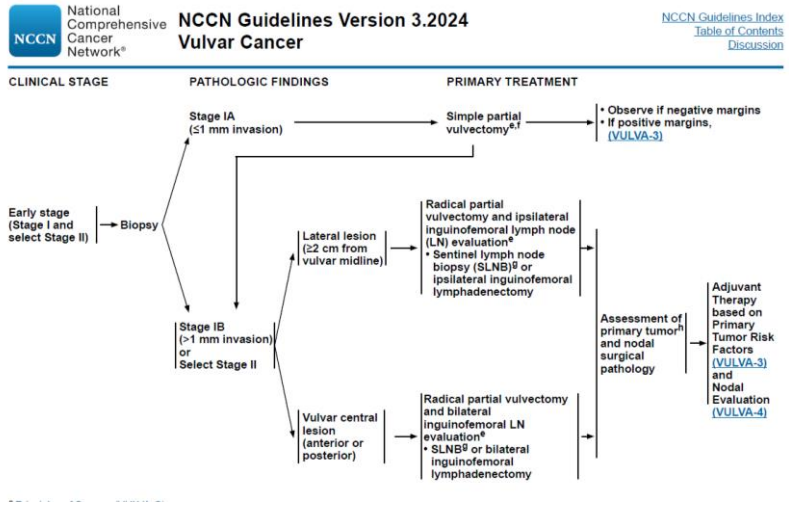
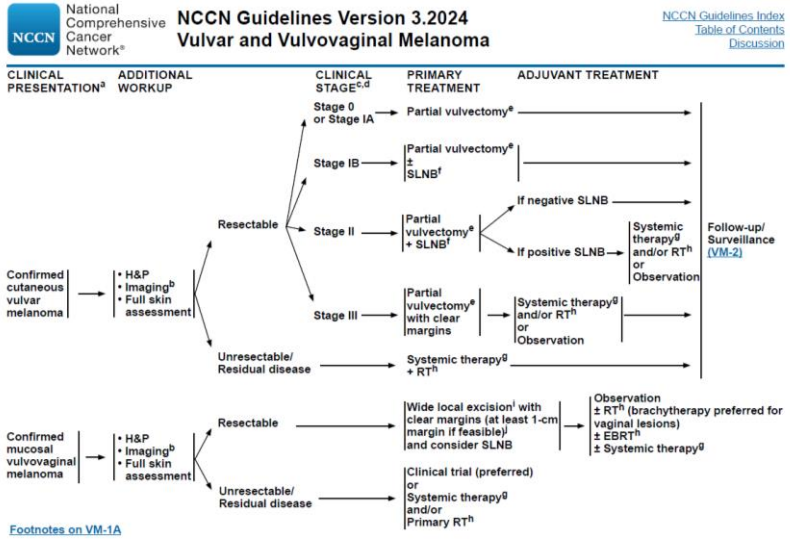




Multicenter Study > J Am Acad Dermatol. 2024 Jan;90(1):66-73. doi: 10.1016/j.jaad.2023.08.088. Epub 2023 Sep 12.

Therapeutic outcomes and survival analysis of Extramammary Paget's disease: A multicentre retrospective study of 249 patients

Helena Escolà [1], Beatriz Llombart [2], Alba Escolà-Rodríguez [3], Lucía Barchino-Ortiz [4], Joaquim Marcoval [5], Inmaculada Alcaraz [6], Sònia Beà-Ardébol [7], Agustí Toll [8], Román Miñano-Medrano [9], Pedro Rodríguez-Jiménez [10], María López-Nuñez [11], Carla Ferrándiz-Pulido [12], Ane Jaka [13], Emili Masferrer [14], Rafael S Aguayo-Ortiz [15], Mireia Yébenes [16], Jorge Arandes-Marcocci [17], Verónica Ruiz-Salas [18], Lucía Turrión-Merino [19], Miquel Just [20], Júlia Sánchez-Schmidt [21], Lorena Leal [22], Fátima Mayo-Martínez [2], Lara Haya-Martínez [6], Alejandra Sandoval-Clavijo [8], Giulia Greta Dradi [9], Yolanda Delgado [10], Júlia Verdaguer-Faja [13], Daniel López-Castillo [14], Ramon M Pujol [23], Gustavo Deza [23]

Posters

LSU Health NEW ORLEANS School of Medicine

Topical Timolol for Improving the Appearance of Surgical Scars following Mohs Surgery with Subsequent Primary Linear Closure: Results from a Split-Scar Clinical Trial

George M. Jeha, MD; Taylor Dickerson, MD; Lyndsey Hargrave, MD; Maria Bao-Loc-Trung, BS; Tyler Prusisz, BS; Elizabeth Bucher, MD; Corey Rougelot, MD; Keith LeBlanc, Jr., MD
LSU Health Sciences Center, Department of Dermatology

Introduction

- There is recent evidence showing that timolol can improve healing of acute wounds in the lower extremities due to its anti-inflammatory effects and pro-reparative properties, but its usage remains insufficiently explored.
- In this study, we aimed to evaluate the cosmetic outcomes of surgical scars following Mohs micrographic surgery (MMS) with primary linear closure, focusing on sites other than the lower extremity, when topical timolol solution was added to the standard postoperative wound care regimen.

Materials and Methods

- 19 adult patients that underwent MMS for non-lower extremity non-melanoma skin cancer with subsequent primary linear closure measuring at least 4 cm were studied.
- The anatomic locations of surgical procedures were the face (8), scalp (2), neck (4), upper extremity (3), and trunk (2).
- Half of the wound was treated with 0.25% timolol solution plus standard postoperative wound care. The other half of was treated with standard postoperative wound care alone.
- Three independent blind physicians assessed serial postoperative photographs by answering, "Can you observe a distinction between one half of the scar and the other half?" and "If you observe a distinction, which side of the scar exhibits superior cosmesis?"
- Responses to these questions were documented during follow-up assessments conducted at intervals of 1-2 weeks, 4-6 weeks, and 9-12 weeks.

Results

- There was no statistically significant difference in physician-reported improvement in scar cosmesis between the two groups at any point during the follow up period ($p > 0.5$ in all cases).

Table 2: Surgical Scar Improvement Over Time [a]

Time	N	Improvement with Timolol (n [%])	Improvement with Standard Would Care (n [%])	p-value [b]
1-2 Weeks	18	11 (61.1)	5 (27.8)	0.2101
4-6 Weeks	16	9 (52.9)	5 (31.3)	0.4240
9-12 Weeks	7	3 (42.9)	1 (14.3)	0.6250

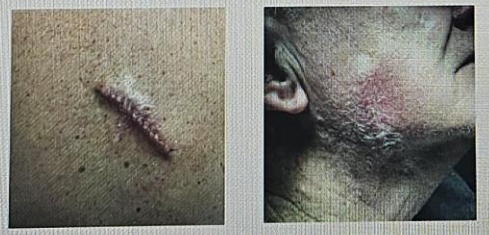
[a] Mean improvement direction was calculated for the three attending observations at each time point
[b] *p*-values calculated from a two-sided sign test

- There was also no statistically significant differences in improvement between to the two groups regardless of age, sex, or anatomic location ($p > 0.5$ in all cases).

Table 3: Surgical Scar Improvement Over Time by Sex [a]

	N	Improvement with Timolol (n [%])	Improvement with Standard Would Care (n [%])	p-value [b]
Female				
1-2 Weeks	5	4 (80.0)	0 (0.0)	0.1250
4-6 Weeks	5	3 (60.0)	2 (40.0)	1.0000
9-12 Weeks	4	2 (50.0)	1 (25.0)	1.0000
Male				
1-2 Weeks	13	7 (53.8)	5 (38.5)	0.7744
4-6 Weeks	11	6 (54.5)	3 (27.3)	0.5078
9-12 Weeks	3	1 (33.3)	0 (0.0)	1.0000

[a] Mean improvement direction was calculated for the three attending observations at each time point
[b] *p*-values calculated from a two-sided sign test



- (Left) Two weeks post-closure on the back. No discernible difference between timolol-treated (inferior one-half) and untreated (superior one-half) wound sections, as agreed upon by all evaluators; (Right) Two weeks post-closure on the cheek. Evaluators showed variation in their assessments; one evaluator rated the timolol-untreated portion (superior one-half of the wound) as cosmetically superior, while two evaluators observed no difference.

Conclusion

- Results suggest a limited role for topical timolol in improving the cosmetic appearance of linearly approximated wounds following Mohs surgery performed on the head, neck, trunk, or proximal upper extremity of otherwise healthy patients.
- To our knowledge, this study is the largest prospective split-scar study investigating the efficacy of topical timolol in enhancing the cosmetic appearance of acute surgical wounds following MMS and linear repair, particularly in sites other than the lower extremity.
- Strengths of this study include its blinded nature, its utilization of a self-control design where patients served as their own comparisons, and the adoption of a simplified 2-item questionnaire aimed at capturing clinically relevant distinctions rather than solely statistically significant ones.
- Limitations of this study include its modest sample size and lack of standardization in the anatomical sites of surgery among the patient cohort.
- Additional study is warranted to ascertain whether timolol represents a reasonable complement to standard wound care in appropriately selected patients, particularly in situations where there is concern for impaired or delayed wound healing.

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- Manci R, Nazir ZH, Dusza SW, Chen CSJ. Topical timolol enhances surgical wound healing in the lower portion of the leg in older patients with comorbidities: A retrospective review. J Am Acad Dermatol. 2022 Sep;87(3):661–3.

Posters

UCDAVIS HEALTH

Aesthetic outcome of layered closure versus layered closure followed by 2-octyl cyanoacrylate: a randomized evaluator-blinding split-wound comparative effectiveness trial

Conclusion

- Even though there were no statistically significant differences between intermediate closure alone and the additional application of 2-OCA, both patients and observers tended to favor the 2-OCA treated side
- Surgical adhesives are easy to apply, inexpensive, and require less wound care
- Surgical adhesives may be utilized by surgeons without sacrificing scar cosmetic outcomes or patient satisfaction

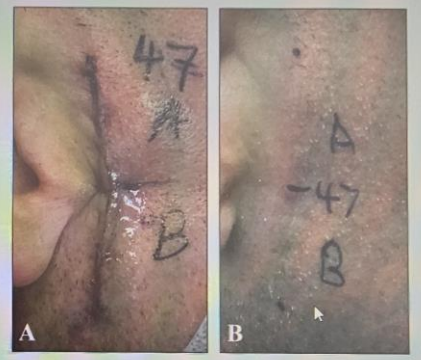


Figure A. Immediate postoperative photo

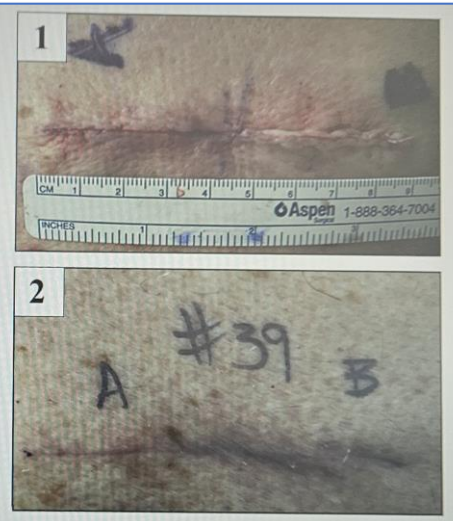
Figure B. 3 months follow-up photo
Side A. Layered closure (sum POSAS score = 8)
Side B. Layered closure with surgical adhesive (sum POSAS score= 10.5)

UCDAVIS HEALTH

Aesthetic outcome of running subcuticular suture versus running horizontal mattress suture in closure of linear wounds on the trunk and extremities: a randomized evaluator blinded split wound comparative effectiveness trial

Conclusion

- Both patients and blinded-observers had better overall opinions of the running subcuticular scar
- Patient assessment of scar color was superior with the running subcuticular suture technique as well
- Our results suggest that scar color may play a decisive role in determining overall opinion of scar outcomes
- As there were no significant differences in total composite POSAS scores, closure technique should remain a joint decision between surgeon and patient



Posters

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SAN DIEGO 8-12 MARZO

Comparison of infection rate between sterile and non-sterile gloves during Mohs Micrographic surgery: a systematic review and meta-analysis

Rafaela de Moraes Souza[1], Rubiana Sarto[2], Lívia Figueiredo Pereira[3], Yasmin Luz Lima de Mesquita[4], Regina Chahine Chater[5], Izadora Lapenda[6], Luana Moury Fernandes Sanchez[7], Pedro Herranz[1]

[1]La Paz University Hospital, Madrid, Spain; [2]Nevill Hall Hospital, Abergavenny, Wales; [3]Pontifical Catholic University of Minas Gerais, Belo Horizonte, Brazil; [4]Federal University of Rio de Janeiro, Rio de Janeiro, Brazil; [5]Albert Einstein Israeli Faculty of Health Sciences, Sao Paulo, Brazil; [6]Pernambuco School of Health, Pernambuco, Brazil; [7]Mount Sinai Hospital, New York, USA

Disclosures: no commercial support provided. Authors have no relationships to disclose.

BACKGROUND AND OBJETIVES

Mohs micrographic surgery (MMS) is an established method for treating various types of skin cancers. There is still limited understanding about the effectiveness of sterile gloves (SG) versus nonsterile gloves (NSG) in preventing postoperative infections during this procedure. Hence, we conducted a systematic review and meta-analysis providing updated evidence about infection rates post-MMS associated with each type of glove and highlighting the cost differences between them.

METHODS

We searched MEDLINE, Embase, and Cochrane for randomized and non-randomized studies comparing postoperative infection rate associated with SG and NSG in adult patients with skin cancer undergoing MMS that did not receive any prophylactic antibiotic. Statistical analysis was performed using Review Manager 5.4. For bias assessment, the Risk of Bias 2 (RoB2) tool was utilized for randomized controlled trials, and the Risk Of Bias In Non-randomized Studies of Interventions (ROBINS-I) for non-randomized studies. **Protocol registration:** PROSPERO, CRD42023458525

RESULTS

Our analysis encompassed 4 studies involving 10,644 MMS procedures, of which 7,512 (70.6%) were performed with SG and 3,132 (29.4%) with NSG. Baseline characteristics are presented in **Table 1**. The data revealed no statistical difference in postoperative infection rates between the SG and NSG groups (3.1% vs 2%; OR 1.14; 95% CI 0.85-1.52; p= 0.39; **Figure 1**). Regarding the mean cost of the gloves, nonsterile gloves cost $0.24 per pair, which is roughly one-tenth the cost of sterile gloves, priced at $2.27 per pair.

Table 1. Baseline Characteristics of Included Studies

		SSI/Cohort Size (%)		Cost of Gloves		Tumor location/Initial Cohort Size (%) Head and Neck		Ear		Trunk		Extremities	
Study	Design	SG	NSG	SG	NSG	SG	NSG	SG	NSG	SG	NSG	SG	NSG
Kemp 2019	Non-RCT	214/5958 (3.6)	43/1407 (3.0)	$1.10	$0.19	NA	NA	NA	NA	NA	NA	NA	NA
Mehta 2014	Non-RCT	5/890 (0.5)	6/929 (0.6)	$0.68	$0.27	833/1004 (83)	799/1021 (78.2)	71/1004 (7)	95/1021 (9.3)	45/1004 (4.5)	57/1021 (5.6)	55/1004 (5.5)	70/1021 (6.8)
Rhinehart 2006	Non-RCT	11/634 (1.7)	14/766 (1.8)	$1.07	$0.12	514/634 (81.1)	601/766 (78.4)	108/634 (17)	148/766 (19.3)	2/634 (0.3)	2/766 (0.2)	10/634 (1.6)	14/766 (1.8)
Xia 2011	RCT	2/30 (6.6)	1/30 (3.3)	$6.25	$0.39	26/30 (86.7)	27/30 (90)	1/30 (3.3)	1/30 (3.3)	2/30 (6.7)	2/30 (6.7)	1/30 (3.3)	0/30 (0)

Abbreviations: NA, not available; NSG, nonsterile glove; RCT, randomized controlled trial; SG, sterile glove; SSI, surgical site infection.

Figure 1. Forest plot of postoperative surgical site infection

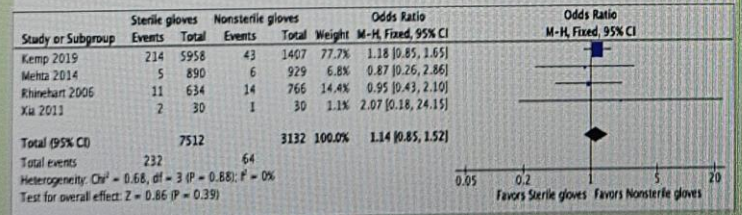

Figure 2. Risk of bias assessment, using (a) RoB2 and (b) ROBINS-I

a

Study	Kemp, 2019	Mehta, 2014	Rhinehart, 2006
Bias due to confounding	Serious	Moderate	Moderate
Bias in selection of participants	Low	Low	Low
Bias in classification of interventions	Low	Low	Low
Bias due to deviations from intended interventions	Low	Low	Low
Bias due to missing data	Low	Low	Low
Bias in measurement of outcomes	Low	Low	Low
Bias in selection of the reported result	Low	Low	Low
Overall risk of bias judgement	Serious	Moderate	Moderate

b

Study	Xia, 2011
Bias from randomization process	Low
Bias due to deviations from intended intervention	Low
Bias due to missing outcome data	Low
Bias in measurement of the outcomes	Low
Bias in selection of the reported result	Low
Overall risk of bias	Low

CONCLUSION

The results support that NSG are as effective as SG in preventing postoperative infections in MMS, with no statistical difference in infection rates, and offer a significant reduction in cost.

Posters

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SAN DIEGO 8-12 MARZO

Anaplastology: A Primer for the Dermatologist and Dermatologic Surgeon

Quoc-Bao D. Nguyen MD MBA, Emma Villamaria BSA, Christopher Nguyen MD, Patricia C Montgomery, Mark Chambers DMD MS

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Introduction

- Anaplastology is a branch of medicine committed to providing facial prosthetic restorative care for patients.
- A multi-disciplinary team approach with combination intra-oral and extra-oral prosthesis can be used to replace missing areas of bone or tissue and restore essential functions such as chewing, swallowing, and speech.
- The ultimate goal is improving quality of life.

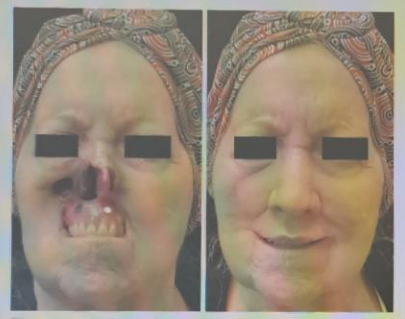

Figure A. Patient with a 20-year history of basal cell carcinoma of the nose affecting the external nasal cartilage and upper lip extending into the oral cavity*.

Figure C. Patient diagnosed with squamous cell carcinoma of the nasal septum following rhinectomy, with definitive adhesive retained nasal prosthesis*.

Practical Application

- Complications are few but include the need for annual maintenance due to degradation of materials from daily use.
- To initiate prosthetic rehabilitation, a patient can be referred to an Anaplastologist (extra-oral prosthesis) or Maxillofacial Prosthodontist (intra-oral prosthesis).
- The International Anaplastology Association (IAA) is comprised of members from over 20 countries.
- Individual members of the IAA can be found on their website along with their contact information.

Background

- Anaplastology is indicated in patients who do not desire surgical reconstruction or who are poor surgical candidates.
- It can also be used in patients who require site monitoring after surgery.
- Advanced techniques such as CT and 3-dimensional imaging are used to obtain an accurate depiction of surrounding anatomical structures.
- The prosthetic device must be anchored to surrounding tissue using materials such as medical-grade adhesives, mechanical attachments, or osseointegration.
- Cost is determined on a case by case basis, and may or may not be covered by health insurance.

Figure B. Patient with adhesive-retained definitive left orbital prosthesis including eyebrow*.

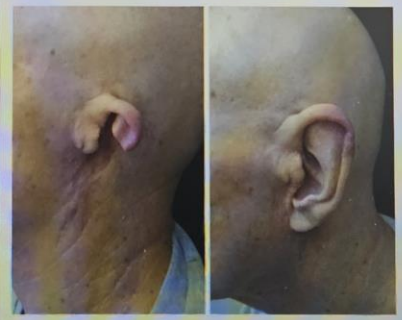

Figure D. Adhesive-retained auricular prosthesis following resection of malignant neoplasm of skin of right ear*.

Conclusion

- Anaplastology is a useful and unique specialty dedicated to restoring function and cosmesis for patients after surgical resection of invasive or locally destructive neoplasms.

Advantages	Disadvantages
Minimally invasive nature and fast rehabilitation	Requires replacement about every 1-2 years
Predictable results and modifiable outcomes	Removability of the prosthetic device
Excellent alternative for patients with surgical fatigue	Not recommended in patients unable to properly care for the device

References

- *Images courtesy of Patricia Montgomery, Clinical Anaplastologist
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La Academia Española de Dermatología y Venereología expresa su agradecimiento al patrocinador UCB, por su especial apoyo y contribución con la actividad formativa Highlights 2024.

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