Melanoma

Melanoma

- Clinical manifestations
- Risk factors
- Clinical diagnosis and diagnostic techniques
- Staging
- Patient care pathway
- Prevention

Melanoma

Some figures

2000-2500 new diagnoses of MM per year in Belgium

11 millions: 0,018-0,023%

1/10 patients with MM will develop a 2nd MM in 10 years

50% of MM diagnosis is made by the patient him/herself

Most frequent site:
- **males: back**
- **females: legs**

50% of MM develop in pre-existing naevi

50% of MM develop de novo

100-150 MM related deaths per year

Melanoma

Some figures

Lifetime risk for MM: males: 1 in 28

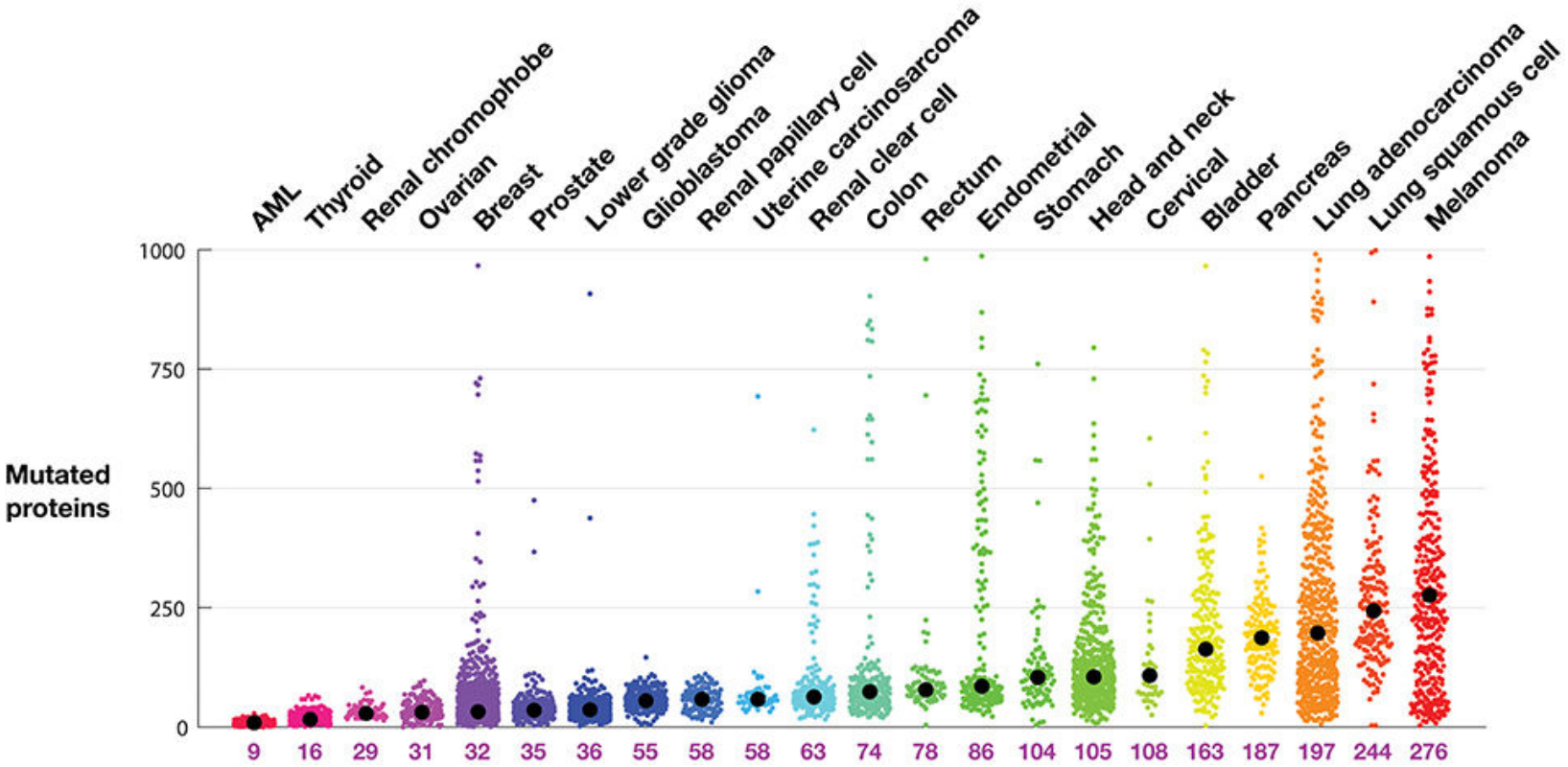
Lifetime risk for MM: females: 1 in 44

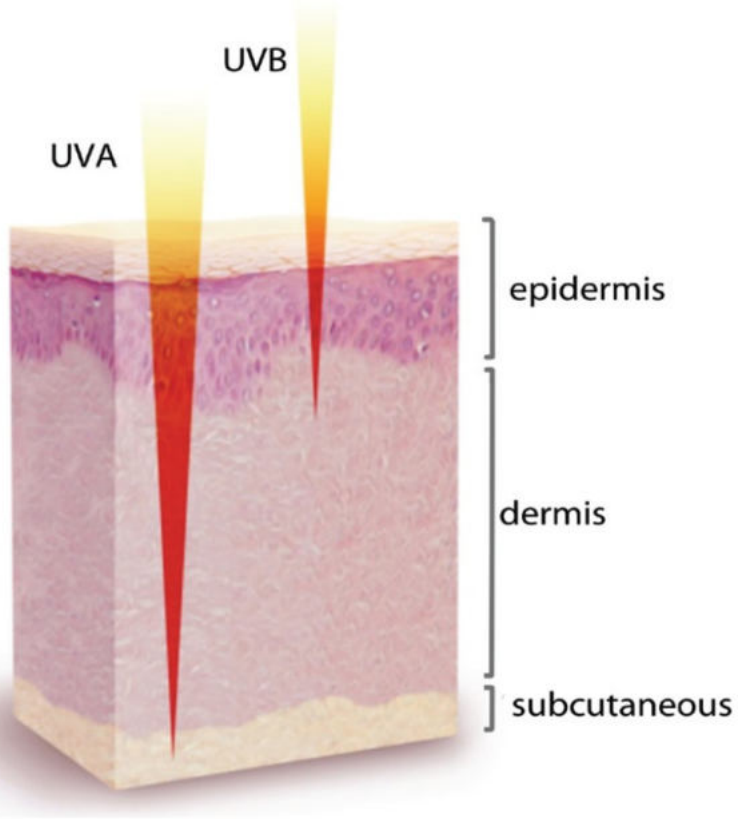
USA: 2017: invasive MM: 87100
in situ MM: 63000

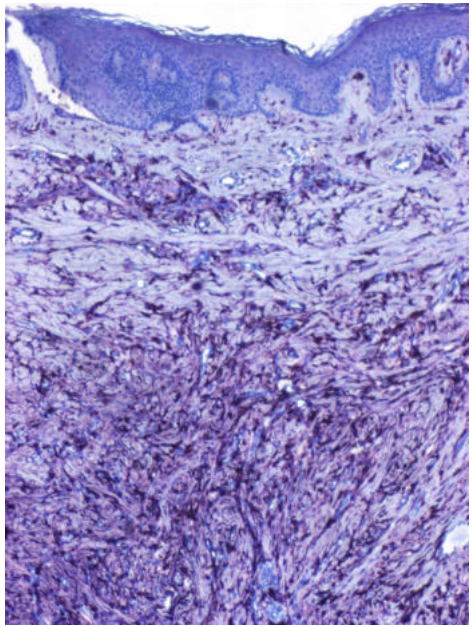
2016: 323 millions: invasive 0,027%
in situ 0,019%
0,046%

Survival rates (5-y)	**White**	**Black**
Localized	98	90
Regional	63	47
Metastatic	18	22

Mutational charge of melanoma

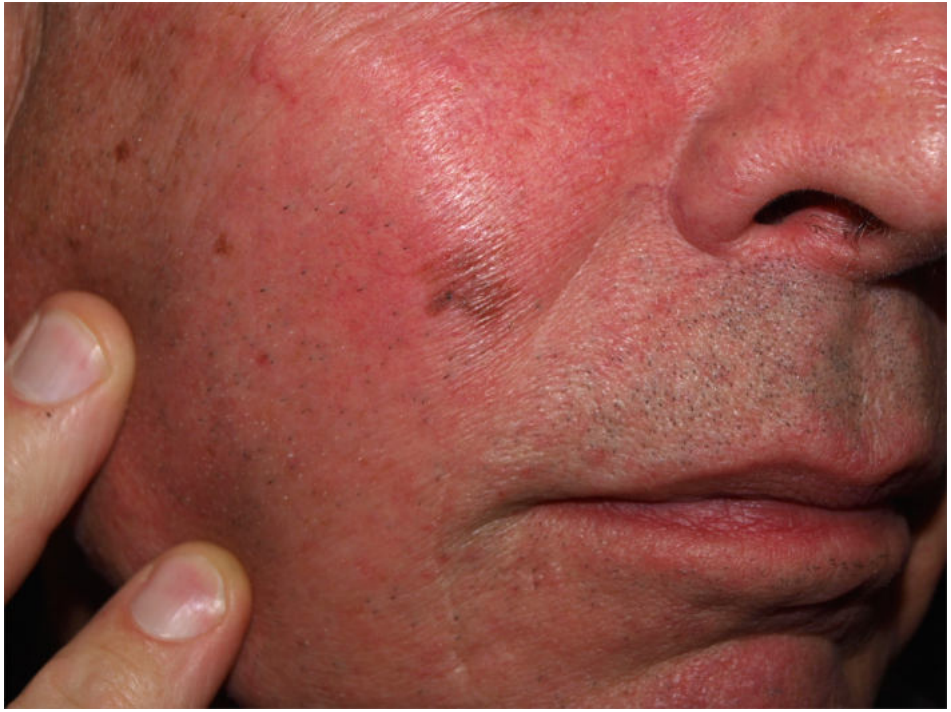



UVB
UVA
epidermis
dermis
subcutaneous



Melanoma Clinical manifestations

Dubreuilh's melanoma



Melanoma Clinical manifestations

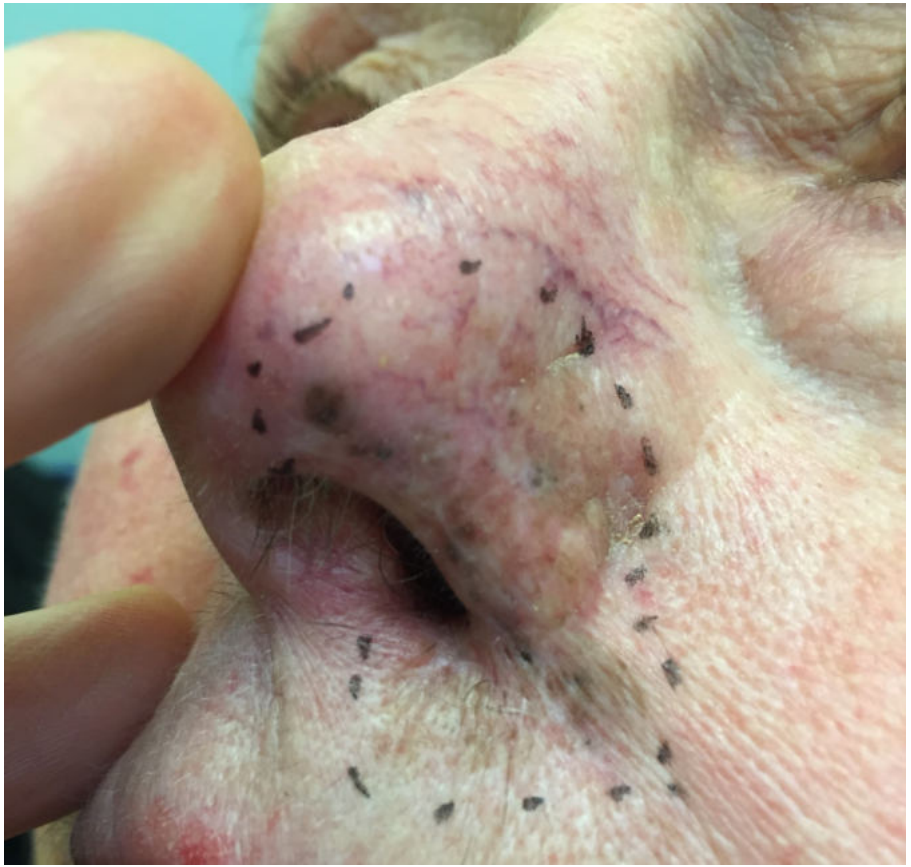
Dubreuilh's melanoma

10% of the cases

Difficult clinical margins

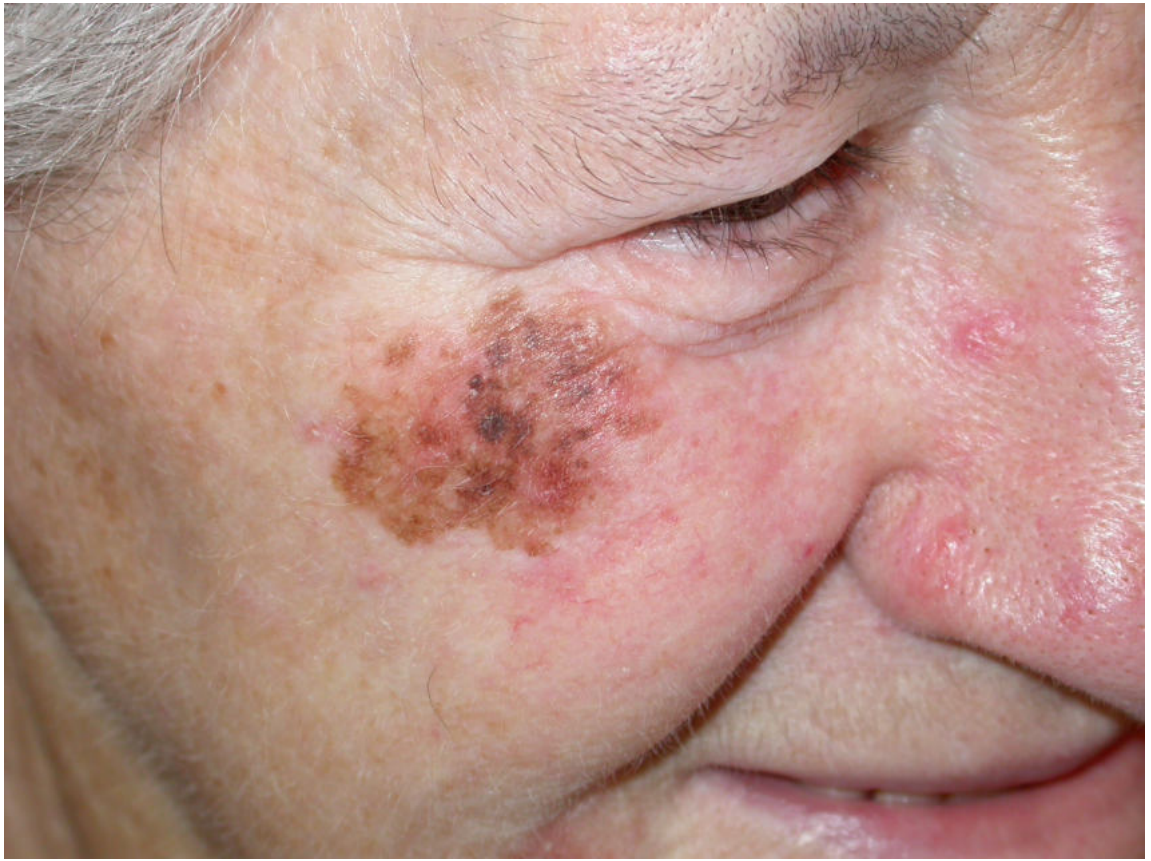
Long indolent periods

Hidden deep invasion



Melanoma Clinical manifestations

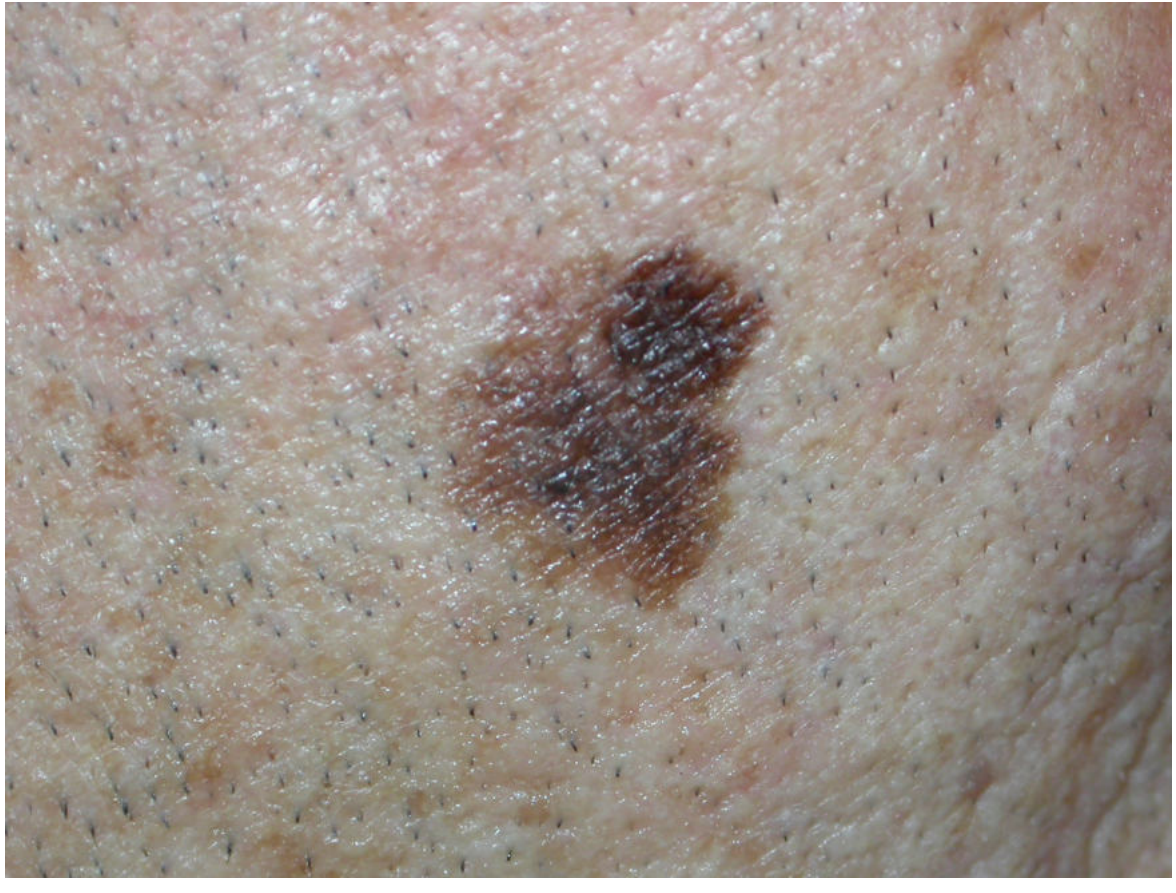
Dubreuilh's melanoma



Melanoma Clinical manifestations

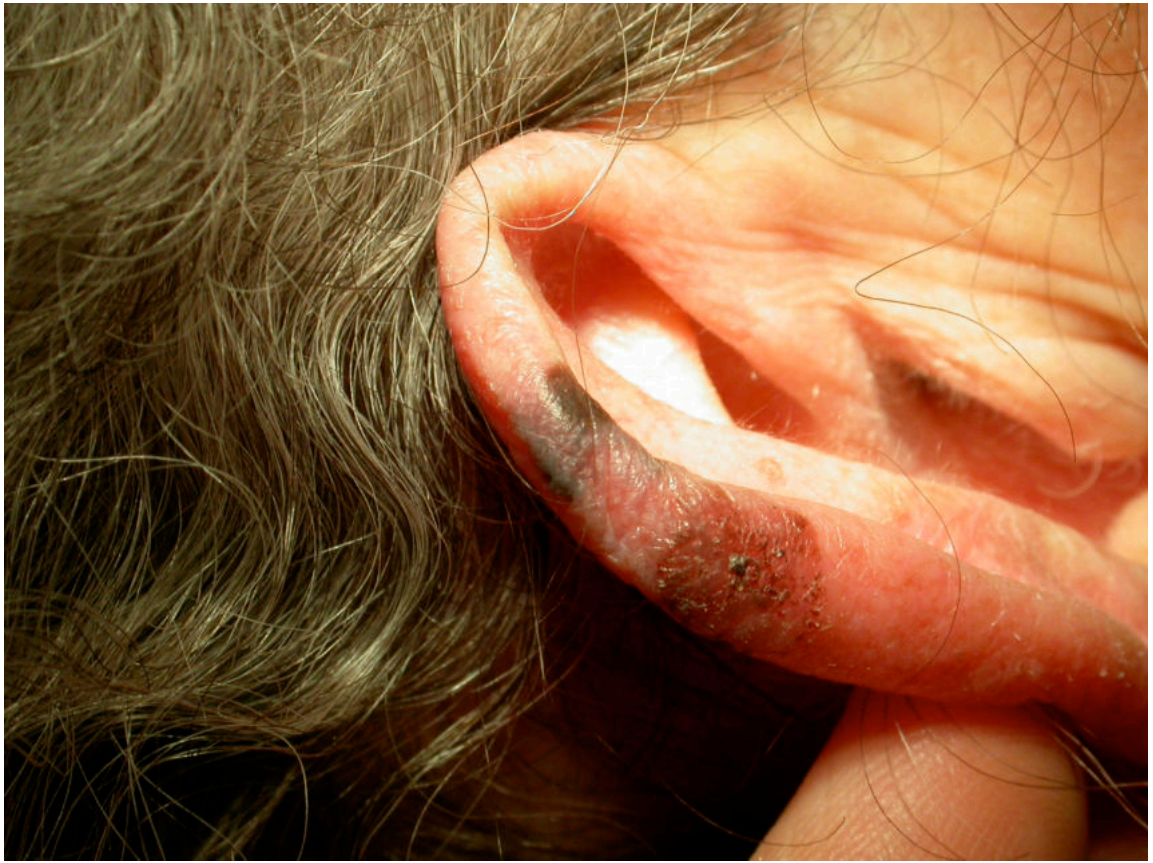
SSM melanoma

70% of MM cases



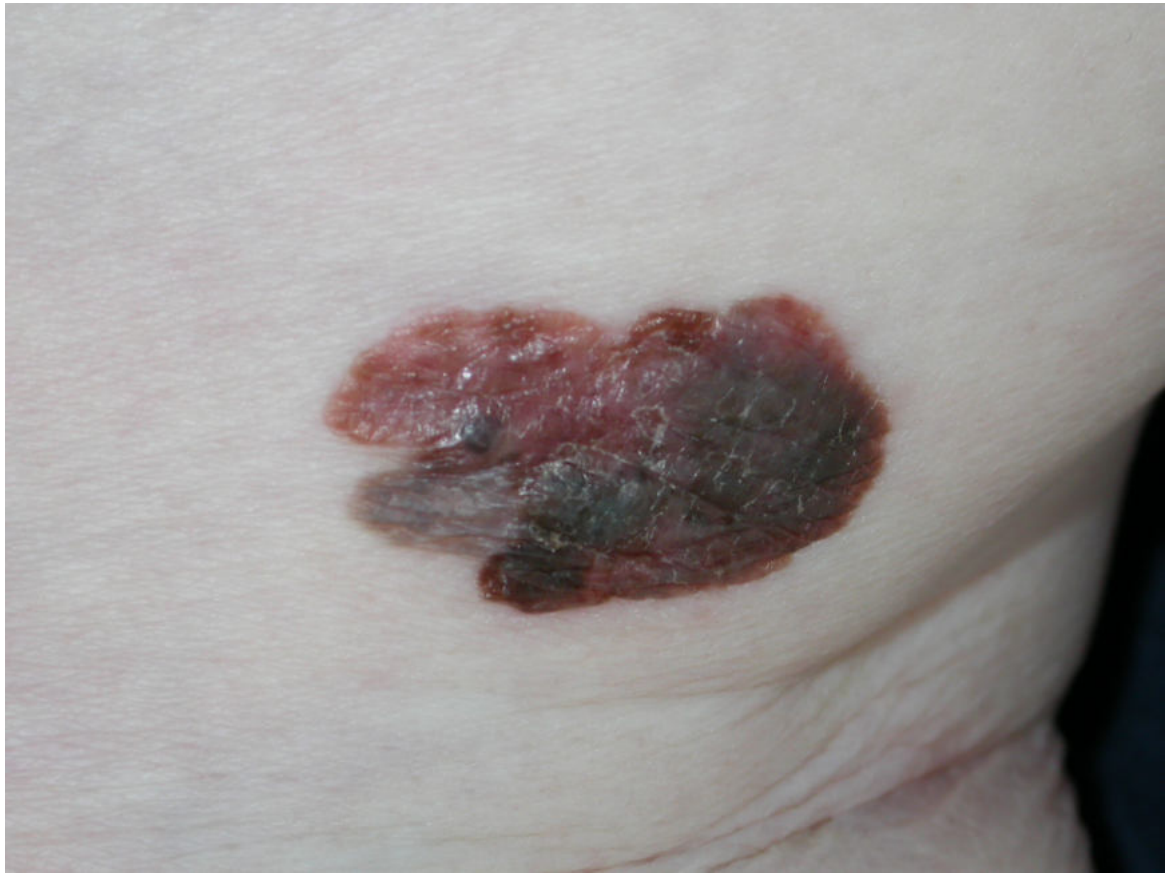
Melanoma Clinical manifestations

SSM melanoma



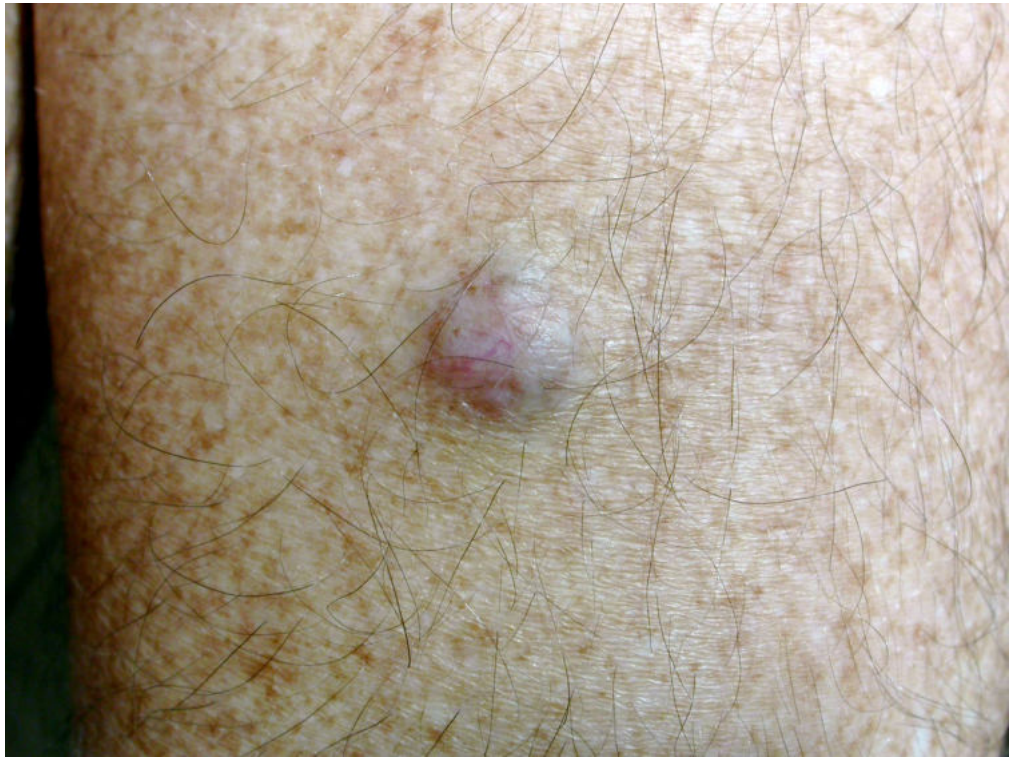
Melanoma Clinical manifestations

SSM melanoma



Melanoma Clinical manifestations

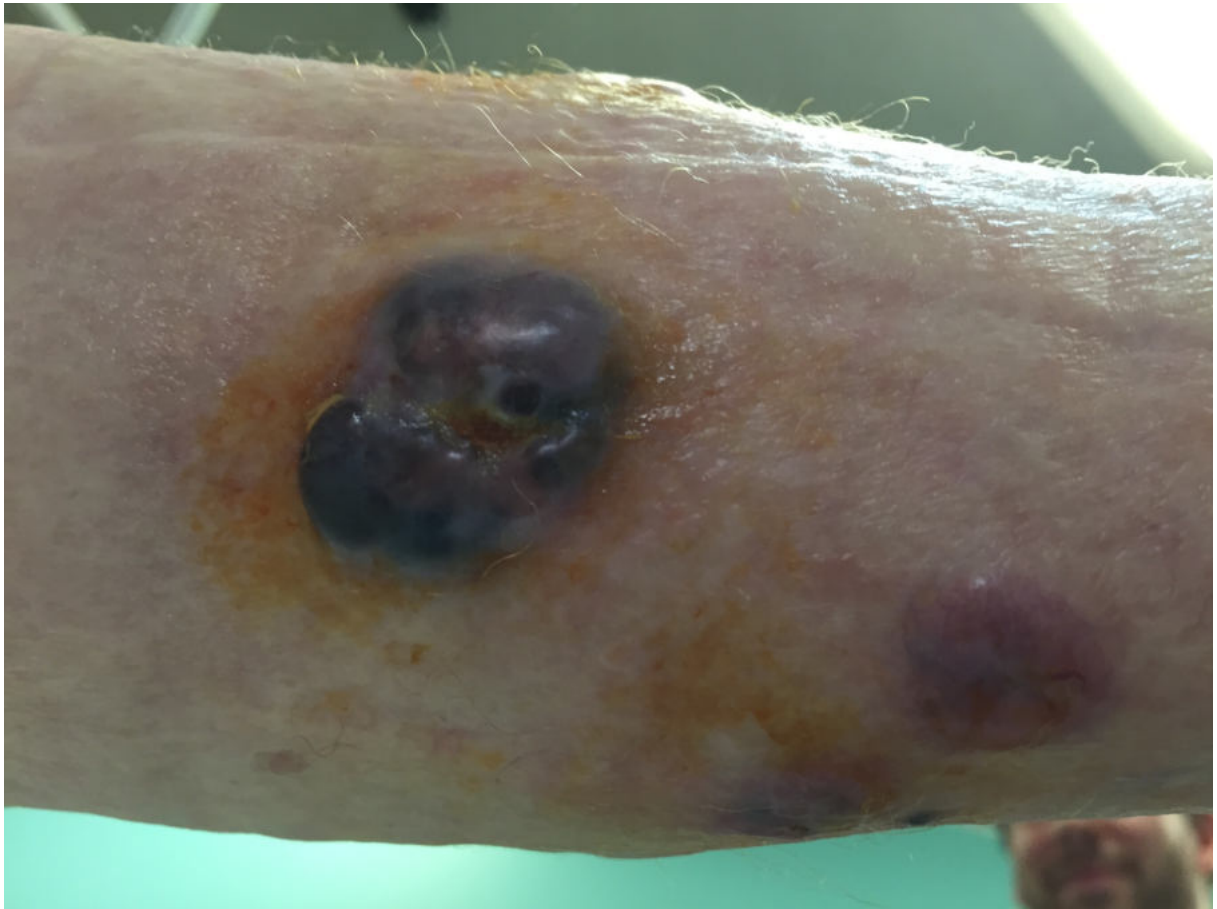
Nodular melanoma



5% of MM cases

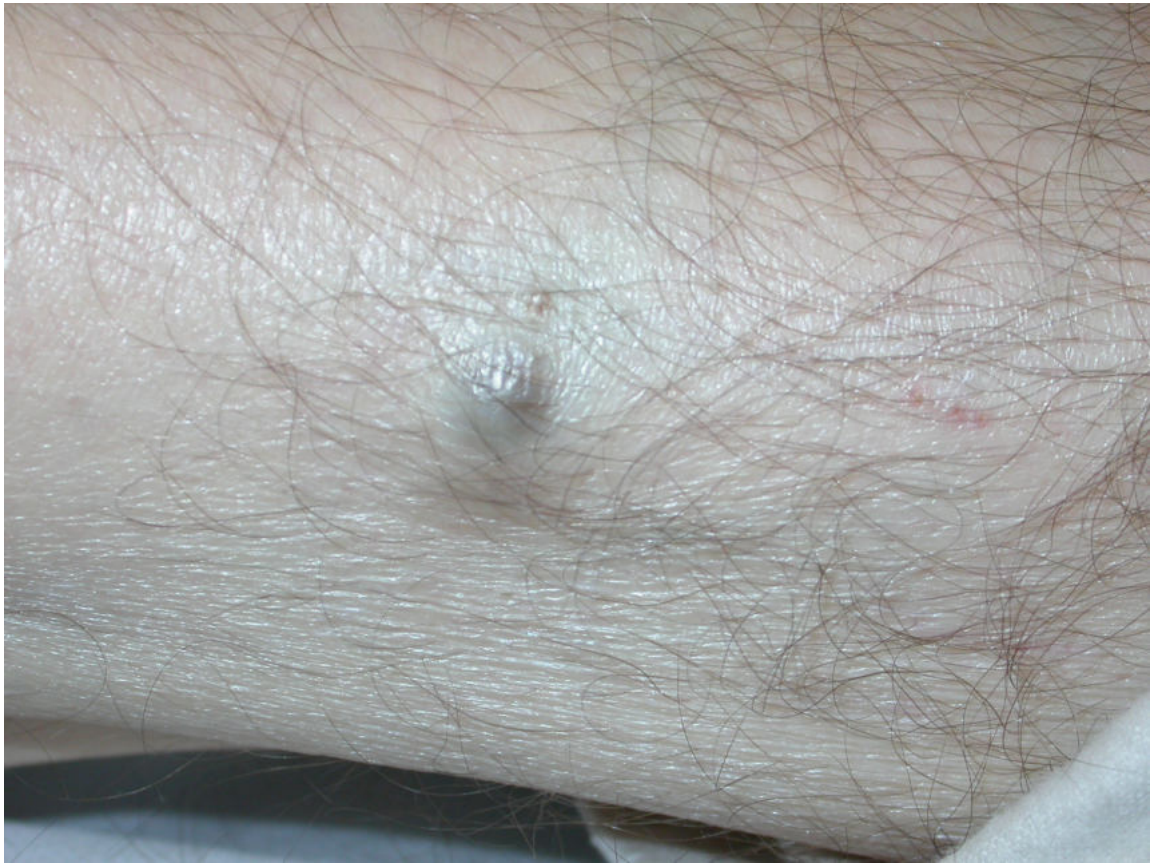
Melanoma Clinical manifestations

Nodular melanoma



Melanoma Clinical manifestations

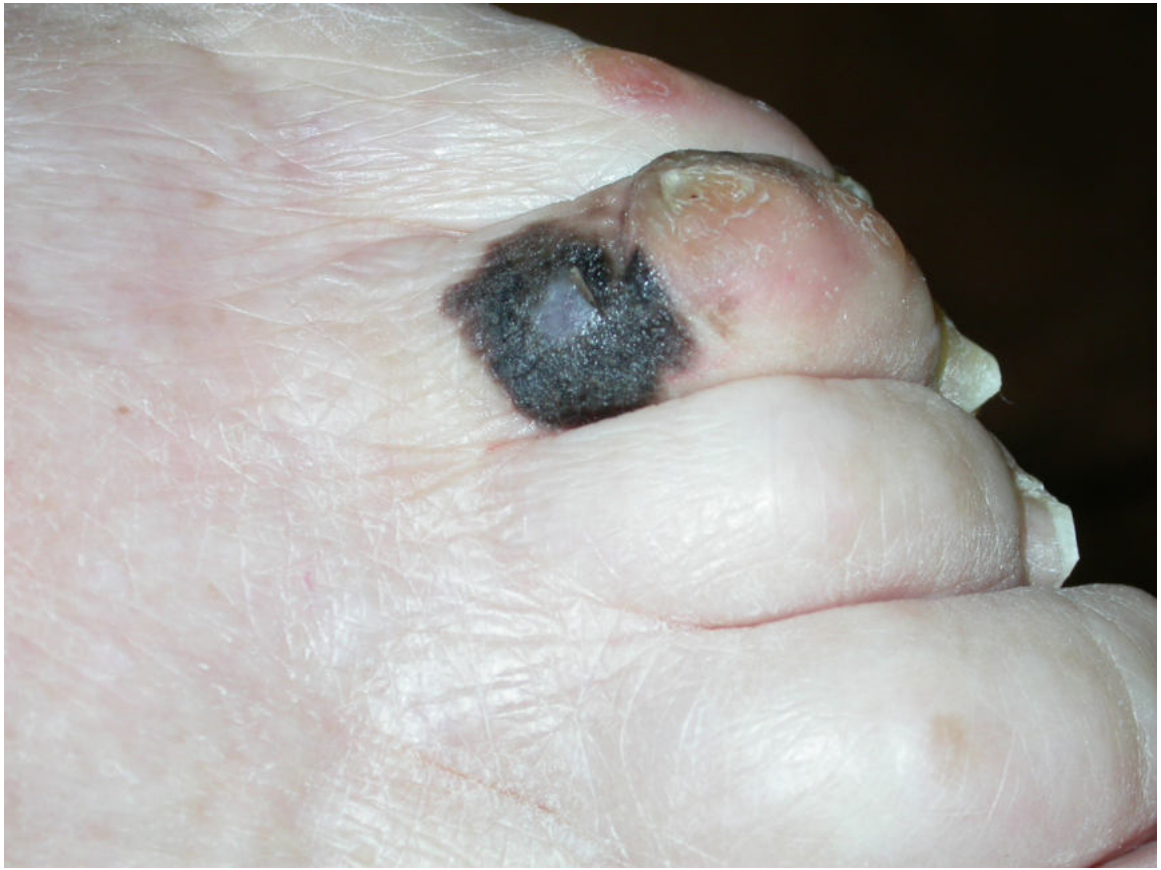
Nodular melanoma



Melanoma Clinical manifestations

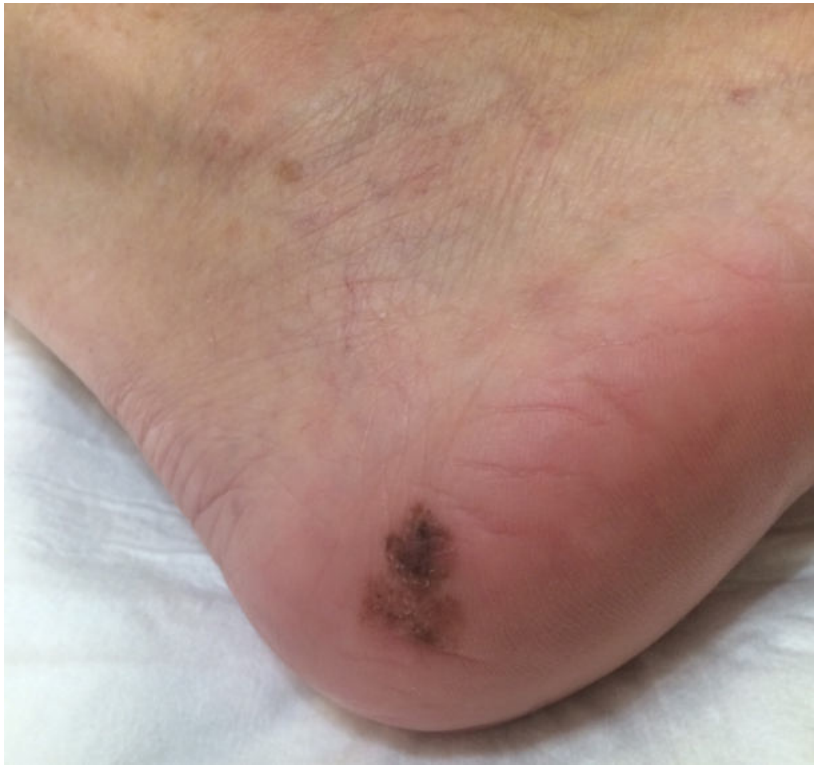
Acrolentiginous melanoma

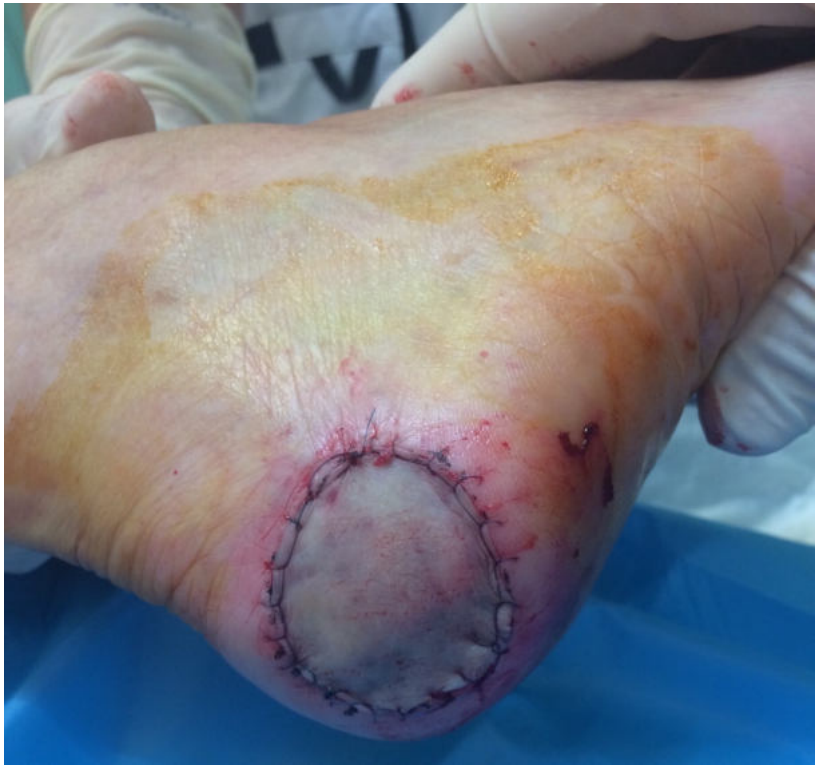
5 % of MM cases



Melanoma Clinical manifestations

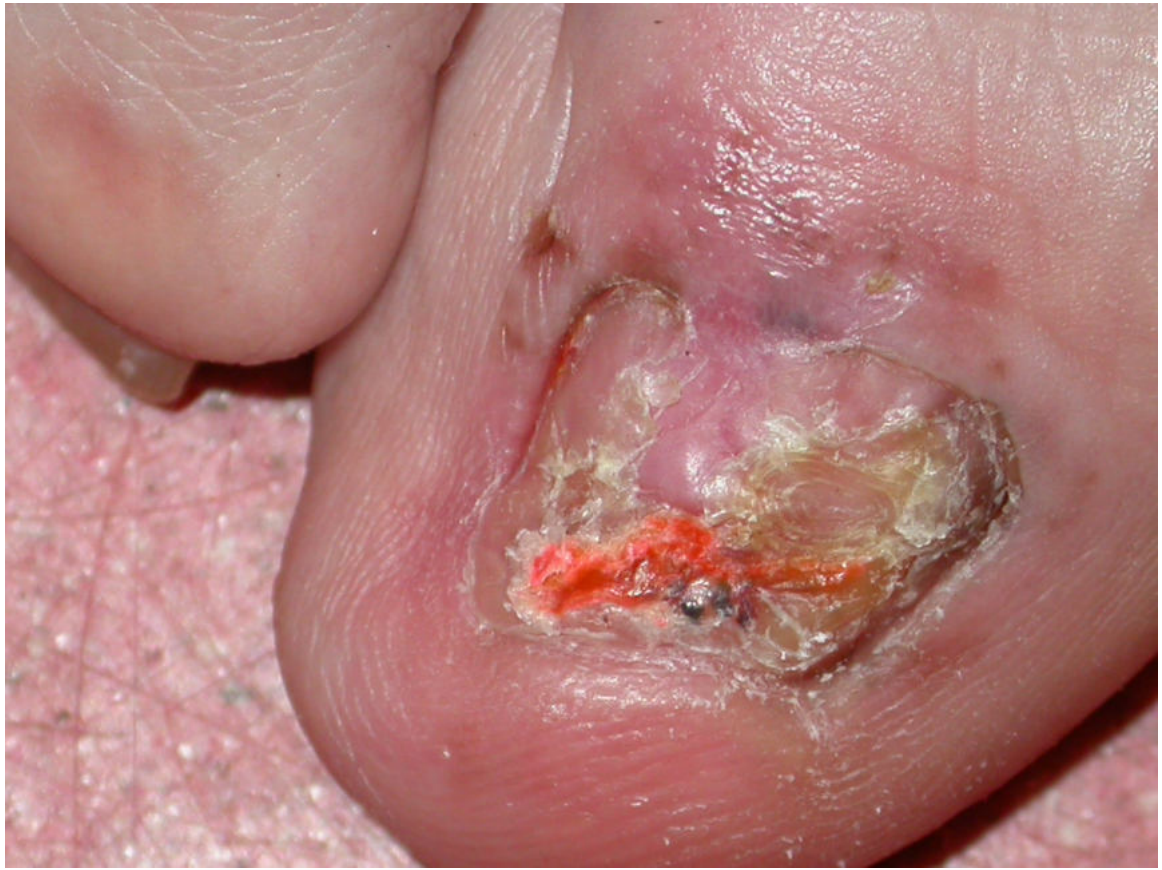
Acrolentiginous melanoma





Melanoma Clinical manifestations

Acrolentiginous melanoma

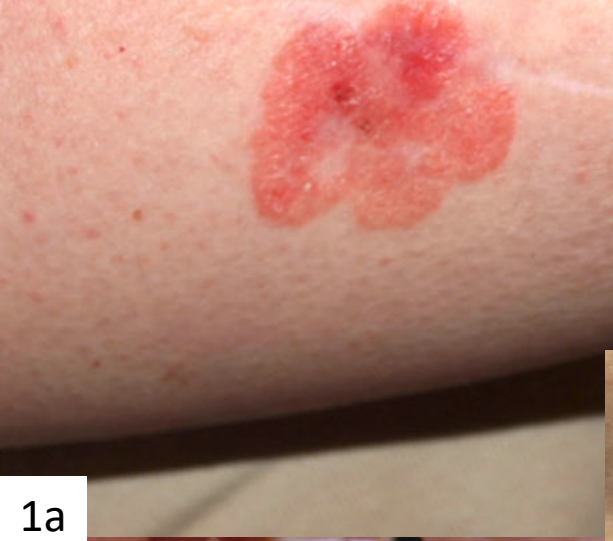


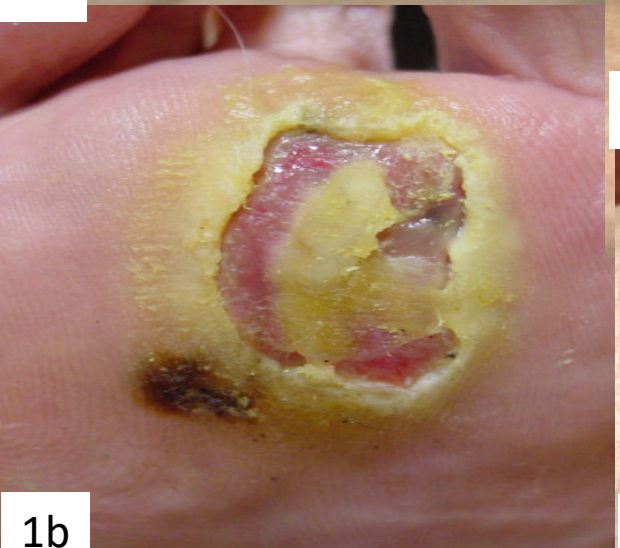
Melanoma Clinical manifestations

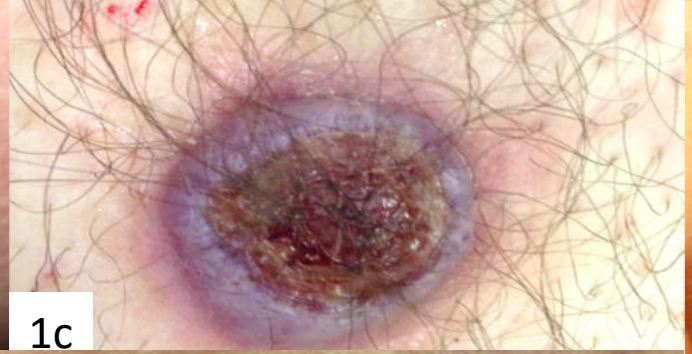
Atypical melanoma

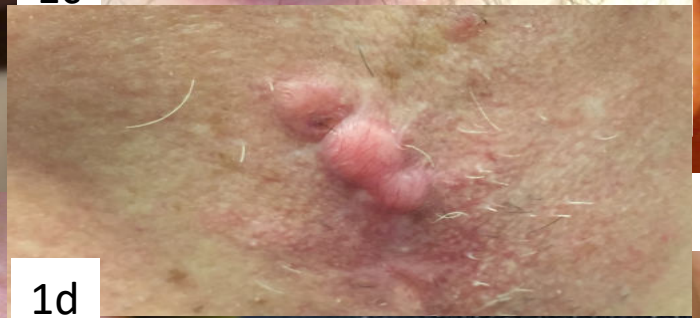
10% of MM cases

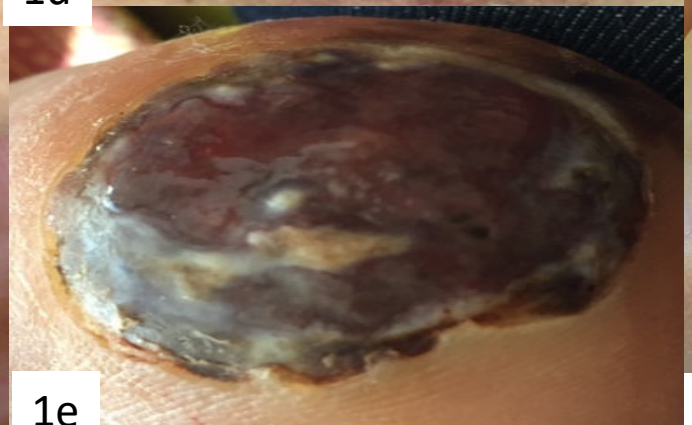
Melanoma masquerading as nonmelanocytic lesions.
Detrixhe A, Libon F, Mansuy M, Nikkels-Tassoudji N, Rorive A, Arrese JE, Quatresooz P, Reginster MA, Nikkels AF.
Melanoma Res. 2016 Dec;26(6):631-634.

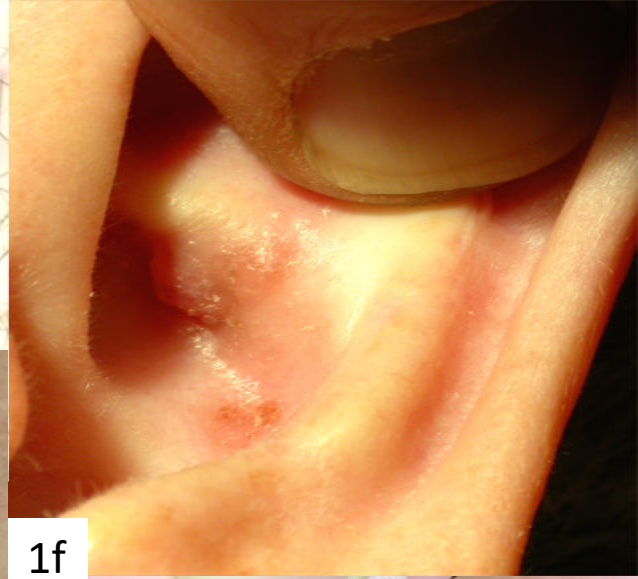

1a

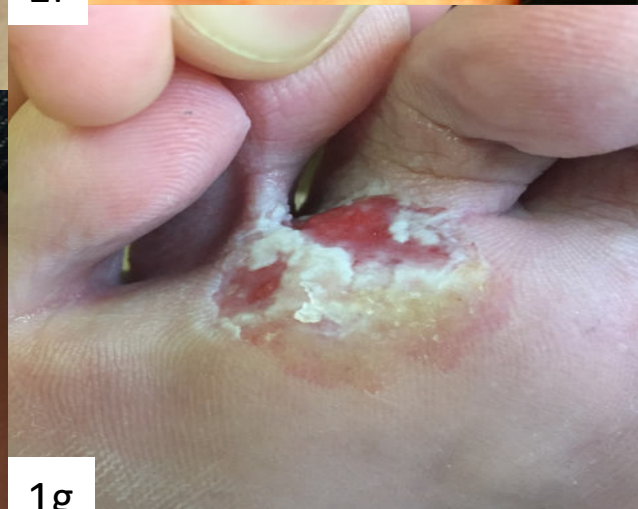

1b


1c


1d

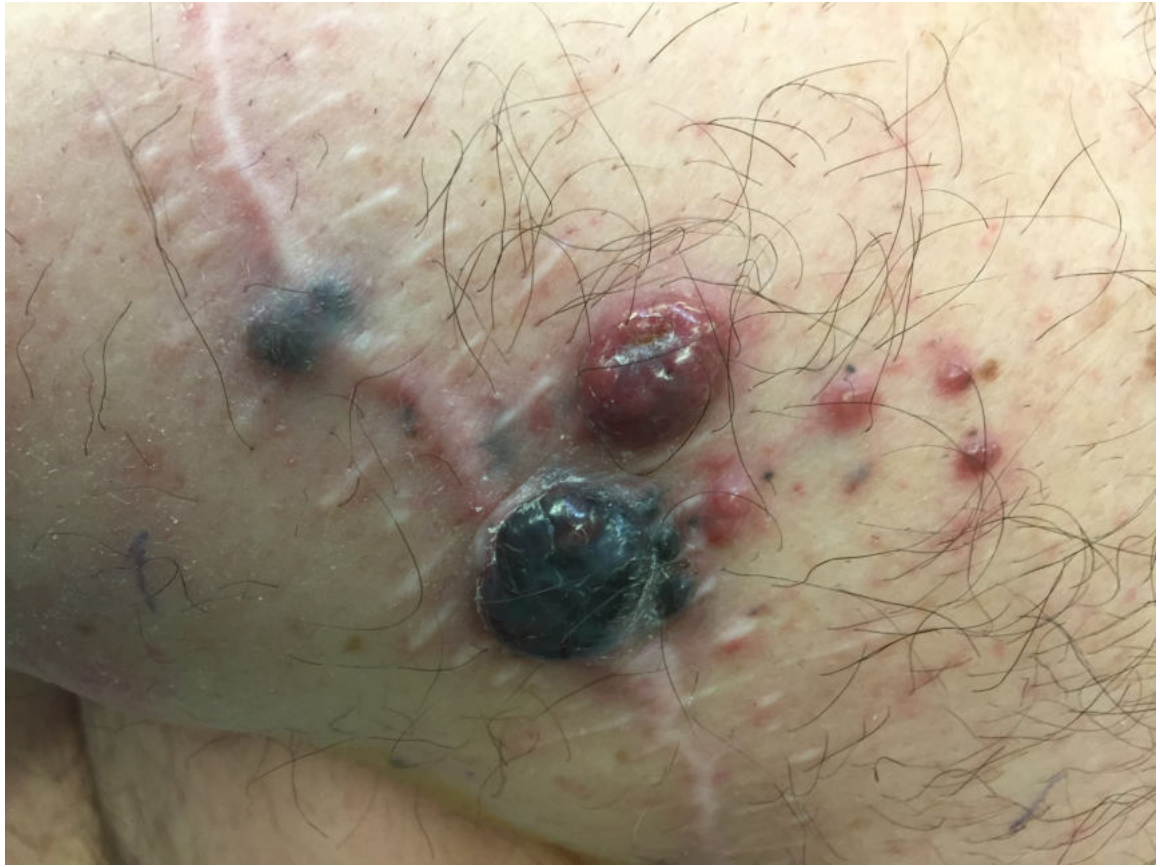

1e


1f


1g

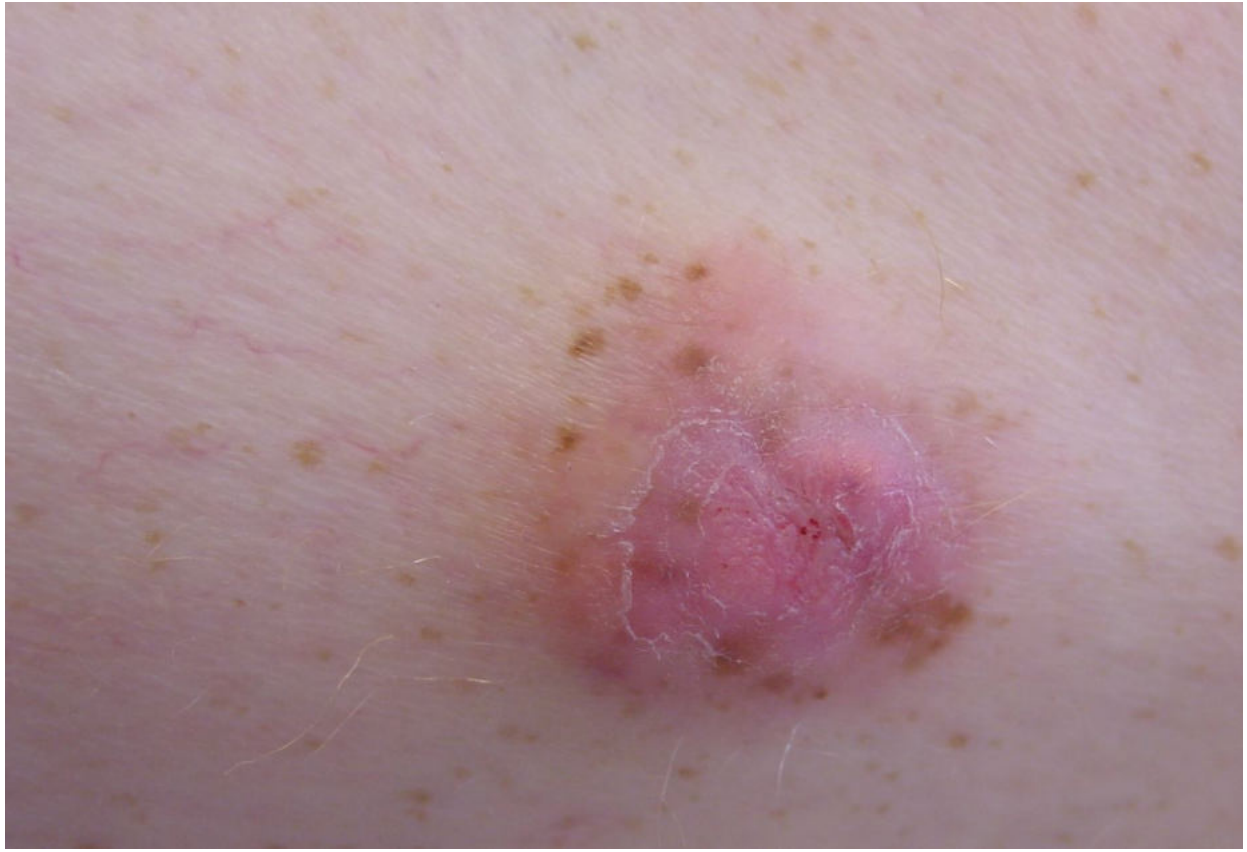
Melanoma Clinical manifestations

Metastatic melanoma



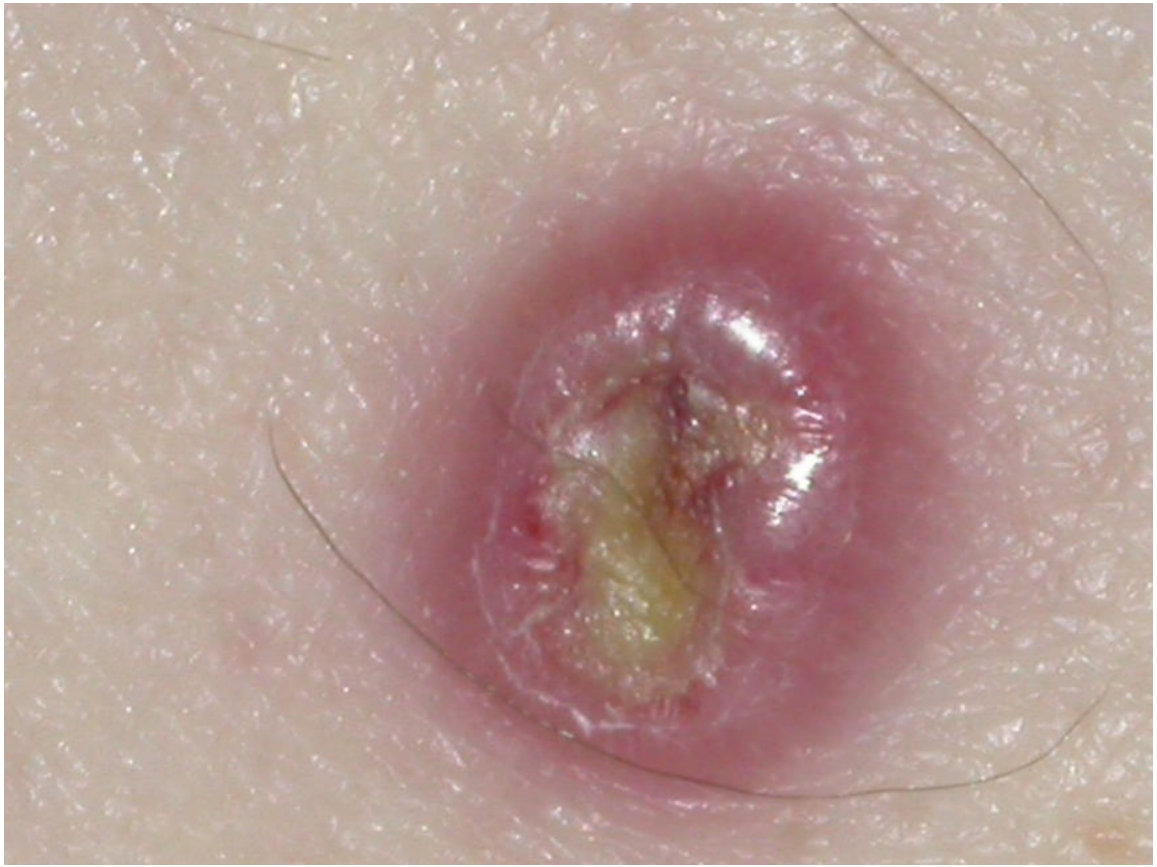
Melanoma Clinical manifestations

Metastatic melanoma



Melanoma Clinical manifestations

Metastatic melanoma



Melanoma

Risk factors

- UV exposure
- Number of moles (both normal and atypical)
- Fair skin, freckling, light hair
- Family history of melanoma
- Personal history of melanoma
- Immunosuppression — OTR: risk increases, prognosis worse
- Age: Risk increases with age
- Gender: Males > females
- Xeroderma pigmentosum

Donor-derived MM:
Screening of donor

Women with MM during pregnancy and 1 st year after:
increased risk for recurrence

Melanoma

Risk factors

- UV exposure
- Number of moles (both normal and atypical)
- Fair skin, freckling, light hair
- Family history of melanoma
- Personal history of melanoma
- Immunosuppression
- Age: Risk increases with age
- Gender: Males > females
- Xeroderma pigmentosum

Tall stature: increased risk

Coffee:
chemopreventive effect?

PDE-5 inhibitors (Viagra)
Increased risk for MM and BCC

Sildenafil: idem (needs confirmation)

Melanoma

Risk factors

Figure 3 – Clinical risk factors for melanoma [4]

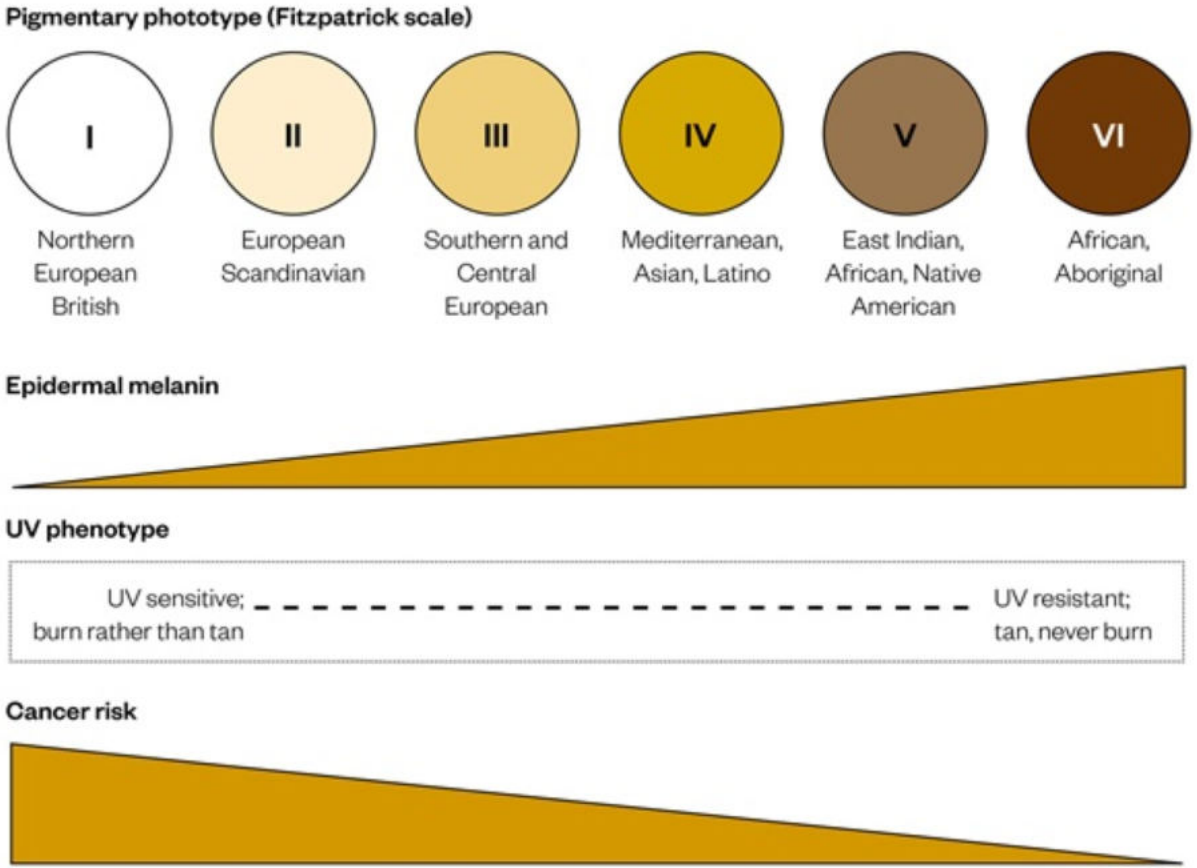
	Relative Risk
Genetic Factors	
1. Strong family history	35-70
2. Weak family history	3
Naevi	
1. Multiple benign naevi (>100)	11
2. Multiple atypical naevi	11
Previous skin factors	
1. Previous melanoma	8.5
2. Previous non-melanoma skin cancer	2.9
Immunosuppression	
1. Transplant recipients	3
2. AIDS	1.5
Sun sensitivity	
1. Type 1 skin (sunburn easily)	1.7
2. Freckling	2.5
3. Blue eyes	1.6
4. Red hair	2.4
UV exposure	
1. History of blistering sunburn	2.5

Please remember:

A dysplastic naevus is NOT a precancerous lesion

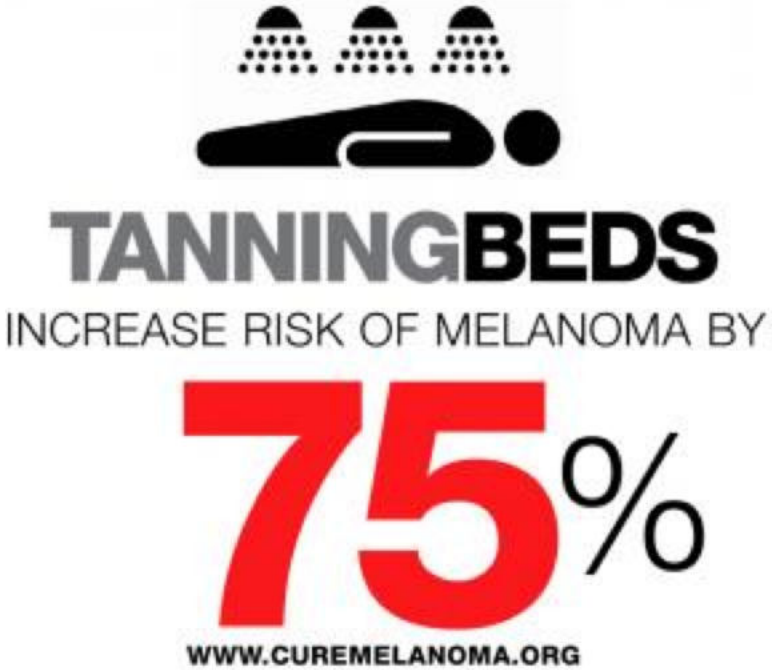
Melanoma

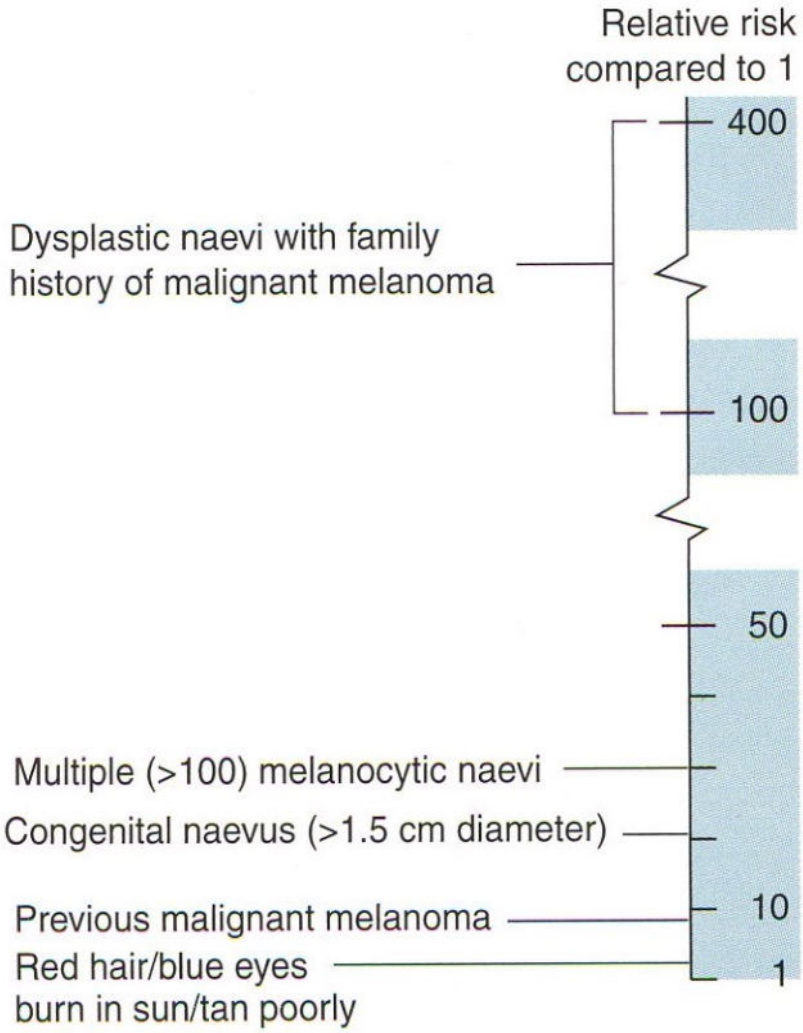
Risk factors



Melanoma

Risk factors





Major risk factors

Naevi

Melanoma

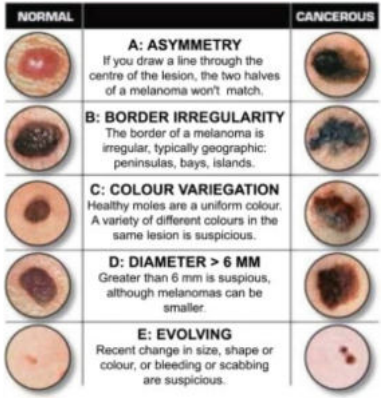
Risk of subsequent MM after MM diagnosis

Cumulative lifetime risk of subsequent MM = 20%

Melanoma risk factors

Clinical diagnosis and diagnostic technics

Clinical recognition
- ABCDE Algorithm

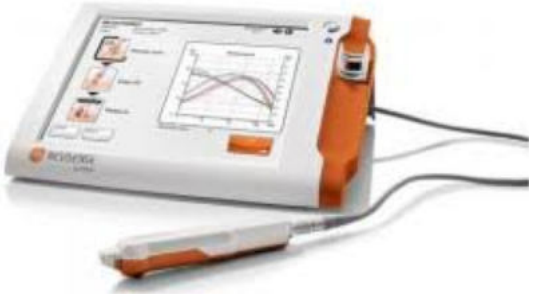


Dermoscopy

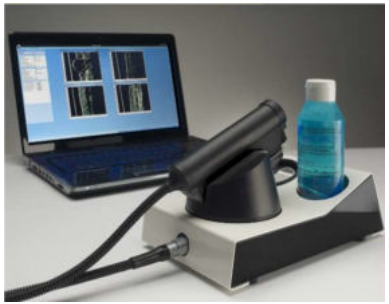
Melanoma risk factors

Clinical diagnosis and diagnostic techniques

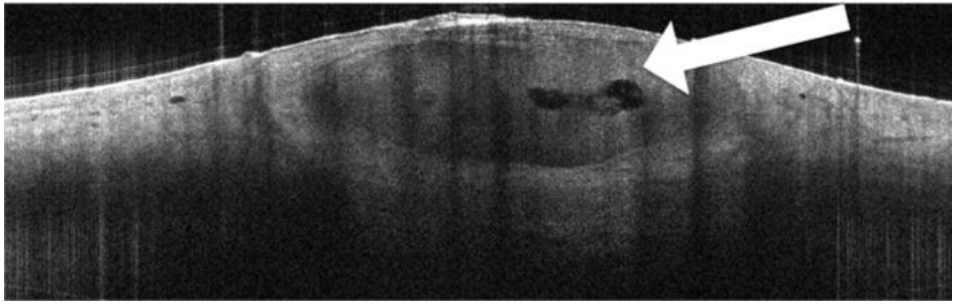
Nevisense



20 Mhz echography



Optical coherence tomography (OCT)



Histology and immunohistology

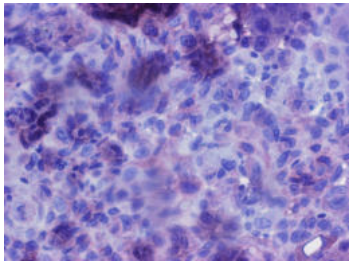
KI67 rate

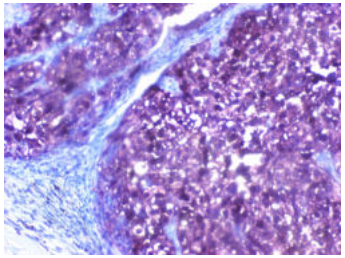
Tyrosinase

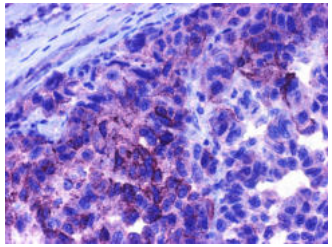
S-100a

Melan-A

HMB-45







Breslow depth

BRAF

Genetic analysis

Excision

No biopsy

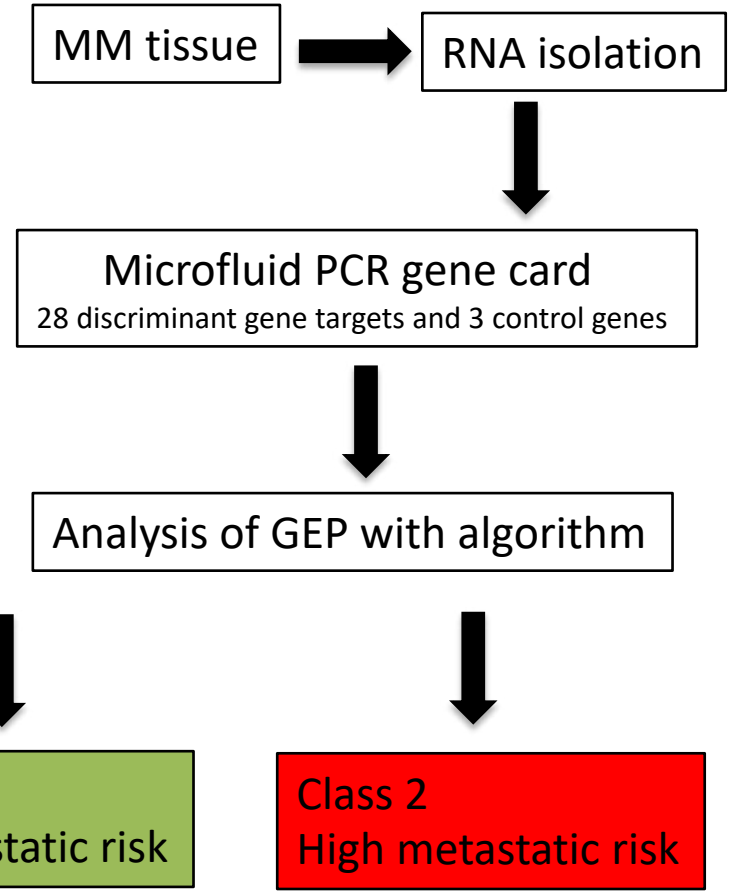
Melanoma risk factors

Department of Dermatology
Centre Hospitalier Universitaire de Liège

Clinical diagnosis and diagnostic techniques

GEP: gene expression profile

Melanoma 31-GEP test



Change in clinical approach ???????

Melanoma

MM survival ⟷ ***Diagnostic techniques***

Diagnosis of early MM
Lesion depth: ↓

→ **These MM are not responsible for a lethal outcome**

Rapid growing MM
Amelanotic MM
Atypical MM

→ **Difficult and delayed diagnosis**

Melanoma

Surveillance strategies

50% of MM develop in pre-existing naevi

→ **Clinical examination: Total body examination**
Lesion-directed examination
High-risk patients: DDS

50% of MM develop de novo

→ **Rapid diagnosis consultation**

Lesion-directed diagnosis

→ Regular circuit

→ Rapid circuit

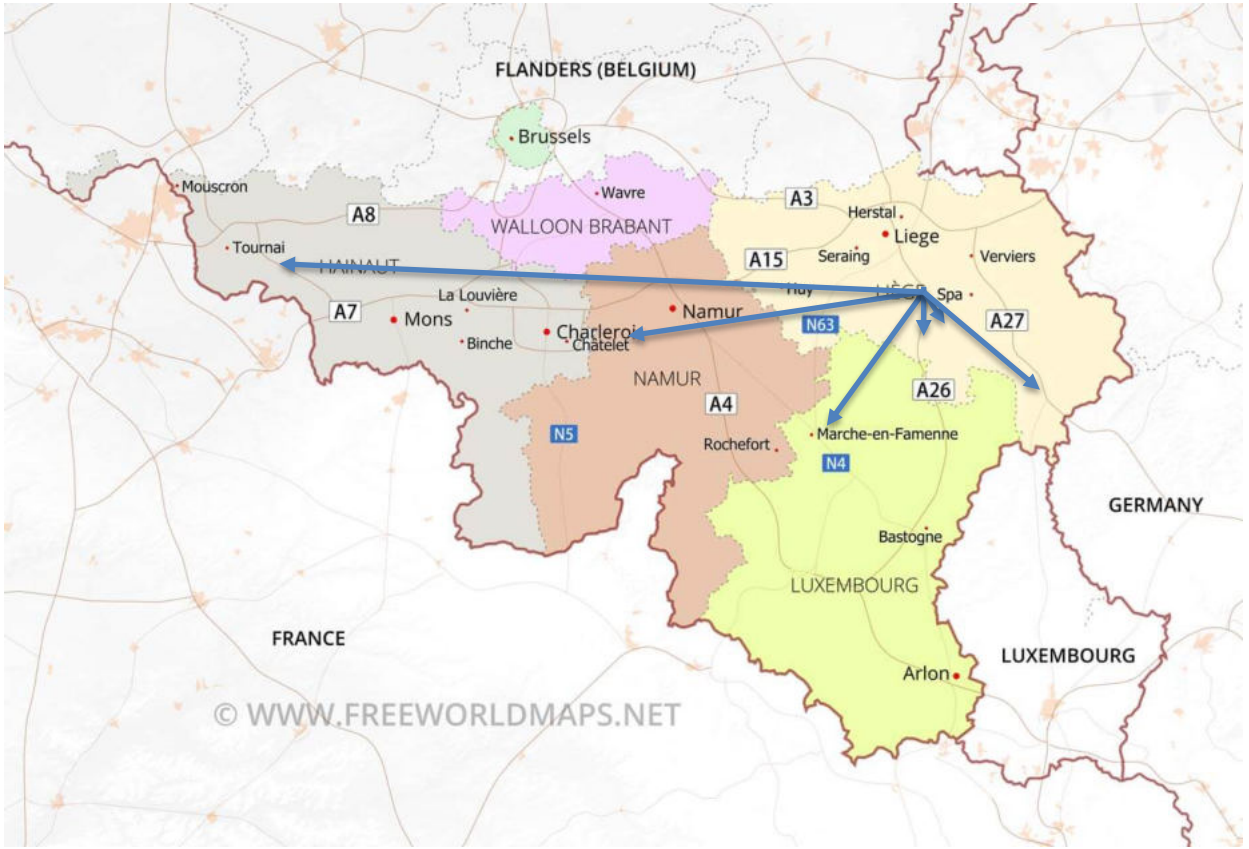
Melanoma

TELESPOT project

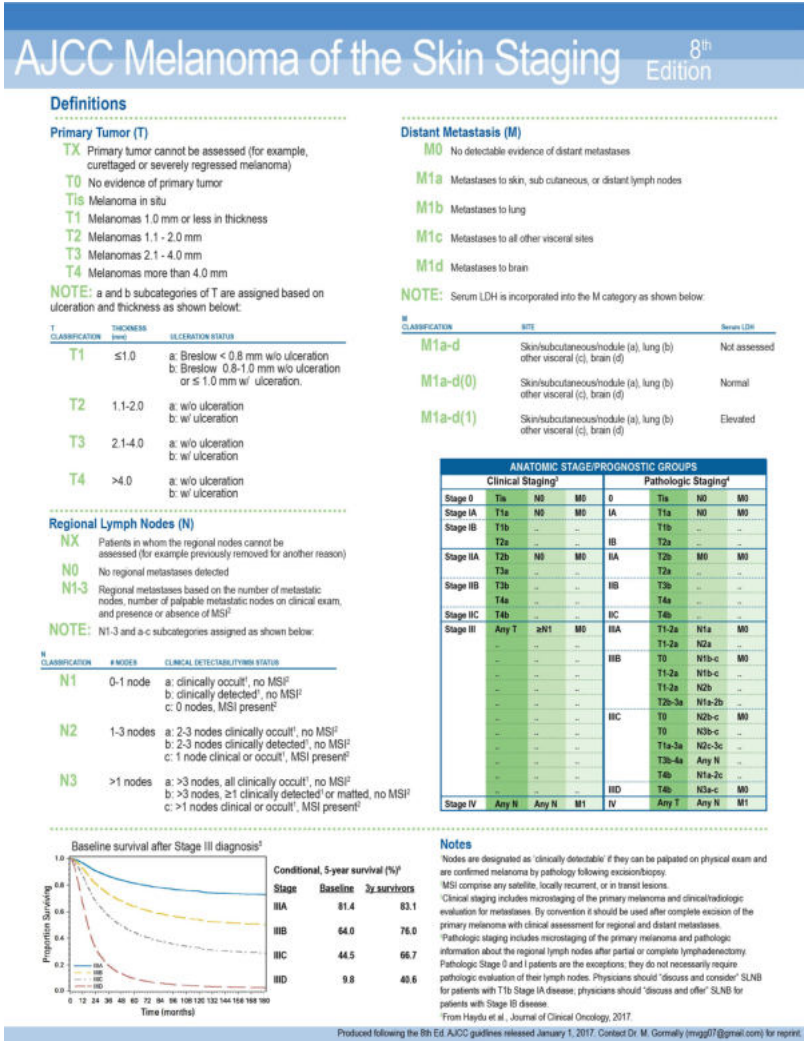
7 GP center

Teledermoscopy

Application on Iphone



Staging



AJCC Melanoma of the Skin Staging 8th Edition

Definitions

Primary Tumor (T)

- TX Primary tumor cannot be assessed (for example, curettaged or severely regressed melanoma)
- T0 No evidence of primary tumor
- Tis Melanoma in situ
- T1 Melanomas 1.0 mm or less in thickness
- T2 Melanomas 1.1 - 2.0 mm
- T3 Melanomas 2.1 - 4.0 mm
- T4 Melanomas more than 4.0 mm

NOTE: a and b subcategories of T are assigned based on ulceration and thickness as shown below:

T CLASSIFICATION	THICKNESS (mm)	ULCERATION STATUS
T1	≤1.0	a: Breslow < 0.8 mm w/o ulceration b: Breslow 0.8-1.0 mm w/o ulceration or ≤ 1.0 mm w/ ulceration.
T2	1.1-2.0	a: w/o ulceration b: w/ ulceration
T3	2.1-4.0	a: w/o ulceration b: w/ ulceration
T4	>4.0	a: w/o ulceration b: w/ ulceration

Regional Lymph Nodes (N)

- NX Patients in whom the regional nodes cannot be assessed (for example previously removed for another reason)
- N0 No regional metastases detected
- N1-3 Regional metastases based on the number of metastatic nodes, number of palpable metastatic nodes on clinical exam, and presence or absence of MSI[2]

NOTE: N1-3 and a-c subcategories assigned as shown below:

N CLASSIFICATION	# NODES	CLINICAL DETECTABILITY/MSI STATUS
N1	0-1 node	a: clinically occult[1], no MSI[2] b: clinically detected[1], no MSI[2] c: 0 nodes, MSI present[2]
N2	1-3 nodes	a: 2-3 nodes clinically occult[1], no MSI[2] b: 2-3 nodes clinically detected[1], no MSI[2] c: 1 node clinical or occult[1], MSI present[2]
N3	>1 nodes	a: >3 nodes, all clinically occult[1], no MSI[2] b: >3 nodes, ≥1 clinically detected[1] or matted, no MSI[2] c: >1 nodes clinical or occult[1], MSI present[2]

Distant Metastasis (M)

- M0 No detectable evidence of distant metastases
- M1a Metastases to skin, sub cutaneous, or distant lymph nodes
- M1b Metastases to lung
- M1c Metastases to all other visceral sites
- M1d Metastases to brain

NOTE: Serum LDH is incorporated into the M category as shown below:

M CLASSIFICATION	SITE	Serum LDH
M1a-d	Skin/subcutaneous/nodule (a), lung (b) other visceral (c), brain (d)	Not assessed
M1a-d(0)	Skin/subcutaneous/nodule (a), lung (b) other visceral (c), brain (d)	Normal
M1a-d(1)	Skin/subcutaneous/nodule (a), lung (b) other visceral (c), brain (d)	Elevated

ANATOMIC STAGE/PROGNOSTIC GROUPS

Clinical Staging[3]				Pathologic Staging[4]			
Stage 0	Tis	N0	M0	0	Tis	N0	M0
Stage IA	T1a	N0	M0	IA	T1a	N0	M0
Stage IB	T1b	..	..		T1b	..	..
	T2a	..	..	IB	T2a	..	..
Stage IIA	T2b	N0	M0	IIA	T2b	M0	M0
	T3a	..	..		T2a	..	..
Stage IIB	T3b	..	..	IIB	T3b	..	..
	T4a	..	..		T4a	..	..
Stage IIC	T4b	..	..	IIC	T4b	..	..
Stage III	Any T	≥N1	M0	IIIA	T1-2a	N1a	M0
	..	..	..		T1-2a	N2a	..
	..	..	..	IIIB	T0	N1b-c	M0
	..	..	..		T1-2a	N1b-c	..
	..	..	..		T1-2a	N2b	..
	..	..	..		T2b-3a	N1a-2b	..
	..	..	..	IIIC	T0	N2b-c	M0
	..	..	..		T0	N3b-c	..
	..	..	..		T1a-3a	N2c-3c	..
	..	..	..		T3b-4a	Any N	..
	..	..	..		T4b	N1a-2c	..
	..	..	..	IIID	T4b	N3a-c	M0
Stage IV	Any N	Any N	M1	IV	Any T	Any N	M1

Baseline survival after Stage III diagnosis[5]

Conditional, 5-year survival (%)[6]

Stage	Baseline	3y survivors
IIIA	81.4	83.1
IIIB	64.0	76.0
IIIC	44.5	66.7
IIID	9.8	40.6

Notes

[1]Nodes are designated as 'clinically detectable' if they can be palpated on physical exam and are confirmed melanoma by pathology following excision/biopsy.
[2]MSI comprise any satellite, locally recurrent, or in transit lesions.
[3]Clinical staging includes microstaging of the primary melanoma and clinical/radiologic evaluation for metastases. By convention it should be used after complete excision of the primary melanoma with clinical assessment for regional and distant metastases.
[4]Pathologic staging includes microstaging of the primary melanoma and pathologic information about the regional lymph nodes after partial or complete lymphadenectomy. Pathologic Stage 0 and I patients are the exceptions; they do not necessarily require pathologic evaluation of their lymph nodes. Physicians should "discuss and consider" SLNB for patients with T1b Stage IA disease; physicians should "discuss and offer" SLNB for patients with Stage IB disease.
[5]From Haydu et al., Journal of Clinical Oncology, 2017.

Produced following the 8th Ed. AJCC guidlines released January 1, 2017. Contact Dr. M. Gormally (mvggt07@gmail.com) for reprint.

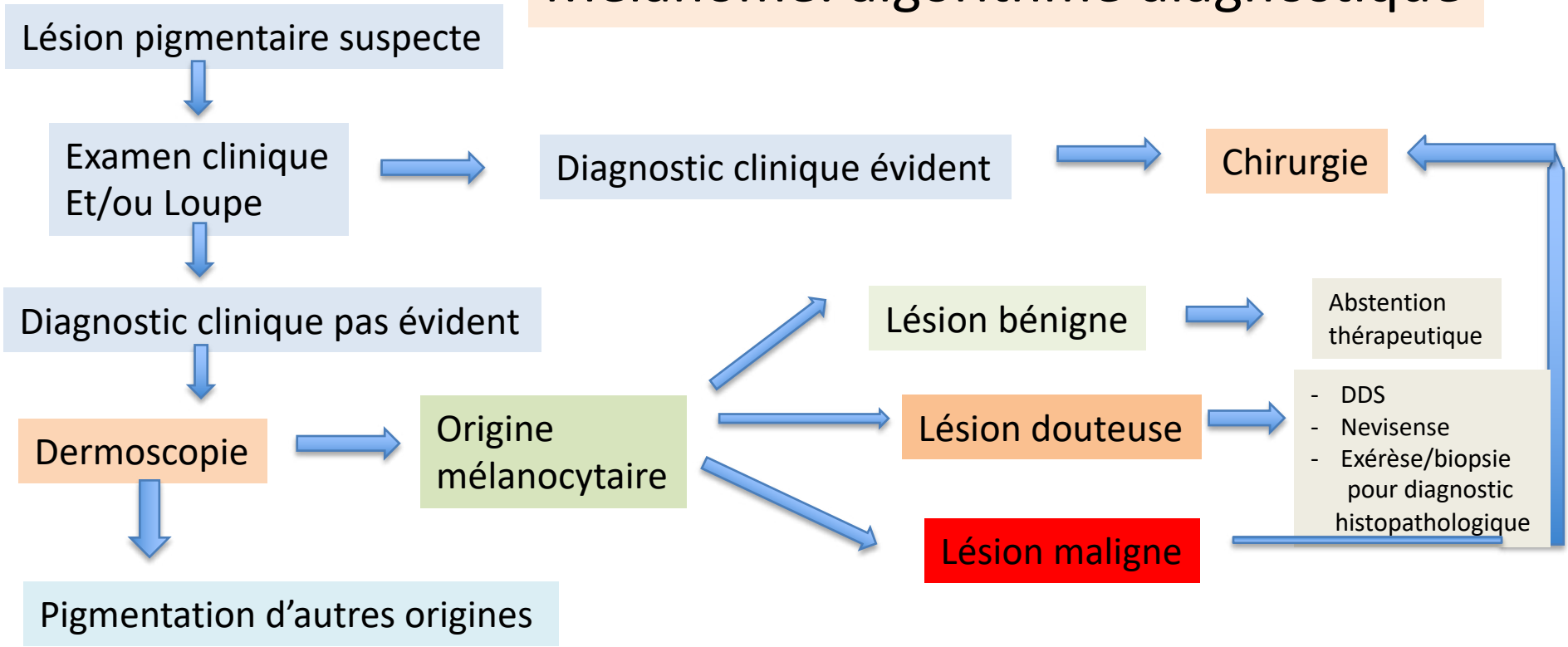
AJCC 2018

Melanoma

Patient care pathway

Trajet de soins en dermato-oncologie

Mélanome: algorithme diagnostique



Mélanome

Lésion pigmentaire hautement suspecte
Mélanome

Echographie 20 Mhz

> 1 mm d'épaisseur

Excision chirurgicale avec 2 cm de marge
Ganglion sentinelle si possible

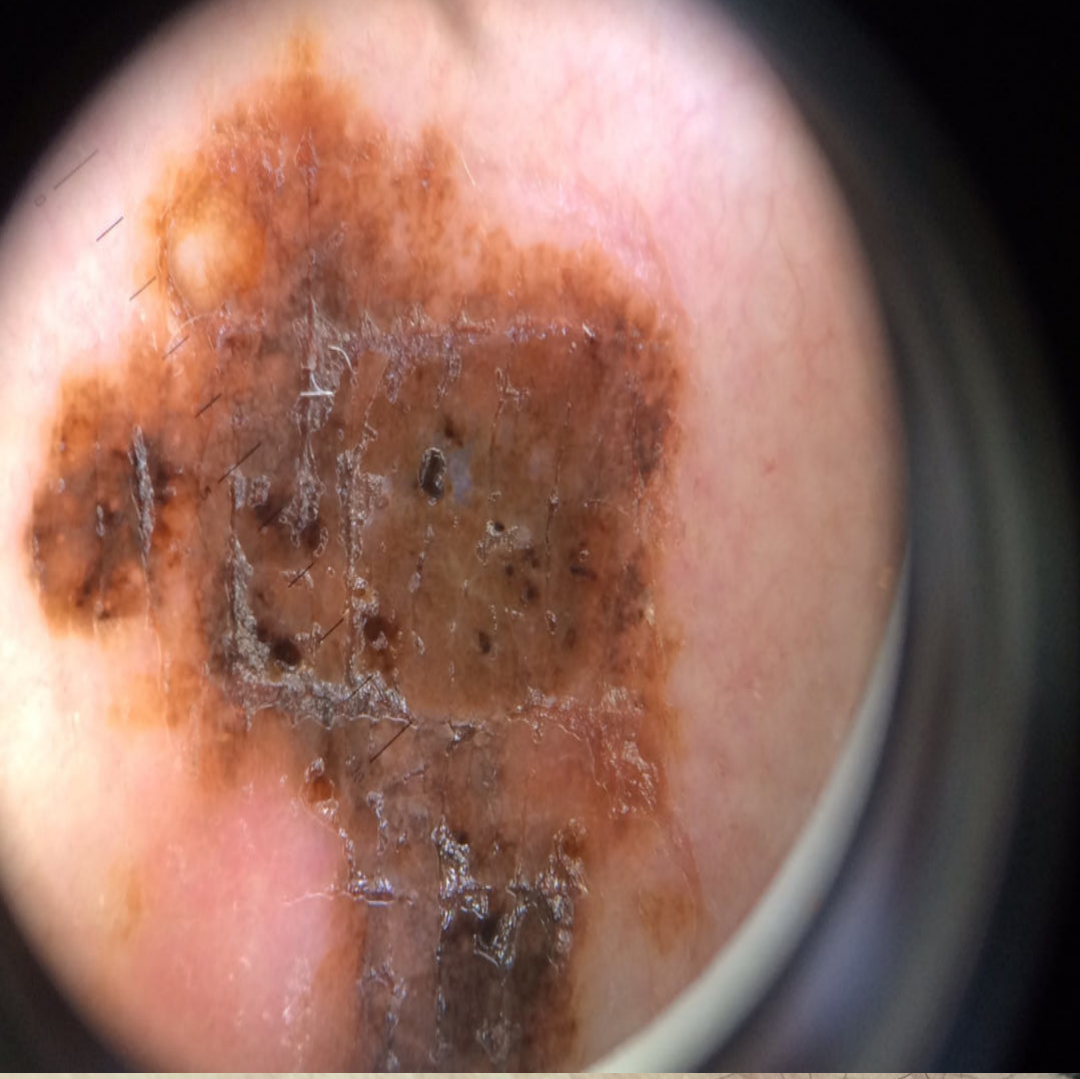
< 1 mm d'épaisseur

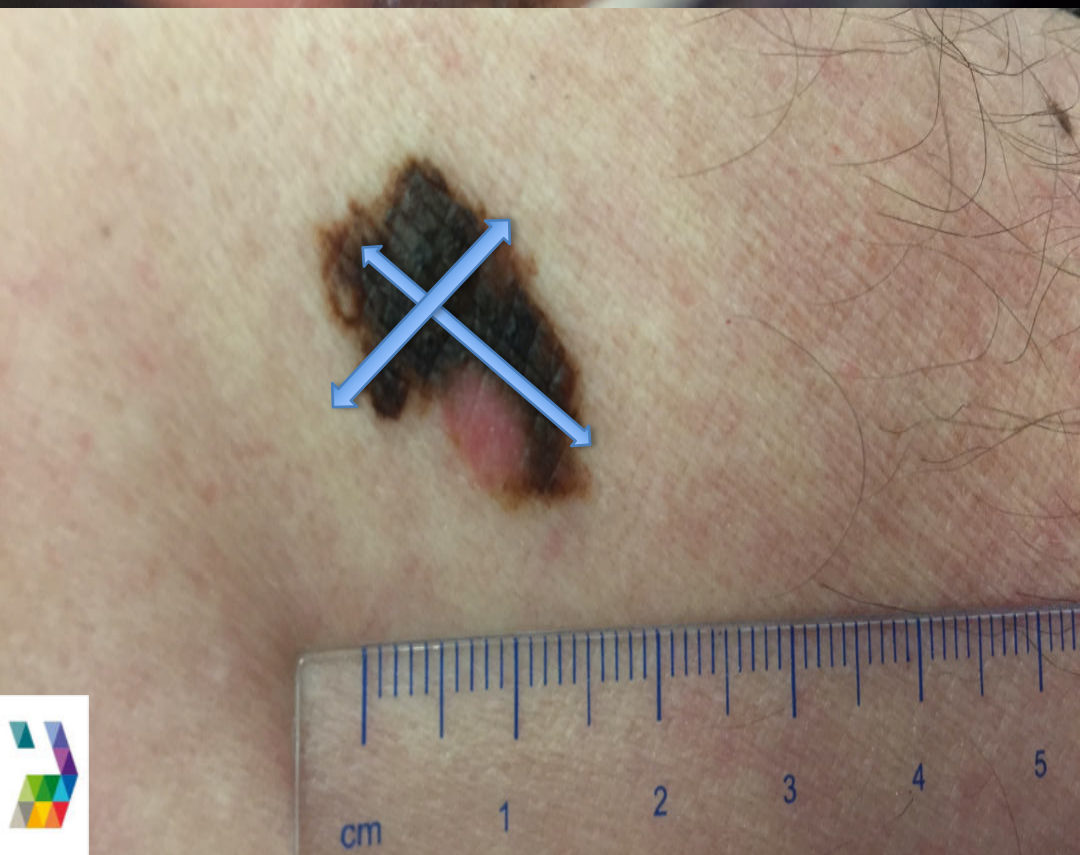
Excision chirurgicale avec 1 cm de marge

Histologie < 1mm mais
- Ulcération
- Mitoses: 2 ou >
- Micrométastases

Histologie < 1mm

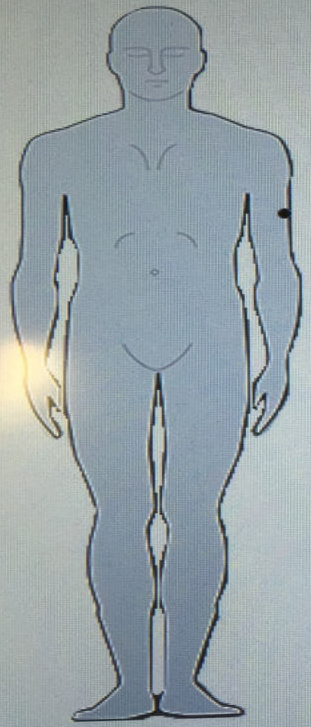
Suivi clinique dermatologie

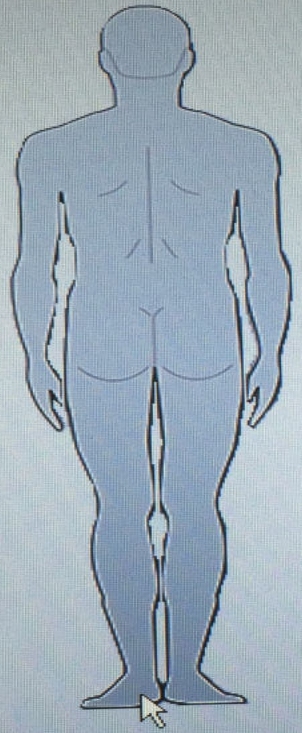


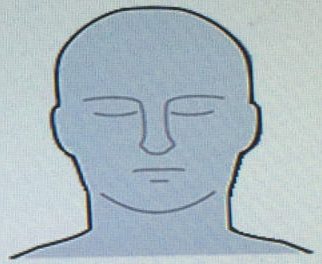

cm
1
2
3
4
5

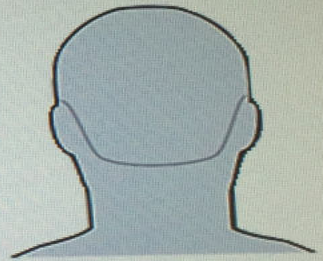
CHAMP CARTE DU CORPS

26/10/2015
11:08









Position de la lésion:

Bras, gauche

Âge:

64

Annuler

Âge

Mesurer

MESURE

ID du patient: [ID-20151026-1108]

Lésion: Bras, gauche 01

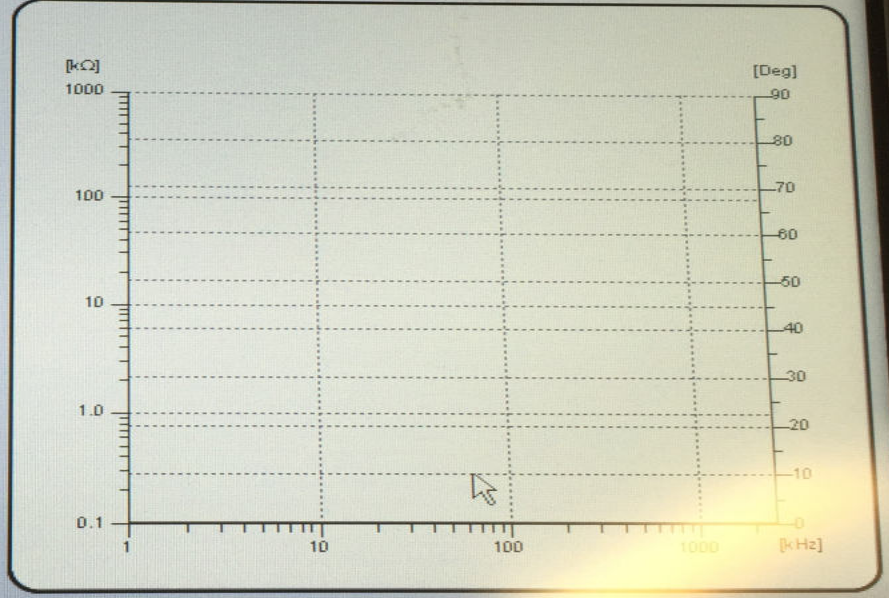
26/10/2015
11:09

DEMO

Humidifiez la peau

Essuyez

Mesurez

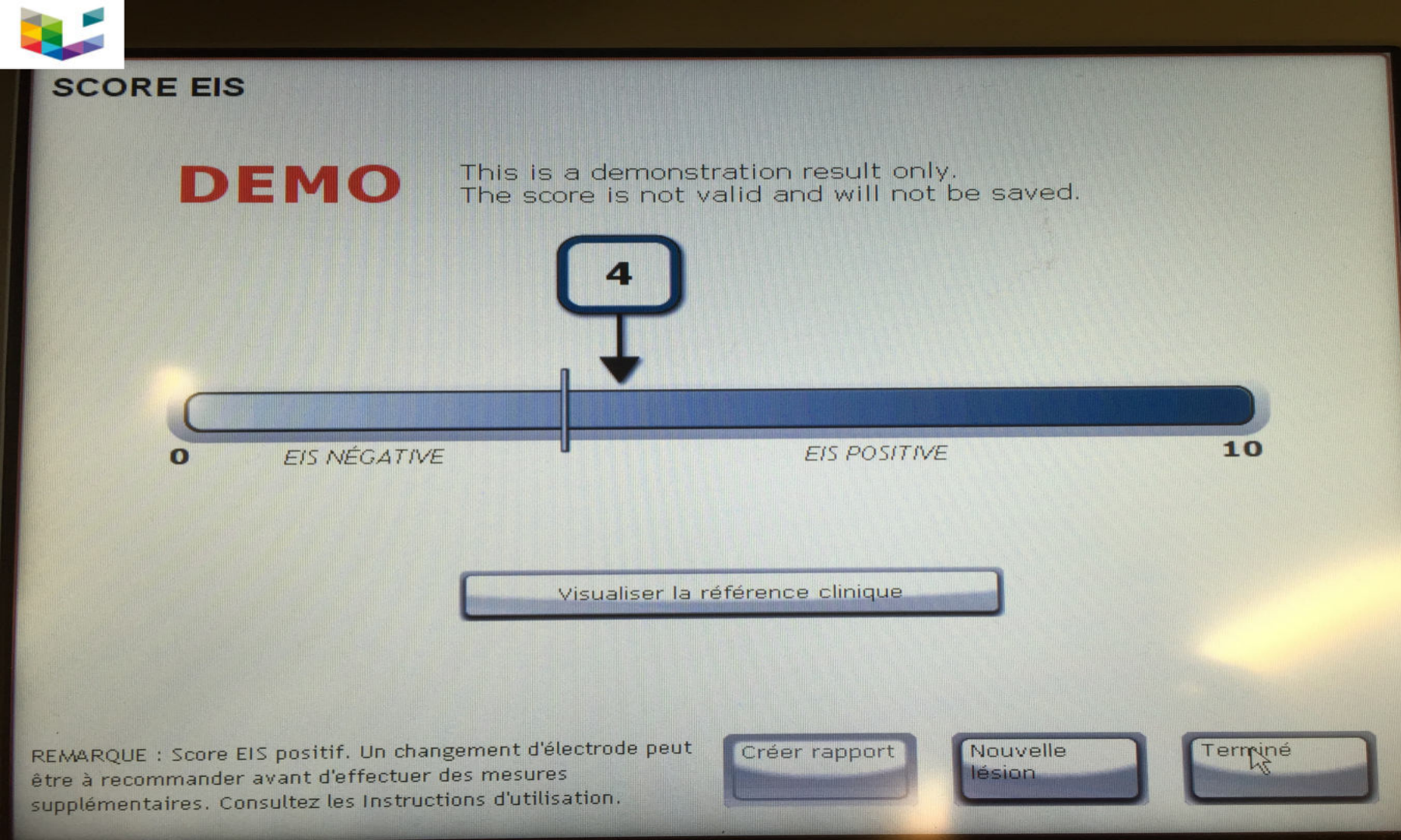


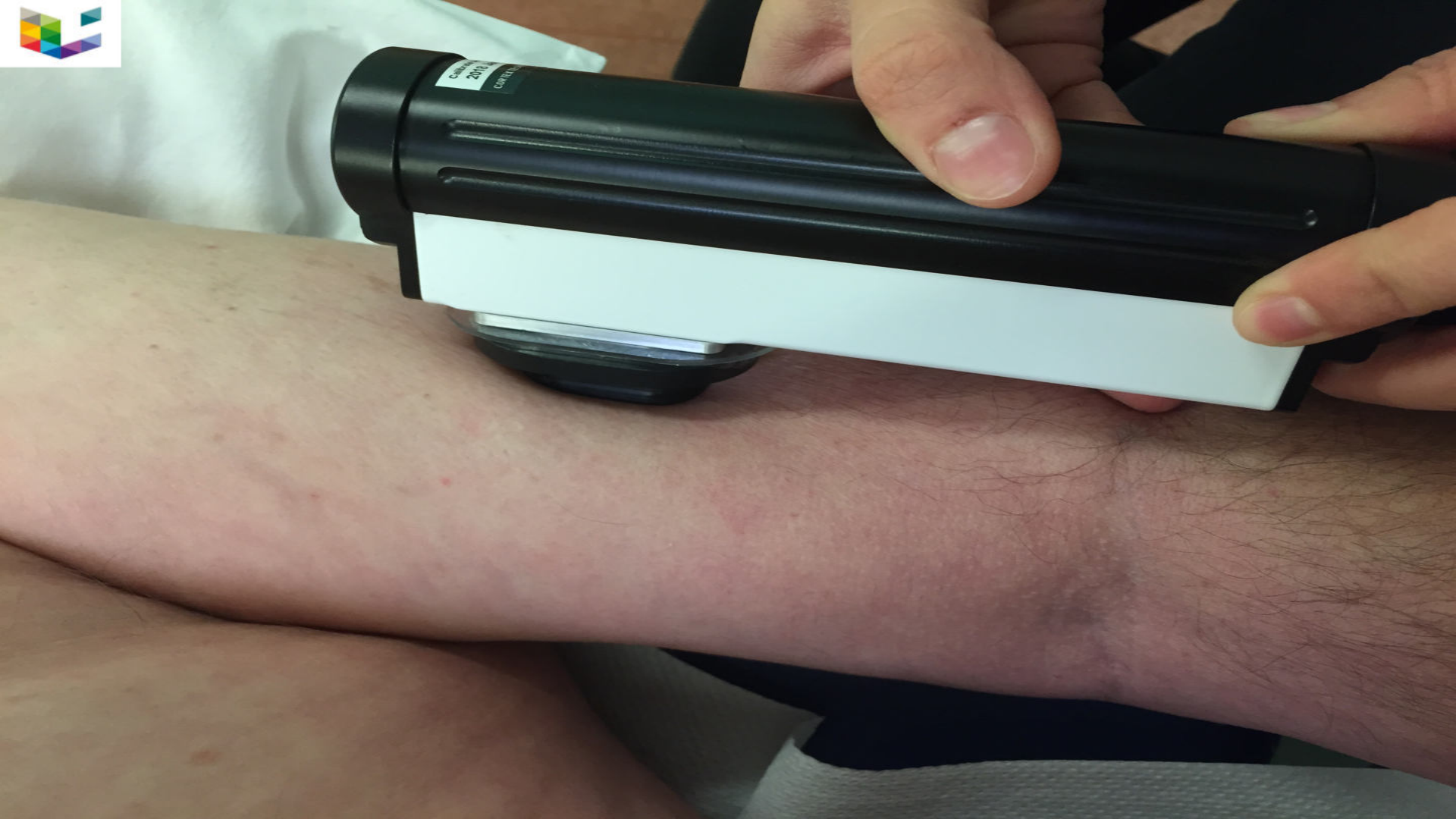
Comptage des électrodes: DEMO

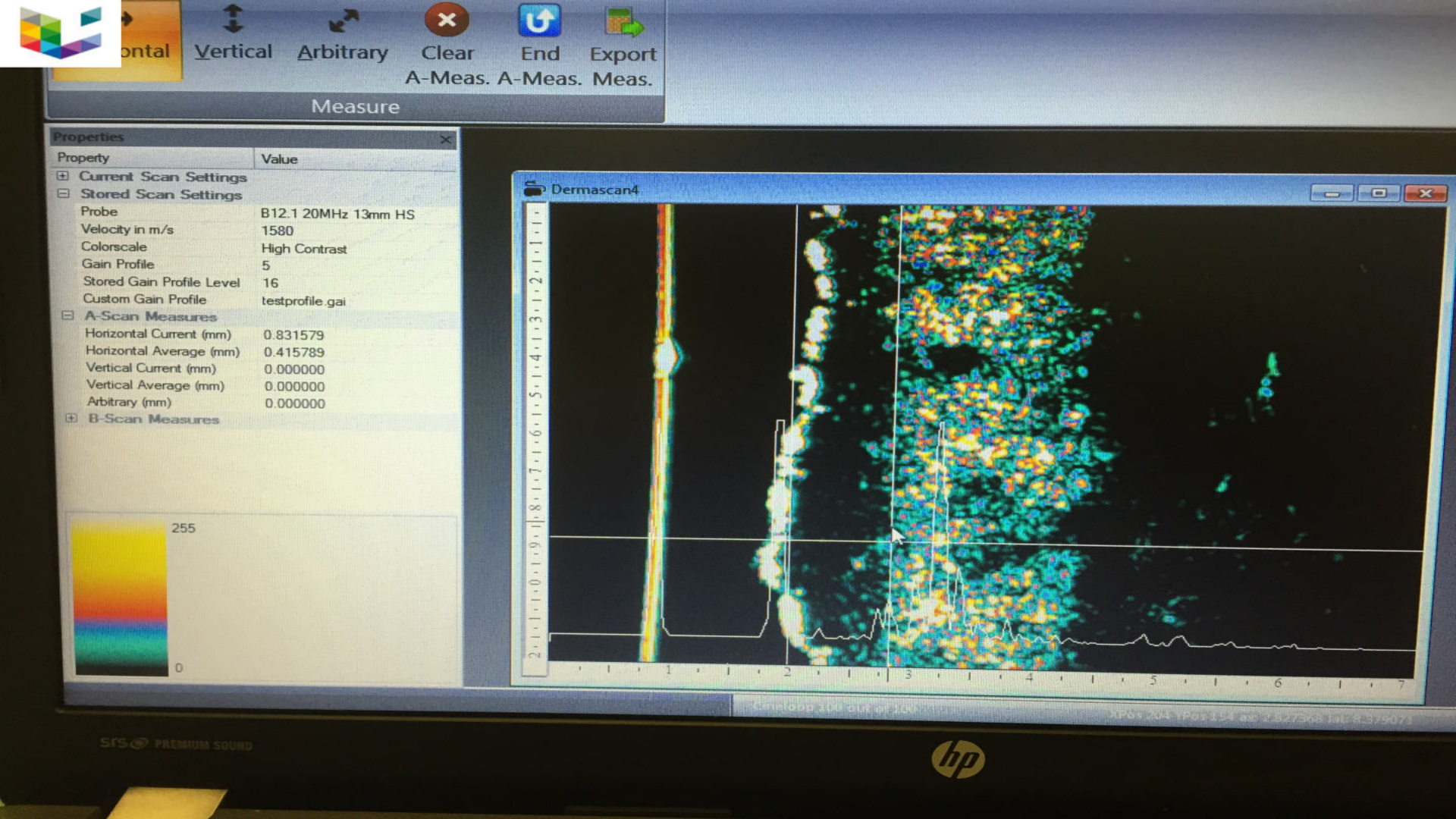
Annuler

Rejeter

Terminé

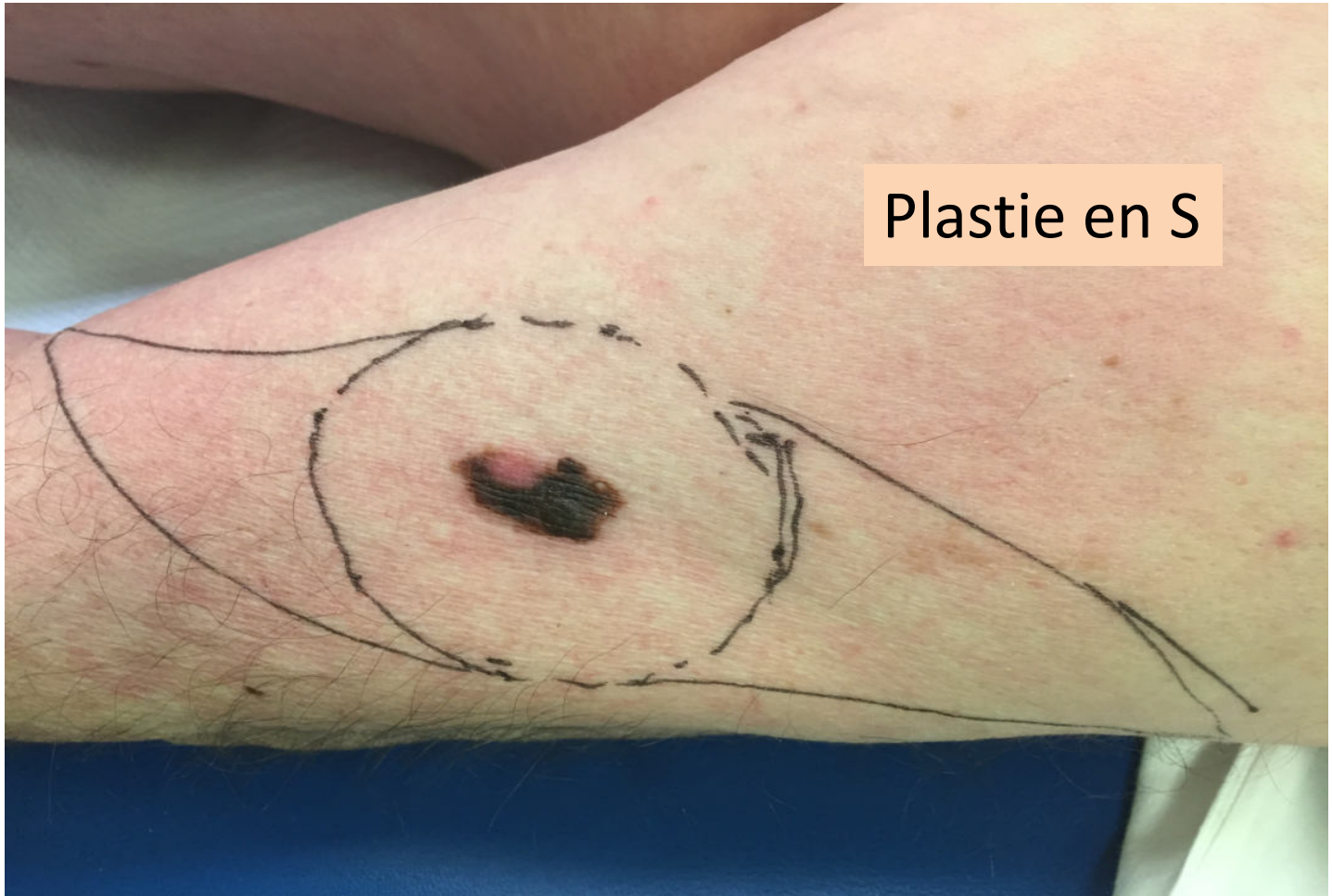

SCORE EIS
DEMO
This is a demonstration result only.
The score is not valid and will not be saved.
4
0
EIS NÉGATIVE
EIS POSITIVE
10
Visualiser la référence clinique
REMARQUE : Score EIS positif. Un changement d'électrode peut être à recommander avant d'effectuer des mesures supplémentaires. Consultez les Instructions d'utilisation.
Créer rapport
Nouvelle lésion
Terminé

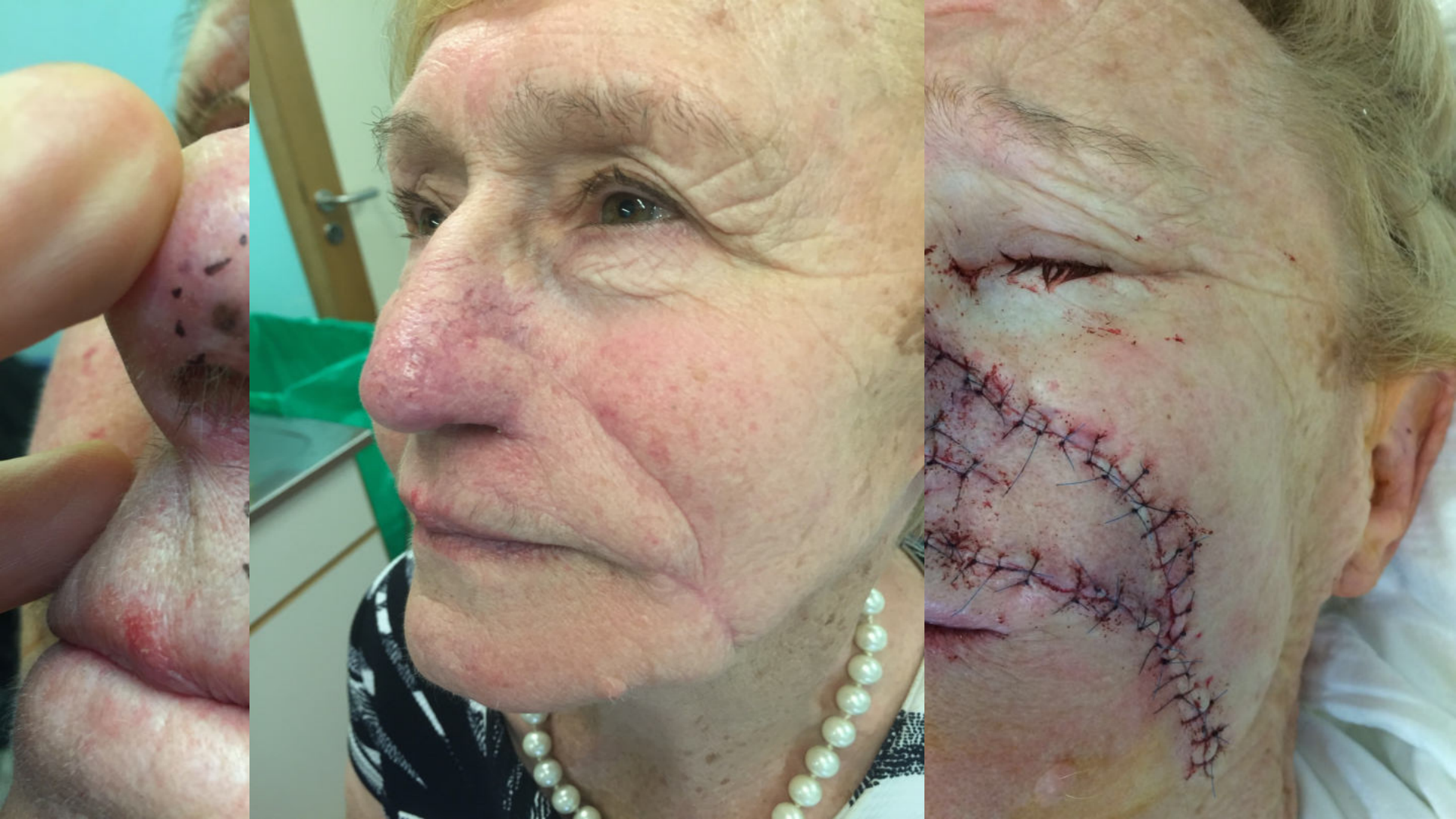



ontal
Vertical
Arbitrary
Clear A-Meas.
End A-Meas.
Export Meas.
Measure
Properties
Property
Value
Current Scan Settings
Stored Scan Settings
Probe
B12.1 20MHz 13mm HS
Velocity in m/s
1580
Colorscale
High Contrast
Gain Profile
5
Stored Gain Profile Level
16
Custom Gain Profile
testprofile.gai
A-Scan Measures
Horizontal Current (mm)
0.831579
Horizontal Average (mm)
0.415789
Vertical Current (mm)
0.000000
Vertical Average (mm)
0.000000
Arbitrary (mm)
0.000000
B-Scan Measures
255
0
Dermascan4
SRS PREMIUM SOUND

0,8 mm de profondeur à l'ultrason 20MHz

=> 1 cm de marge chirurgicale


Plastie en S



Trajet de soins en dermato-oncologie

Mélanome

Marges d'excision cliniques

- MM in situ extrémité chéphalique: 0,9 mm
- MM in situ corps: 0,5 mm
- MM < 1 mm: 1 cm
- MM > 1 mm, et/ou micrométastases, et/ou 2 mitoses ou >, et/ou ulcération: 2cm de marge

CAVE:

Attention: les marges cliniques ne correspondent pas aux marges histologiques
Les tissus rétrécissent dans le formol.

Mélanome

Délais d'interventions dermato-oncologie:

Cas urgents: intervention dans la semaine
- *Mélanome érodé, charnu*

Cas non-urgents:
- *Mélanome de Dubreuilh*
- *Petit mélanome superficiel*

Trajet de soins en dermato-oncologie

Mélanome

Suivi clinique

Années	1, 2	3-5	6 et +
MM in situ (récurrent)	Dermato: 4 x/an	Dermato: 2 x/an	Dermato: 1 x/an
MM < 1 mm (récurrent)	Dermato: 4x/an	Dermato: 2 x/an	Dermato: 1 x/an
MM < 1 mm (récurrent) • Ulcération • Mitoses: 2 ou >= • Micrométastases	Dermato: 4 x/an Onco: 4 x/an (Combiner RV)	Dermato: 2 x/an Onco 2 x/an (Alterner RV)	Dermato: 1 x/an Onco 1 x/an (Alterner RV)
MM > 1 mm (récurrent)	Dermato: 4 x/an Onco: 4 x/an (Combiner RV)	Dermato: 2 x/an Onco 2 x/an (Alterner RV)	Dermato: 1 x/an Onco 1 x/an (Alterner RV)

Trajet de soins en dermato-oncologie

Mélanome

Suivi clinique

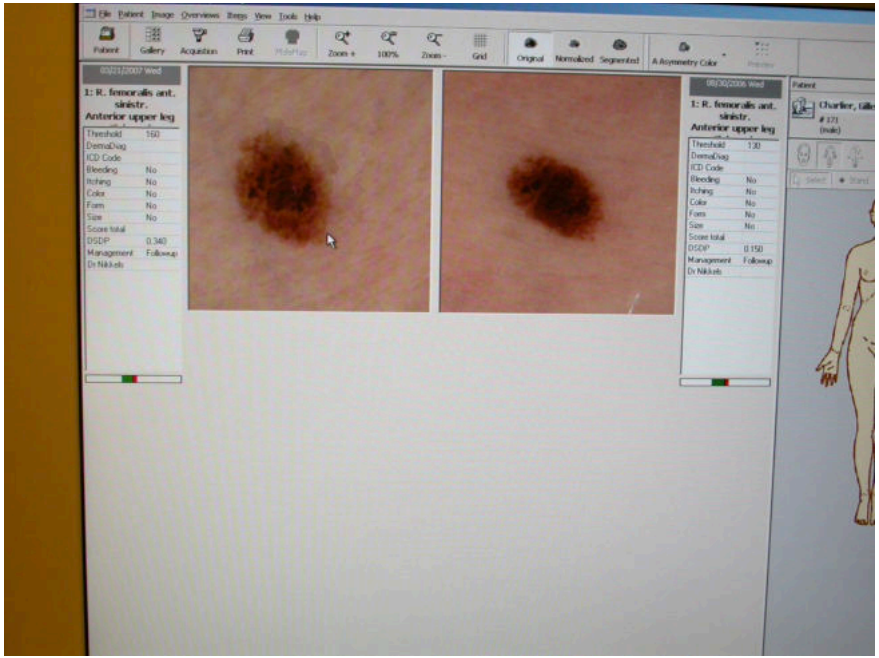
Dermogenius

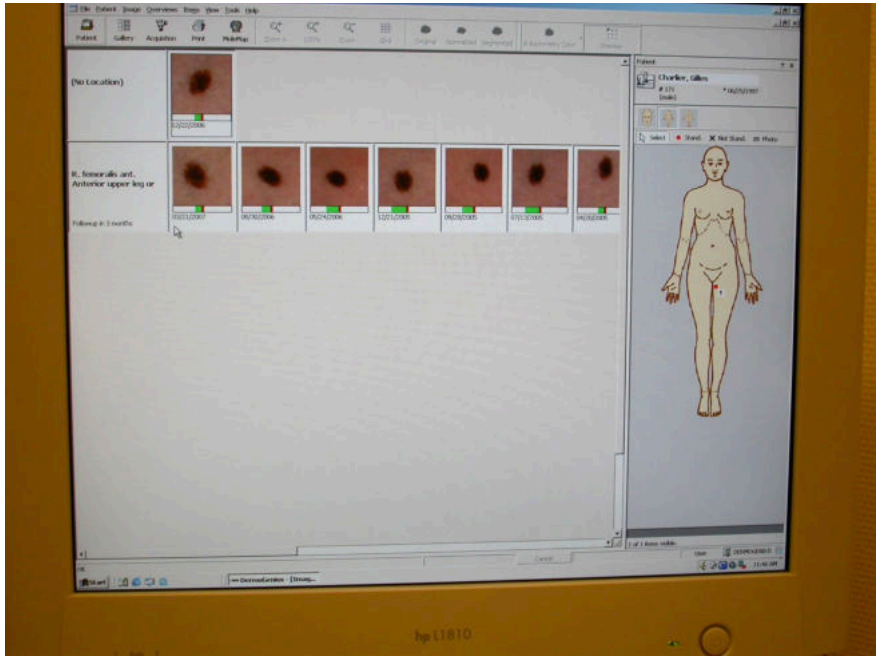
Dermoscopie
Digitalisée
Séquentielle
DDS

Dermogenius

Department of Dermatology

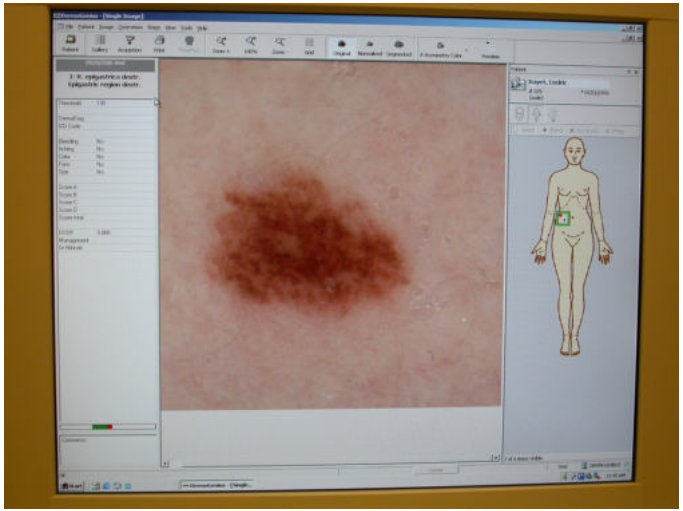
Centre Hospitalier Universitaire de Liège

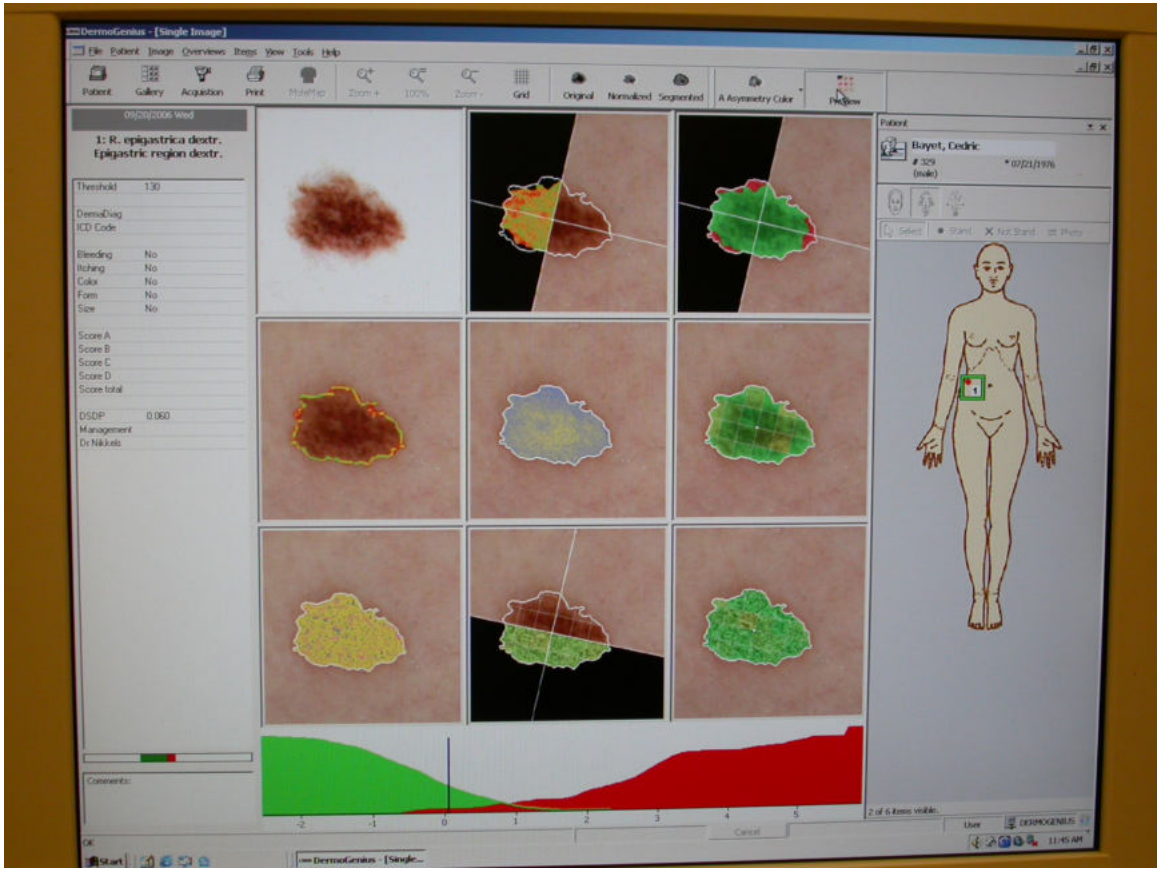


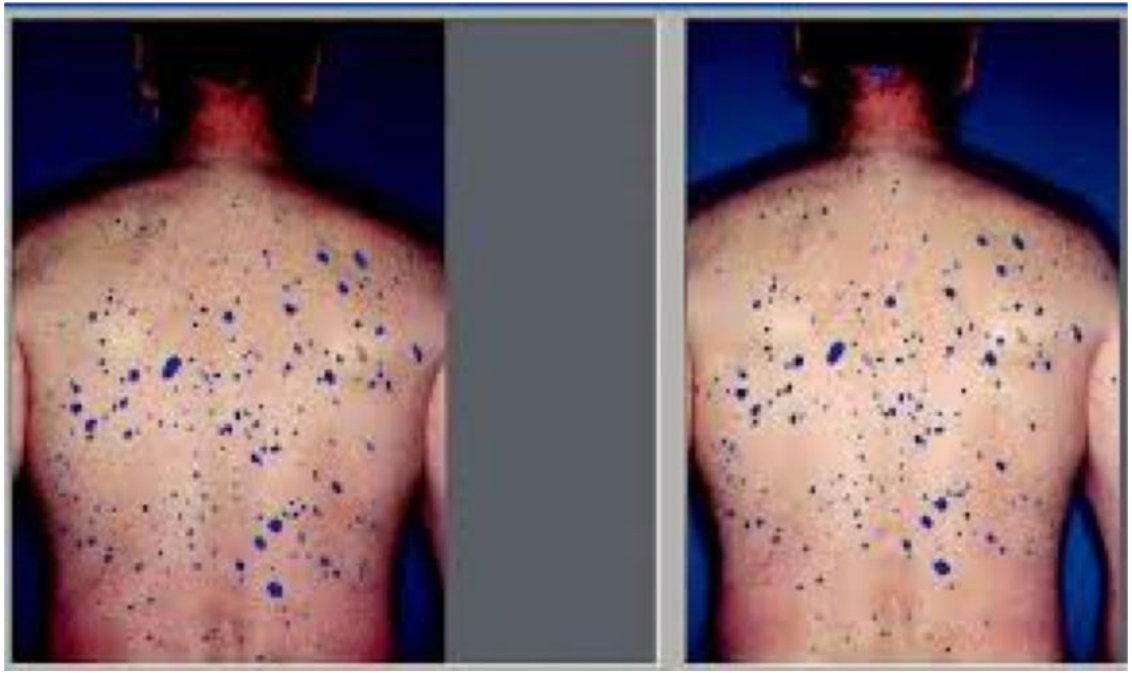


Dermogenius

Department of Dermatology
Centre Hospitalier Universitaire de Liège







Whole body photography

Trajet de soins en dermato-oncologie

Examens lors d'une visite de suivi mélanome

1

1. Anamnèse (apparition nouvelles lésions, signes généraux, etc…)
2. Examen dermatologique (Total body examination)
3. Examen dermatoscopique
4. Examen DDS (Dermoscopie digitalisée séquentielle)
5. Examen clinique:
   - Adenopathies éventuelles
   - Hépatomégalie
   - Splénomégalie

2 Examen et prise en charge dermatologique (recherche des effets indésirables des traitements oncologiques chez le patient métastatique)

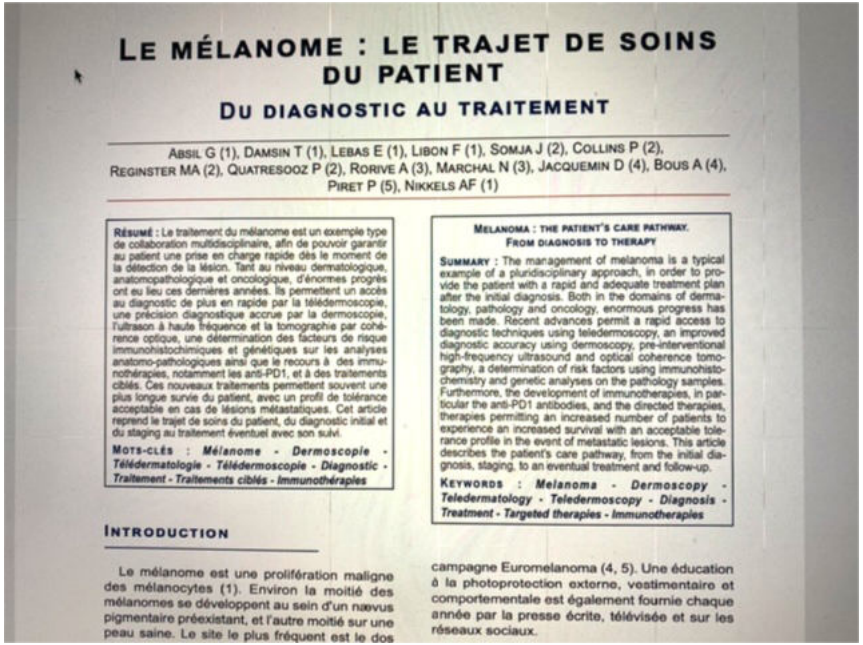
3 Rappel de la photoprotection

4 Rappel de la vitamine D

5 Programmer nouveau RV de suivi

Melanoma

Survival according to disease stage



LE MÉLANOME : LE TRAJET DE SOINS DU PATIENT

DU DIAGNOSTIC AU TRAITEMENT

ABSIL G (1), DAMSIN T (1), LEBAS E (1), LIBON F (1), SOMJA J (2), COLLINS P (2), REGINSTER MA (2), QUATRESOOZ P (2), RORIVE A (3), MARCHAL N (3), JACQUEMIN D (4), BOUS A (4), PIRET P (5), NIKKELS AF (1)

RÉSUMÉ : Le traitement du mélanome est un exemple type de collaboration multidisciplinaire, afin de pouvoir garantir au patient une prise en charge rapide dès le moment de la détection de la lésion. Tant au niveau dermatologique, anatomopathologique et oncologique, d'énormes progrès ont eu lieu ces dernières années. Ils permettent un accès au diagnostic de plus en rapide par la télédermoscopie, une précision diagnostique accrue par la dermoscopie, l'ultrason à haute fréquence et la tomographie par cohérence optique, une détermination des facteurs de risque immunohistochimiques et génétiques sur les analyses anatomo-pathologiques ainsi que le recours à des immunothérapies, notamment les anti-PD1, et à des traitements ciblés. Ces nouveaux traitements permettent souvent une plus longue survie du patient, avec un profil de tolérance acceptable en cas de lésions métastatiques. Cet article reprend le trajet de soins du patient, du diagnostic initial et du staging au traitement éventuel avec son suivi.

MOTS-CLÉS : *Mélanome - Dermoscopie - Télédermatologie - Télédermoscopie - Diagnostic - Traitement - Traitements ciblés - Immunothérapies*

MELANOMA : THE PATIENT'S CARE PATHWAY. FROM DIAGNOSIS TO THERAPY

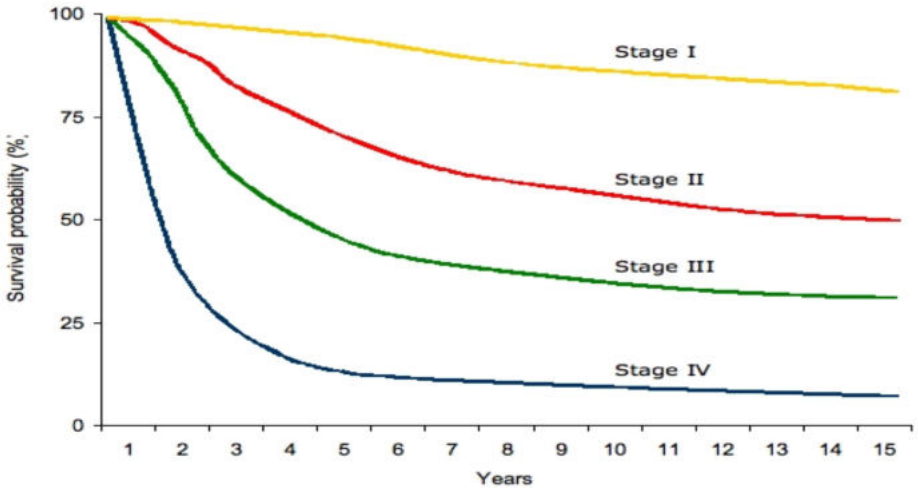
SUMMARY : The management of melanoma is a typical example of a pluridisciplinary approach, in order to provide the patient with a rapid and adequate treatment plan after the initial diagnosis. Both in the domains of dermatology, pathology and oncology, enormous progress has been made. Recent advances permit a rapid access to diagnostic techniques using teledermoscopy, an improved diagnostic accuracy using dermoscopy, pre-interventional high-frequency ultrasound and optical coherence tomography, a determination of risk factors using immunohistochemistry and genetic analyses on the pathology samples. Furthermore, the development of immunotherapies, in particular the anti-PD1 antibodies, and the directed therapies, therapies permitting an increased number of patients to experience an increased survival with an acceptable tolerance profile in the event of metastatic lesions. This article describes the patient's care pathway, from the initial diagnosis, staging, to an eventual treatment and follow-up.

KEYWORDS : *Melanoma - Dermoscopy - Teledermatology - Teledermoscopy - Diagnosis - Treatment - Targeted therapies - Immunotherapies*

INTRODUCTION

Le mélanome est une prolifération maligne des mélanocytes (1). Environ la moitié des mélanomes se développent au sein d'un nævus pigmentaire préexistant, et l'autre moitié sur une peau saine. Le site le plus fréquent est le dos

campagne Euromelanoma (4, 5). Une éducation à la photoprotection externe, vestimentaire et comportementale est également fournie chaque année par la presse écrite, télévisée et sur les réseaux sociaux.



Melanoma

Prevention

Melanoma

Prevention

Melanoma

Prevention

Melanoma

Prevention

No, sunscreen use does not impair vitamin D production

No, you cannot use the cream from last year

The real-life SPF is about 1/3 of the figure on the package

One single texture is OK for the entire family

Melanoma

Prevention

SPF 50 vs SPF 100 ?

SPF 100/50: 50: 55% more sunburns

ERYTHEMA SCORE: 50: 0,75
100: 0,52

Impact on MM incidence: still ?????

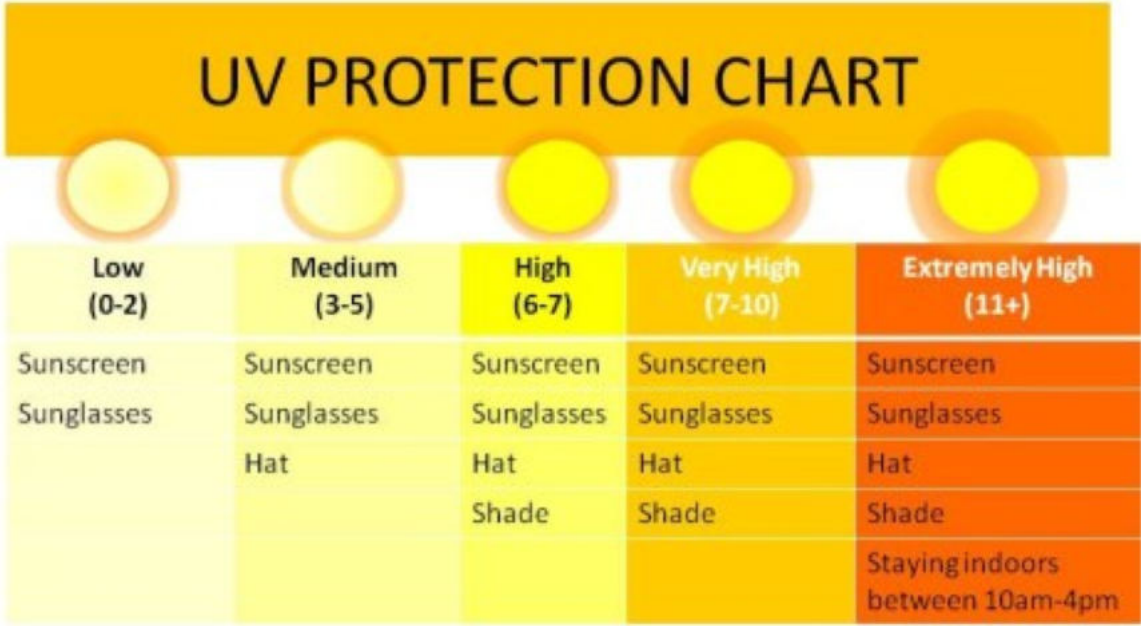
Melanoma

Prevention

Smart phone apps
Weather forecast

0-4: nothing to worry
5-8: protection
9-11: stay inside

UV-index

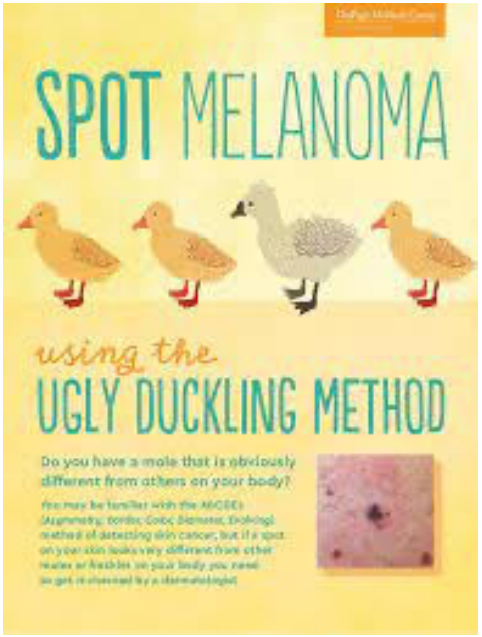


Melanoma

Prevention

Take a shower with your partner

Shadow



Children *Beta-HPV infection during childhood increases keratinocytic photosensitivity*

Melanoma ??????

Melanoma

Prevention

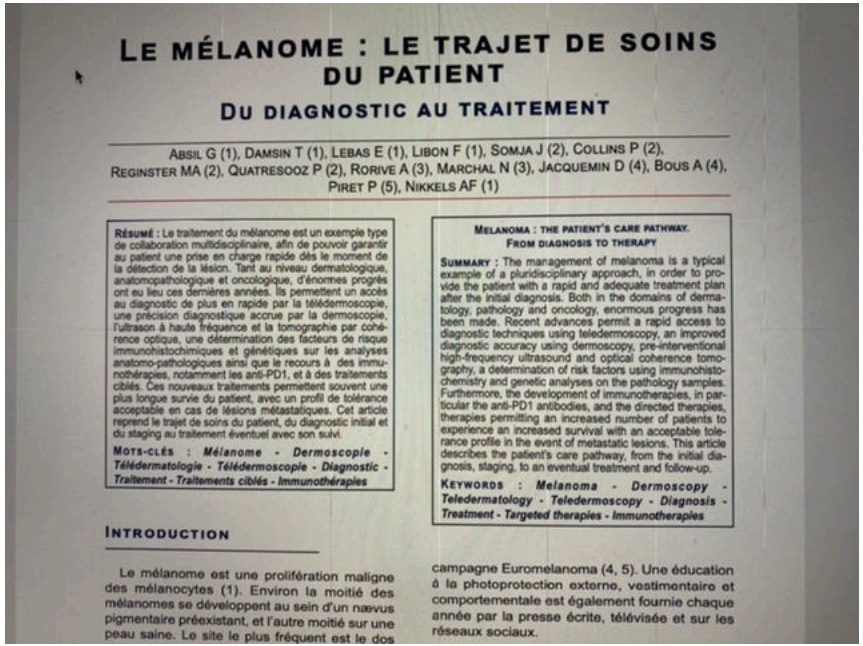
Information and awareness campaings

Only 5% of all melanoma patients arrive at the oncology department

We are fighting to get this figure even lower

Melanoma

Thank you for your attention



LE MÉLANOME : LE TRAJET DE SOINS DU PATIENT

DU DIAGNOSTIC AU TRAITEMENT

ABSIL G (1), DAMSIN T (1), LEBAS E (1), LIBON F (1), SOMJA J (2), COLLINS P (2), REGINSTER MA (2), QUATRESOOZ P (2), RORIVE A (3), MARCHAL N (3), JACQUEMIN D (4), BOUS A (4), PIRET P (5), NIKKELS AF (1)

RÉSUMÉ : Le traitement du mélanome est un exemple type de collaboration multidisciplinaire, afin de pouvoir garantir au patient une prise en charge rapide dès le moment de la détection de la lésion. Tant au niveau dermatologique, anatomopathologique et oncologique, d'énormes progrès ont eu lieu ces dernières années. Ils permettent un accès au diagnostic de plus en rapide par la télédermoscopie, une précision diagnostique accrue par la dermoscopie, l'ultrason à haute fréquence et la tomographie par cohérence optique, une détermination des facteurs de risque immunohistochimiques et génétiques sur les analyses anatomo-pathologiques ainsi que le recours à des immunothérapies, notamment les anti-PD1, et à des traitements ciblés. Ces nouveaux traitements permettent souvent une plus longue survie du patient, avec un profil de tolérance acceptable en cas de lésions métastatiques. Cet article reprend le trajet de soins du patient, du diagnostic initial et du staging au traitement éventuel avec son suivi.

MOTS-CLÉS : *Mélanome - Dermoscopie - Télédermatologie - Télédermoscopie - Diagnostic - Traitement - Traitements ciblés - Immunothérapies*

MELANOMA : THE PATIENT'S CARE PATHWAY. FROM DIAGNOSIS TO THERAPY

SUMMARY : The management of melanoma is a typical example of a pluridisciplinary approach, in order to provide the patient with a rapid and adequate treatment plan after the initial diagnosis. Both in the domains of dermatology, pathology and oncology, enormous progress has been made. Recent advances permit a rapid access to diagnostic techniques using teledermoscopy, an improved diagnostic accuracy using dermoscopy, pre-interventional high-frequency ultrasound and optical coherence tomography, a determination of risk factors using immunohistochemistry and genetic analyses on the pathology samples. Furthermore, the development of immunotherapies, in particular the anti-PD1 antibodies, and the directed therapies, therapies permitting an increased number of patients to experience an increased survival with an acceptable tolerance profile in the event of metastatic lesions. This article describes the patient's care pathway, from the initial diagnosis, staging, to an eventual treatment and follow-up.

KEYWORDS : *Melanoma - Dermoscopy - Teledermatology - Teledermoscopy - Diagnosis - Treatment - Targeted therapies - Immunotherapies*

INTRODUCTION

Le mélanome est une prolifération maligne des mélanocytes (1). Environ la moitié des mélanomes se développent au sein d'un nævus pigmentaire préexistant, et l'autre moitié sur une peau saine. Le site le plus fréquent est le dos

campagne Euromelanoma (4, 5). Une éducation à la photoprotection externe, vestimentaire et comportementale est également fournie chaque année par la presse écrite, télévisée et sur les réseaux sociaux.

RMLg 2021