

Skin Cancers

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Skin Cancer Types:

- **Melanoma: Cutaneous, Ocular, Mucosal**
- **Basal Cell**
- **Squamous Cell**
- **Merkel Cell**

Cutaneous Melanoma

Risks:

Skin Type

Light Skin

Exposures

UV

Mutations:

- BRAFV600 (V600E/V600K)

IHC:

- S100

Types of Melanoma:

- Cutaneous
- Ocular
- Mucosal
sinonasal, vulvovaginal, anorectal

Cutaneous Melanoma:

- Superficial Spreading
- Nodular
- Lentigo Maligna
- Acral Lentiginous
- Rare: Desmoplastic, etc

Staging: Breslow

T Size

T1 = 0-1 mm

T2-T3 = 1-4 mm

T4 = > 4 mm

Stage I

0-2 mm

Stage II

>2 mm

Stage III

LN+, microsatellites

Stage IV

Metastatic

Cutaneous Melanoma: Treatment

Stage I, T1 Melanoma (< 1 mm)

Wide Excision +/- SLNB

Consider SLNB if adverse features:
ulceration, mitotic index > 2/mm², +LVI

Stage I-II, T2-T3 Melanoma (> 1 mm)

Wide Excision + SLNB

If +SLNB → LN US surveillance or completion LND

Wide Excision Margins

In situ = 0.5 cm margin

1 mm depth = 1 cm margin

2+ mm depth = 2 cm margin

Cutaneous Melanoma: Treatment

Stage III Melanoma (+ LN)

Wide Excision + LND

+/- Adjuvant Systemic Therapy

BRAF-/+ = pembrolizumab or nivolumab

BRAF+ = dabrafenib/trametinib

Consider adjuvant systemic therapy if

- > 4 mm depth
- > 2 LN

+/- Adjuvant Radiation Therapy

Consider adjuvant RT if

- > 2 LN
- Extracapsular extension
- Desmoplastic sub-type

Cutaneous Melanoma: Treatment

Stage IV Melanoma

Systemic Therapy

- **BRAF +/- = Immunotherapy**

Pembrolizumab

Nivolumab +/- Ipilimumab

** Preferred front-line even if BRAF mutation present*

- **BRAF + = BRAF/MEK Inhibitors**

Dabrafenib/Trametinib (fever, rash/acne, diarrhea, edema)

Vemurafenib/Cobimetinib (QTC, SCC, rash/photosensitivity)

Encorafenib/Binimetinib (QTC)

** Preferred if rapid response needed*

Localized Therapy

- Radiation Therapy
- **Metastatectomy (oligometastatic)**

Non-Cutaneous Melanoma: Treatment

Mucosal Melanoma

General

- Sinonasal, vulvovaginal, anorectal
- C-KIT mutations common

Local

- Excision +/- adjuvant RT

Systemic

- C-Kit: Imatinib
- Immunotherapy

Ocular Melanoma

General

- GNA mutation associated
- Metastasize to liver commonly

Treatment

- Brachytherapy, particle beam therapy
- Small tumors: laser ablation
- Large tumors: enucleation

Other Skin Cancers: Treatment

Basal/Squamous Cell

Local, Low Risk

- Excision

Local, High Risk (> 2 cm, R1+/PNI+)

- Excision +/- RT

Locally Advanced or Metastatic

- Hedgehog Inhibitors: sonidegib, vismodegib
- Immunotherapy: pembrolizumab, cemiplimab

Merkel Cell

General

- Cutaneous NET
- Risks: polyomavirus, UV exposure
- CK20+

Local Treatment

- Surgery + SLNB +/- RT

Systemic Treatment

- Immunotherapy: pembrolizumab, avelumab

Melanoma Reference Handout

Melanoma

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Rare: Desmoplastic, etc

IHC:

S100

Staging: Breslow

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>2 mm

Stage III

LN+, microsattellites

Stage IV

Metastatic

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Cutaneous Melanoma: Tx

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+/- Radiation Therapy

Stage IV Melanoma

Localized Therapy

Radiation Therapy
Metastatectomy (oligometastatic)

Systemic Therapy

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Pembrolizumab
Nivolumab +/- Ipilimumab

2. BRAF + = BRAF/MEK Inhibitors

Dabrafenib/Trametinib (fever, rash, diarrhea, edema)
Vemurafenib/Cobimetinib (SCC, QTC)
Encorafenib/Binimetinib (QTC)