

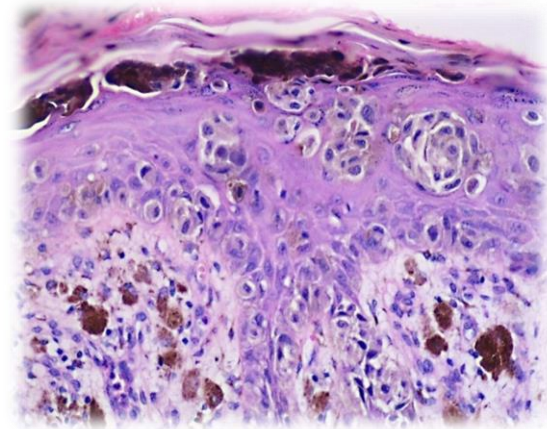


Melanoma

Antien Mooyaart

29-5-2018

Pathology, ErasmusMC



Outline

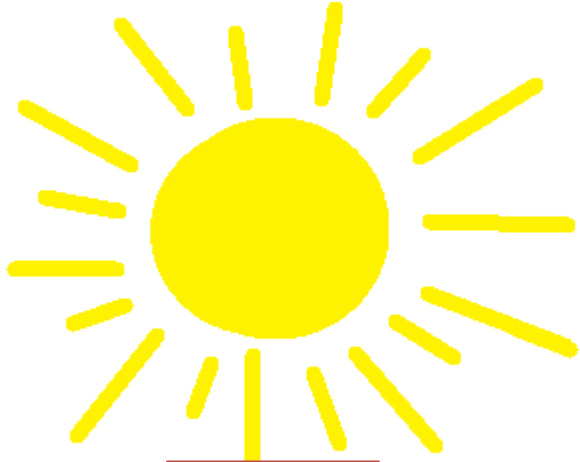
- What is a melanoma?
- What causes melanoma?
- How do we diagnose a melanoma?
- How do we treat melanoma?

What is melanoma?

- Type of skin cancer
- Relatively rare, very aggressive
- Malignant mole



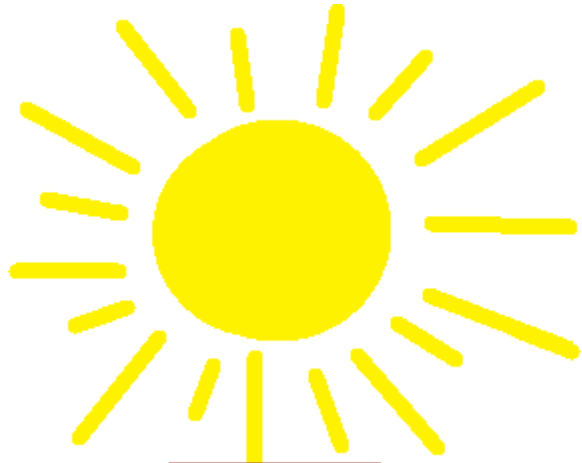
What causes melanoma?



UV- light



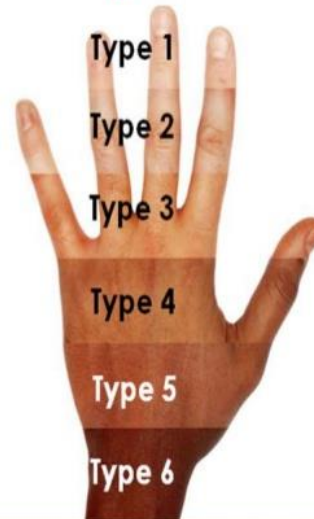
What causes melanoma?



UV- light



Fitzpatrick Skin Types



Type 1 White: Always burns, never tans

Type 2 White: Usually burns, difficulty in tanning

Type 3 White: Sometimes burns, average tan

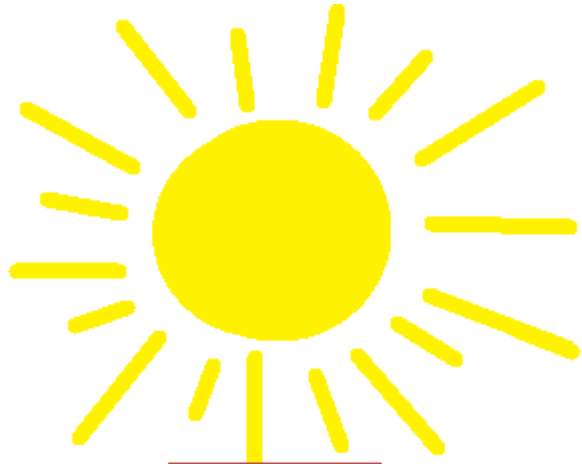
Type 4 Moderate Brown: Rarely burns, tans with ease

Type 5 Dark Brown: Very rarely burns, tans very easily

Type 6 Black: Does not burn, tans very easily



What causes melanoma?



UV- light

Fitzpatrick Skin Types



Type 1 White: Always burns, never tans

Type 2 White: Usually burns, difficulty in tanning

Type 3 White: Sometimes burns, average tan

Type 4 Moderate Brown: Rarely burns, tans with ease

Type 5 Dark Brown: Very rarely burns, tans very easily



How to diagnose melanoma?



Dermatologist



Pathologist

How to diagnose melanoma?



Dermatologist



Pathologist

How to diagnose melanoma?

- A: asymmetry
- B: border
- C: color
- D: diameter
- E: evolution

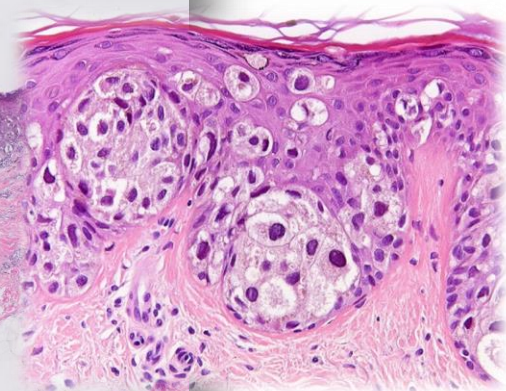
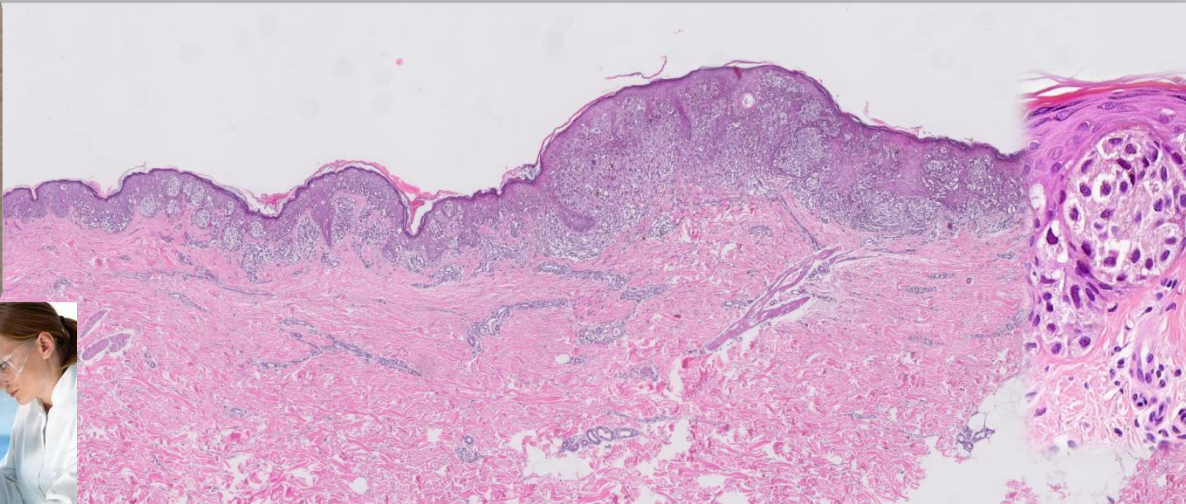
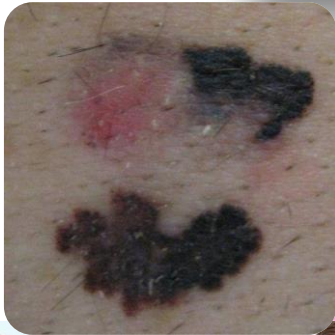
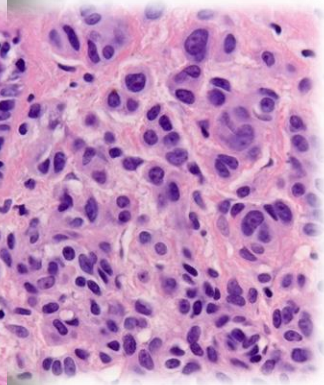
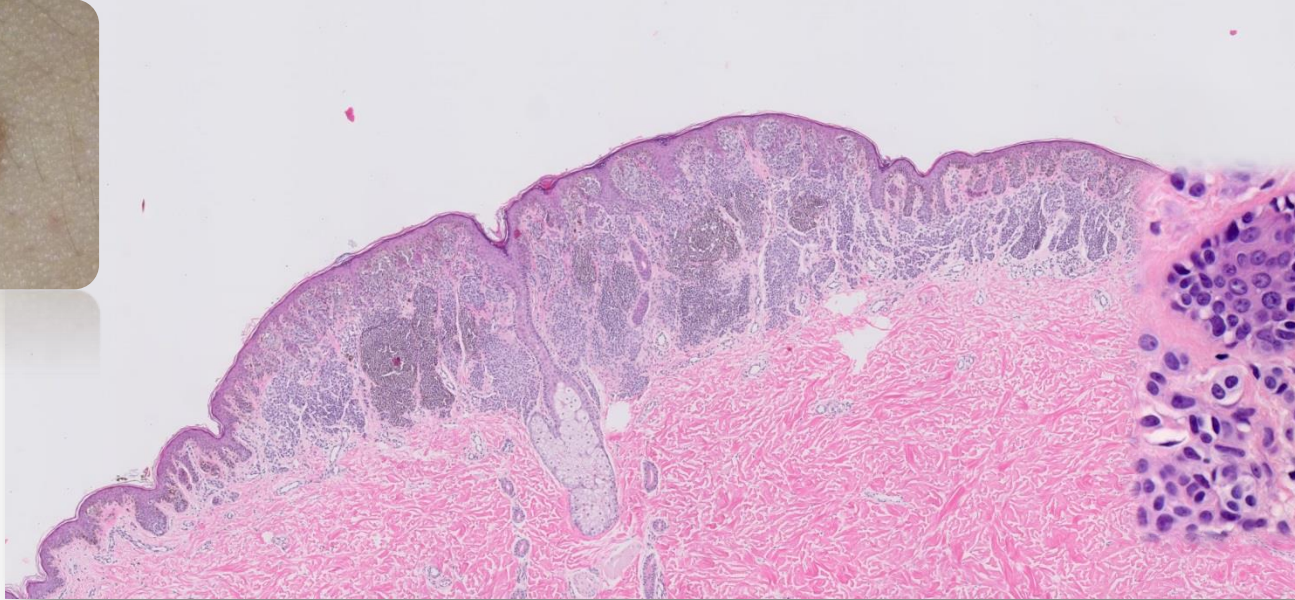
Normal
mole



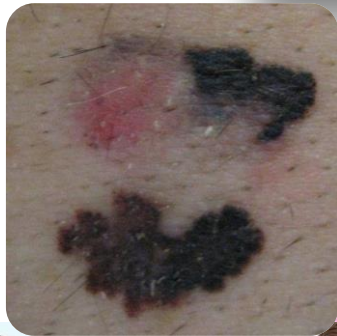
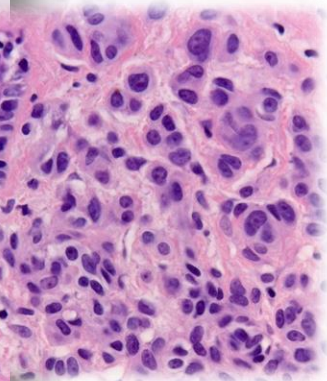
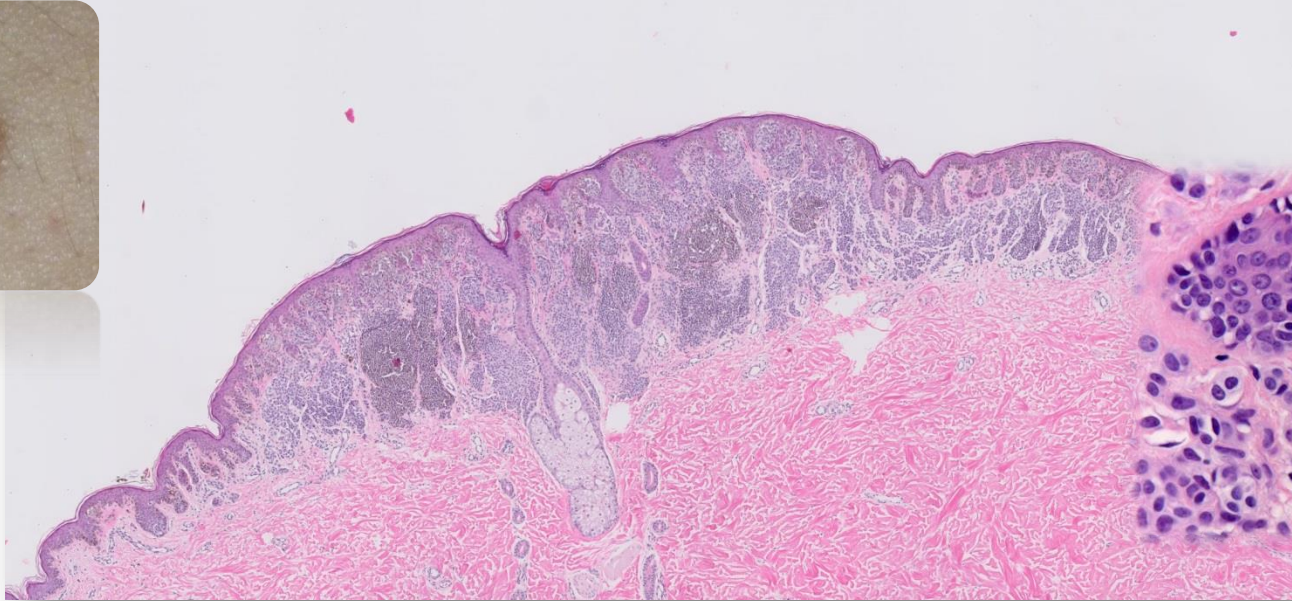
Melanoma



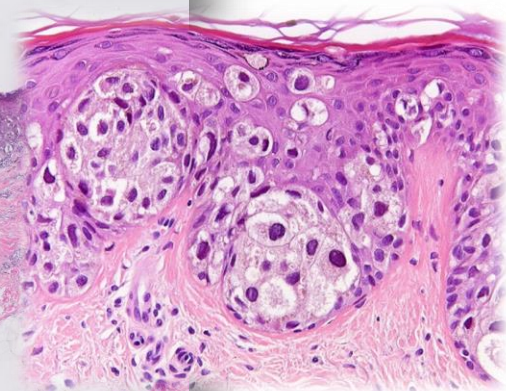
How to diagnose melanoma?



How to diagnose melanoma?

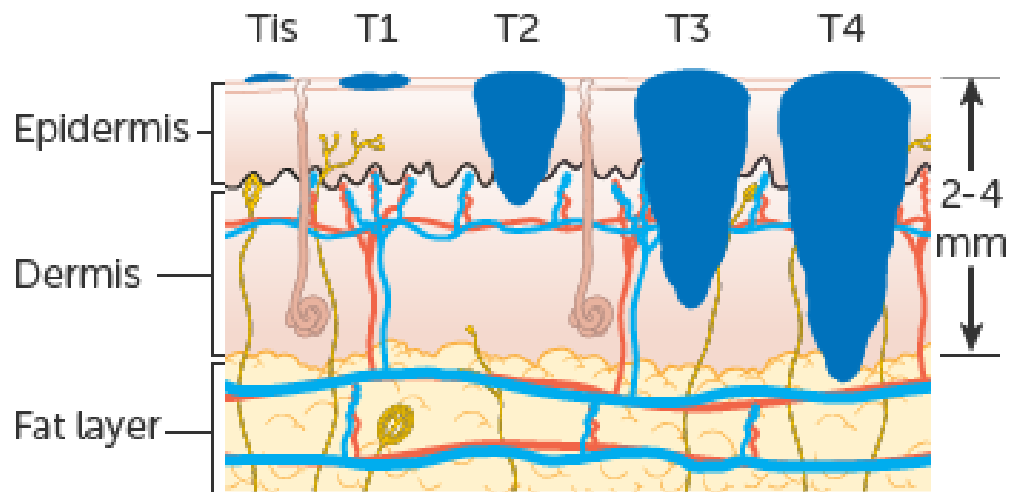


Breslow-thickness



How do we treat melanoma?

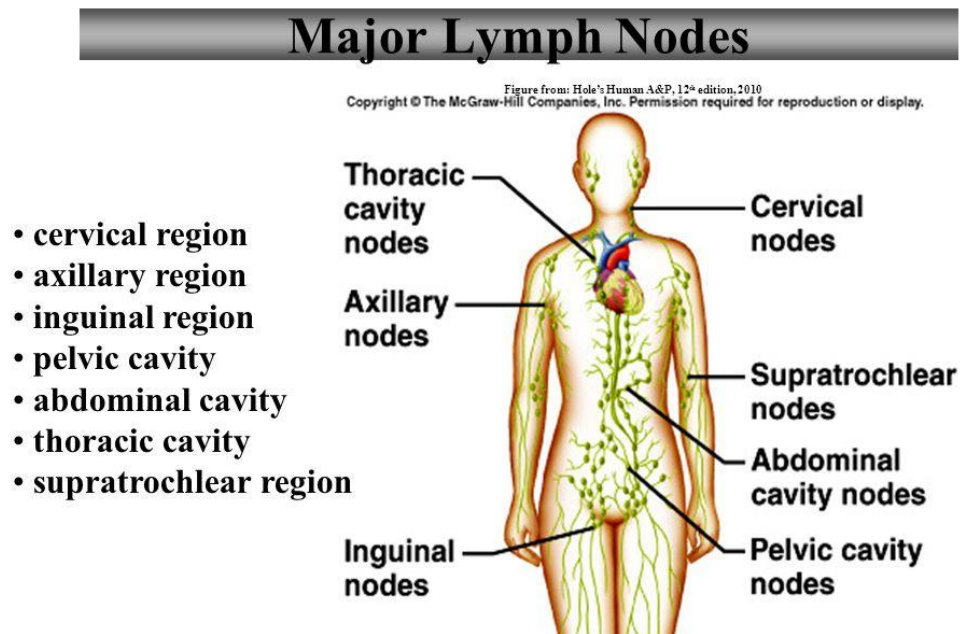
- Depends on stage of the disease
 - T (tumor): Breslow-thickness, ulceration



Cancer Research UK

How do we treat melanoma?

- Depends on stage of the disease
 - T (tumor): Breslow-thickness, ulceration
 - N (nodal stage): regional lymph nodes, local spread



How do we treat melanoma?

- Depends on stage of the disease
 - T (tumor): Breslow-thickness, ulceration
 - N (nodal stage): regional lymph nodes, local spread
 - M (metastasis): distant metastasis (further than regional lymph nodes, for example lung or liver)

Stage of disease

0	Tis	N0	M0
IA	T1a	N0	M0
IB	T1b	N0	M0
	T2a	N0	M0
IIA	T2b	N0	M0
	T3a	N0	M0
IIB	T3b	N0	M0
	T4a	N0	M0
IIC	T4b	N0	M0
IIIA	T1 – 4a	N1a	M0
	T1 – 4a	N2a	M0
IIIB	T1 – 4b	N1a	M0
	T1 – 4b	N2a	M0
	T1 – 4a	N1b	M0
	T1 – 4a	N2b	M0
	T1 – 4a	N2c	M0
IIIC	T1 – 4b	N1b	M0
	T1 – 4b	N2b	M0
	T1 – 4b	N2c	M0
	Any T	N3	M0
IV	Any T	Any N	M1

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IIB	T3b	N0	M0
	T4a	N0	M0
IIC	T4b	N0	M0
IIIA	T1 – 4a	N1a	M0
	T1 – 4a	N2a	M0
IIIB	T1 – 4b	N1a	M0
	T1 – 4b	N2a	M0
	T1 – 4a	N1b	M0
	T1 – 4a	N2b	M0
	T1 – 4a	N2c	M0
IIIC	T1 – 4b	N1b	M0
	T1 – 4b	N2b	M0
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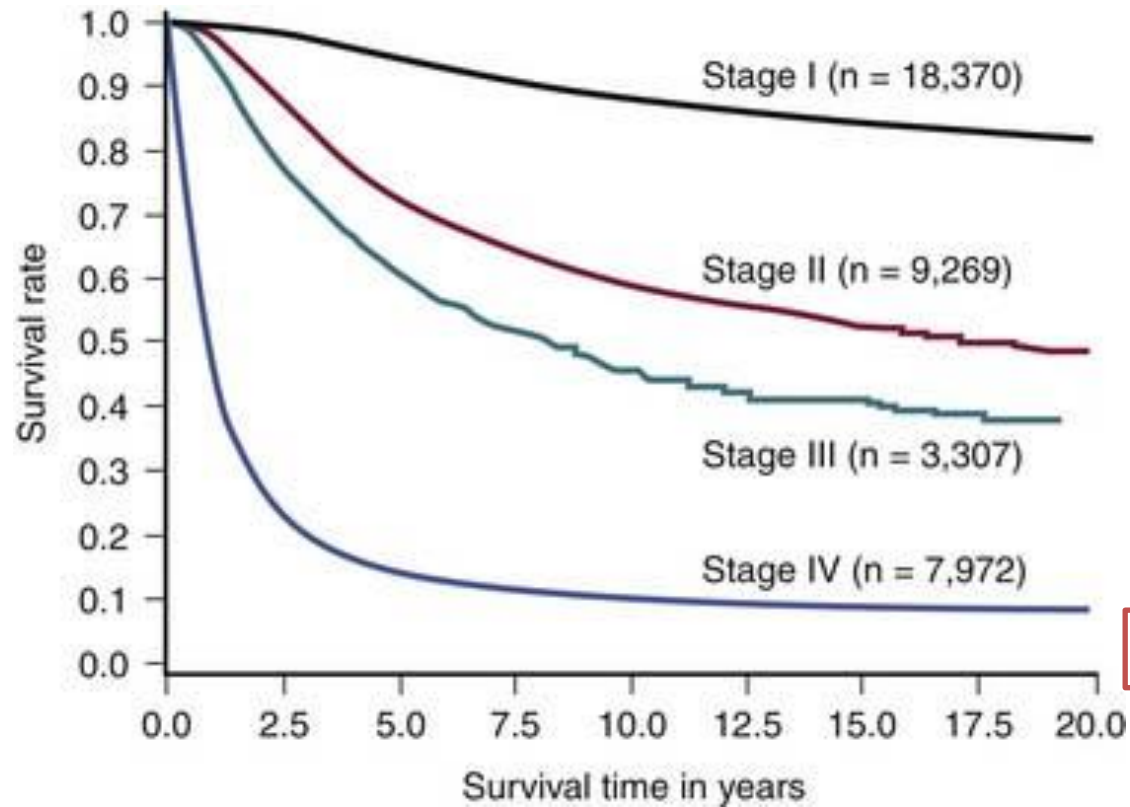
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IIB	T3b	N0	M0
	T4a	N0	M0
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	T1 – 4a	N2a	M0
IIIB	T1 – 4b	N1a	M0
	T1 – 4b	N2a	M0
	T1 – 4a	N1b	M0
	T1 – 4a	N2b	M0
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IA	T1a	N0	M0
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	T3a	N0	M0
IIB	T3b	N0	M0
	T4a	N0	M0
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	T1 – 4a	N1b	M0
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	T1 – 4b	N2c	M0
	Any T	N3	M0
IV	Any T	Any N	M1

Prognosis



Local disease

Distant metastasis

How do we treat melanoma?

- Local disease (stage I/II/III) – large surgical excision of the tumor
- Distant metastasis (stage IV)
 - Chemotherapy
 - Targeted therapy (BRAF inhibitor)
 - Immunotherapy