

# J15



# Malignant Melanoma

English

Malignant melanoma is a very malignant degeneration of the pigment producing cells of the skin. It spreads into the organism through the blood and lymph at a very early stage. Therefore, early diagnosis is crucial.

This model is designed to draw the attention to this disease and to provide relevant basic information. Two aspects are emphasized in the representation:

1. The "ABCDE rule" for an early diagnosis of suspicious skin discoloration that might be malignant, based on visual characteristics:

- A= Asymmetry:** irregular shape.
  - B= Border:** uneven edge and surface, with spreading branches
  - C= Color:** color variations within the degenerated skin area (light, dark, speckled).
  - D= Diameter:** area of degenerated skin larger than 5mm.
  - E= Enlargement,** perhaps also elevation: e.g. in height and width.
- However, the decision is made by the doctor!

2. The classification of existing melanomas according to depth of invasion (Clark levels I – V) and tumor thickness (Breslow thickness, in millimeters).

## Model, enlarged approx. 8 times:

The model is divided into six zones: from the left to the right, first the front and then the back. In the top view (skin surface), these zones show the progressive stages of a melanoma in which the "ABCDE" criteria are shown at increasing levels from the left to the right. The vertical surface shows a sectional view of the increasing invasion into the various skin layers at the individual stages. The left, narrow side of the model shows Clark's levels of invasion. For an assessment of Breslow's thickness, the depth of the skin layers is represented by graduated millimeter marks on the right side of the model. The illustrations on the base show various types of malignant melanomas.

Zone	Breslow, depth in mm	Clark level	Depth of invasion of the black cells on the vertical front of the model
1	healthy	healthy	
2	epithelium	I	Black cells at the surface of the epidermis
3	≤0.75	II	Black cells fill the epidermis, a few in the papillary layer
4	>0.75 ≤1.5	III	Black cells fill the papillary layer
5	>1.5 ≤4	IV	Black cells invade the reticular layer
6	>4	V	Black cells invade the subcutaneous fatty tissue, satellite cells approach a vein

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## Structures (Latin / English), please refer to pages 8-9:

- 7 Epidermis / Epidermis
- 8 Stratum basale / Basal layer of epidermis
- 9 Dermis / Derma comprising:
  - a. Stratum papillare / Papillary layer of dermis
  - b. Stratum reticulare / Reticular layer of dermis
- 10 Tela subcutanea / Subcutaneous tissue
- 11 Folliculus pili / Hair follicle
- 12 Plexus subpapillaris / Subpapillary plexus
- 13 Glandula sebacea / Sebaceous gland
- 14 M. arector pili / Arrector muscle of hair
- 15 Bulbus pili / Hair bulb
- 16 Arteriola / Arteriole
- 17 Venula / Venule
- 18 Corpusculum lamellosum (Golgi-Mazzoni) / Golgi-Mazzoni corpuscles
- 19 Corpusculum bulboideum (Ruffini) / Brushes of Ruffini
- 20 Corpusculum lamellosum (Vater-Paccini) / Vater-Paccini corpuscle
- 21 Meissner tactile corpuscle



