Algorithm for differentiating between melanocytic and non-melanocytic skin tumours

First step: Is the structure clearly melanocytic?
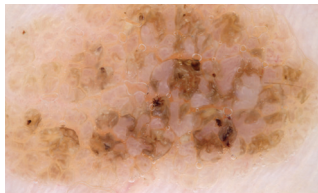

Pigment network, branched streaks, aggregated globules, structureless brown/blue lesion? **Exception:** dermatofibroma, solar lentigo, accessory nipple

→ clearly melanocytic
ABCD rule of dermatoscopy

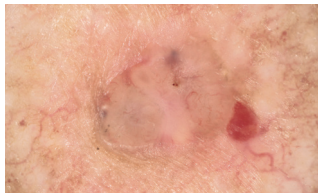## Second step: Is the structure non-melanocytic?

Excerpt from the most common types of non-melanocytic lesions:

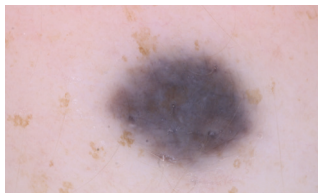Pseudo horn cysts, comedo-like openings, fingerprint-like structures, cerebriform structures, opaque colours

→ **Seborrhoeic keratosis**

Arborizing vessels, blue-grey oval globules, ulceration, spoke-wheel areas, leaf-like structures
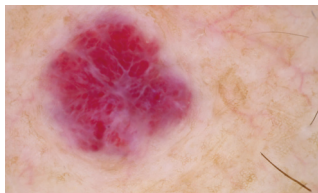
→ **Basal-cell carcinoma**

Homogeneous, blue pigmentation

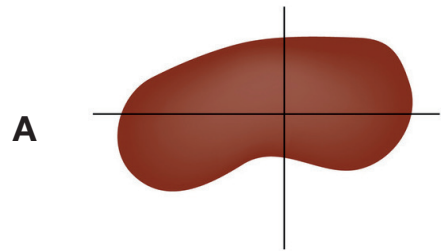→ **Blue Nevus**

Red to almost black globules

→ **Haemangioma**
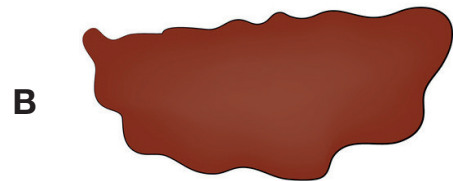
Third step: All other lesions are classified as melanocytic.
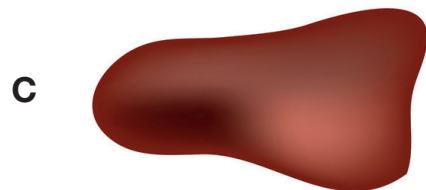
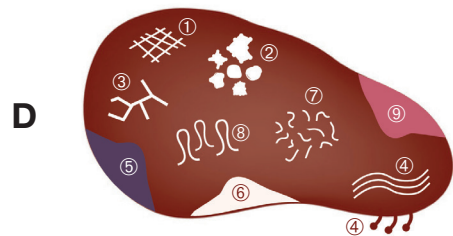→ ABCD rule of dermatoscopy

Fourth step: ABCD rule of dermatoscopy

A

Asymmetry:
Asymmetric in one or two axis

B

Border:
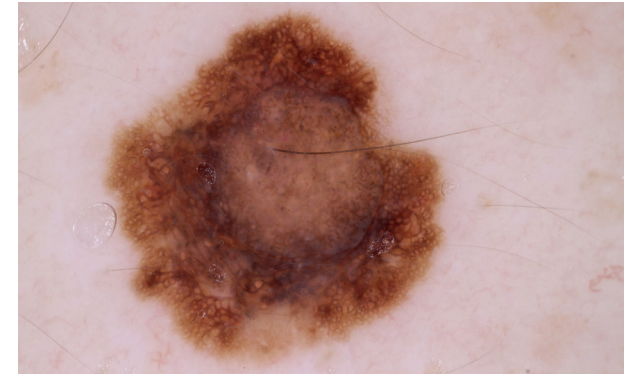Irregular or blurred

C

Colour:
Differently coloured pigmentation
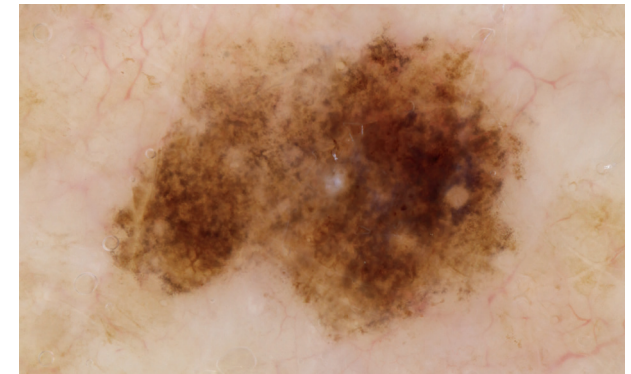Polychromatism (white, red, light brown,
dark brown, black, and blue-grey)

D

Dermatoscopic structure:
Pigment network: irregular mesh and/or pigmentation (1)
Clumps and globules: irregular size and distribution (2)
Branched strips: modified pigment network, abrupt discontinuation (3)
Strips: non-parallel, irregular strips (4)
Structureless areas: no recognisable structures (5), milky veil
Regression structures: whitish, scar-like depigmentation (6)
Atypical vascular patterns: irregular polymorphous vascular pattern (7)
hairpin vessels (8), milky red areas (9)

If one or more of these criteria correspond to a pigment spot, a suspicious or malignant lesion may be involved.

Examples:

Asymmetrical lesion with atypical network, stripes, and dots with brown, grey, and blue colours. Image without polarisation filter with immersion fluid and full lighting (4 LEDs).

Asymmetric lesion with clumps, points, and a network of an invasive melanoma (< 0.5 mm tumour thickness) with brown and grey colours. Image with polarisation filter with immersion fluid and full lighting (4 LEDs).