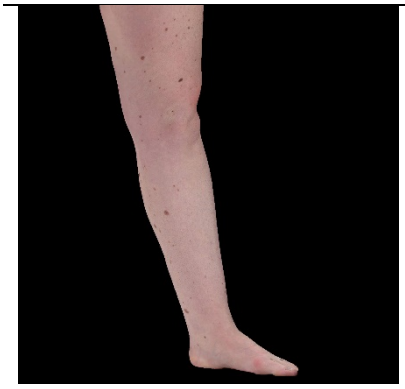
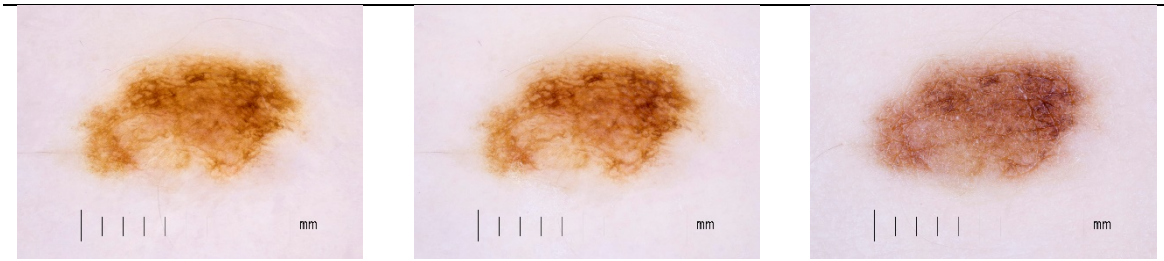
Supplementary Online Content

Finnane A, Curiel-Lewandrowski C, Wimberley G, Caffery L, Katragadda C, et al. Proposed technical guidelines for the acquisition of clinical images of skin-related conditions. *JAMA Derm*. doi:10.1001/jamadermatol.2016.6214

eAppendix. Visual guide for implementing Technique Standards for Skin Lession Imaging.

This supplementary material has been provided by the authors to give readers additional information about their work.

Supplement eAppendix. Visual guide for implementing Technique Standards for Skin Lession Imaging. Example images to provide clinicians and photographers with a visual guide for implementing the imaging technique standards published by Katragadda and colleagues.[15]

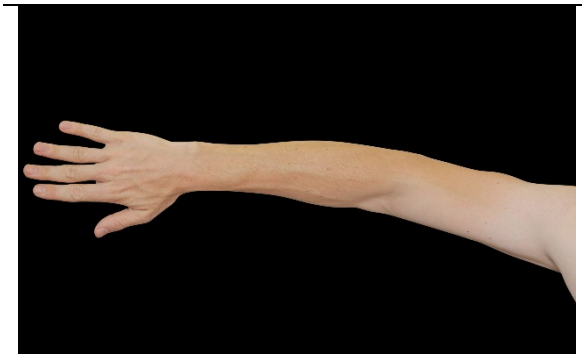
Lighting
2.1 Broad spectrum lighting is recommended to provide the most accurate representation of the skin type.
2.2 Irrespective of the light source, an even illumination across the area of interest should be achieved when capturing regional and close-up images for accurate assessment of skin type and surface texture without shadowing and hot spots.
2.3 Relative to the skin surface, and whenever possible, the lighting source should be on an angle or oblique to the skin being photographed.

2.4 While obtaining both polarized and non-polarized dermoscopic images of the lesion is ideal, it is up to the health care provider to decide if it is indicated.
2.5 If only one dermoscopic image is obtained it is usually preferable to obtain it with polarized light; however, it is up to the health care provider to ultimately decide whether to obtain the image in polarized or non-polarized mode.
Lesion-specific considerations for deciding on optimal lighting
Dermoscopic images of melanocytic naevus using polarized light (left), non-polarized light with gel (centre) and non-polarized light without gel (right). Pigment network can be more easily seen in polarized light image.


Background color

3.1 When capturing images of the skin, a solid background color without patterns or disrupted surface is recommended.

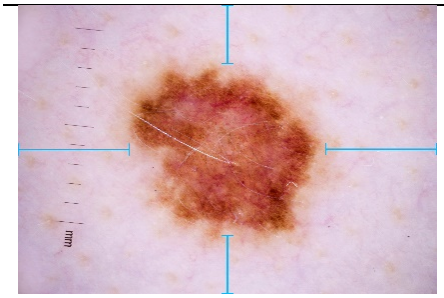
3.2 When capturing images of the skin, a blue or black background is recommended to provide contrast to skin tones.

3.3 When capturing images of the skin, artifacts should be avoided in the background and on patient's skin (e.g. jewelry) to avoid interference with the visualization of the patient skin and corresponding skin lesions.



Field of view

4.1 Optimally, when photographing a lesion (close-up or dermoscopy), the lesion should be balanced and centered in the field of view, while attempting to capture an equal area of normal skin surrounding the lesion.



4.2 When photographing close-up images, there is no limit in the size of the lesion to be imaged.

4.3 When photographing lesions that are larger than the field of view provided by the dermoscopy lens, multiple images can be obtained to capture the largest proportion of the area of interest.

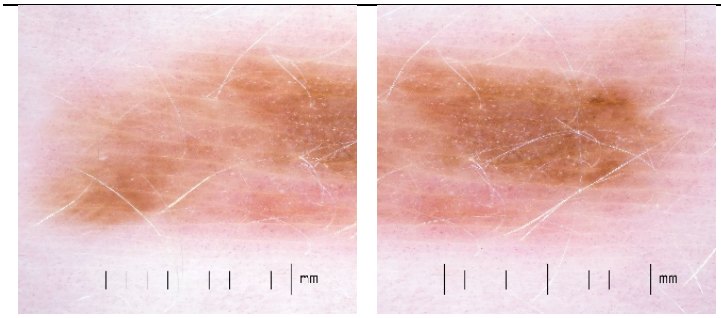


Image orientation

5.1 Regional body images should be oriented with the superior aspect of the field of view facing towards the scalp (cephalic

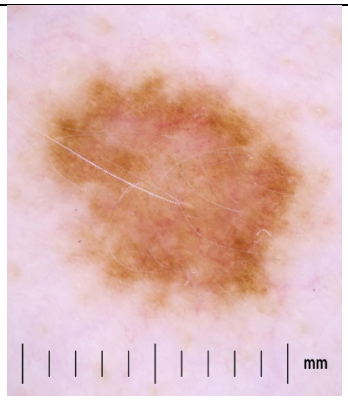
orientation).

5.2 Across regional and close-up images, the horizontal or vertical orientation should be consistent, when feasible.

5.3 When feasible, the orientation of close-up, and dermoscopic images should follow the same parameters used to obtain the relative regional image corresponding to the lesion of interest.

5.4 Dermoscopic images should be captured using the same orientation as the corresponding close-up image.

5.5 When capturing regional body, close-up, and dermoscopic images the camera should follow a similar orientation as the one obtained in previous imaging sessions.



5.6 Areas of the body that are challenging to photograph and require specific recommendations include the hands, feet, web spaces of fingers and toes, intergluteal cleft, genitalia, perineum, behind the ears, hair-bearing scalp, intertriginous skin and superior frontal scalp.

5.7 For patients at the extremes of height and weight or those with physical impairments, general recommendations should be followed when possible, and otherwise treated on an individual basis. When required, additional regional images should be obtained to ensure that the complete cutaneous surface is visualized.

5.8 To ensure the area of the body can be easily identified in regional images, sufficient visualization of the anatomical site (in many cases a joint) should be included in the field of view for proper localization of the lesion.

Focus and depth of field

6.1 When photographing the skin, the focus point should target the center of the lesion of interest.

6.2 When photographing the skin, the maximum amount of the area of interest should be in focus.

6.3 When photographing the skin, the camera should be oriented perpendicular to the skin surface.

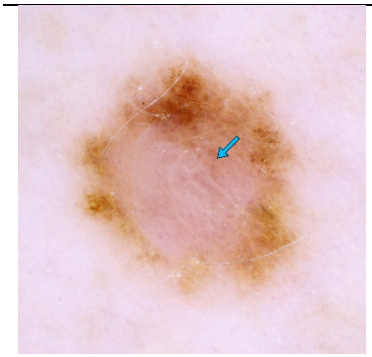
Resolution

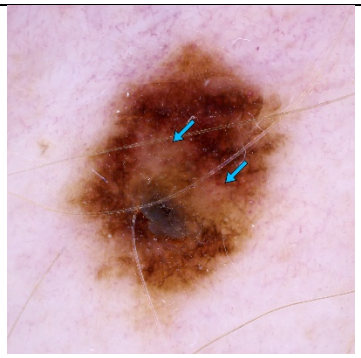
7.1 For regional images, a level of magnification should be used that sharply depicts the presence of hair follicles.

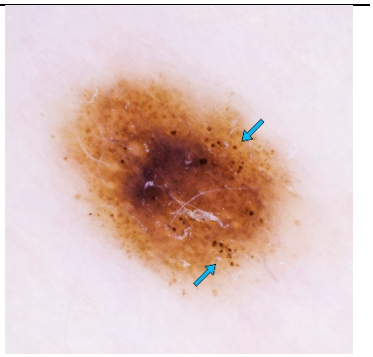
7.2 For close-up images, a level of magnification should be used that sharply depicts skin markings.

7.3 For dermoscopic imaging a level of magnification that allows clear visualization of dots is required (if present).

7.4 For dermoscopic imaging a level of magnification that allows clear visualization of regression structures is required (if present).







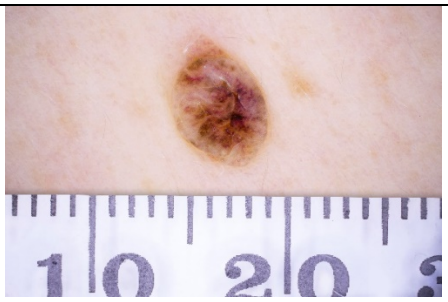
Scale

8.1 For close-up imaging of lesions, a scale should be used and placed in the most appropriate axial plane according to the camera orientation (i.e., vertical scale for vertical image frame) without obscuring or distracting from the area of interest.

8.2 For dermoscopic imaging of lesions, a method to define the size of the lesions should be included. Options to achieve this standard include, but are not limited to: inclusion of a scale in the contact dermoscopy lens and/or using a digital scale

that can be retrieved as part of the image file.

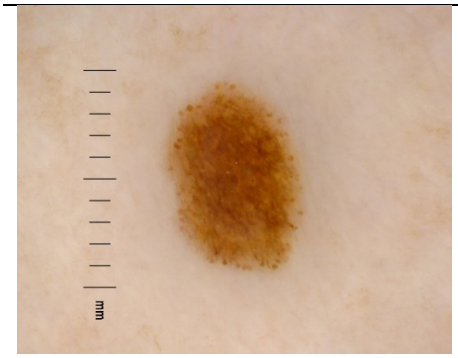
8.3. When implementing a physical scale for dermoscopic images, the scale should be used and placed in the most appropriate axial plane according to the camera orientation (i.e., vertical scale for vertical image frame) without obscuring or distracting from the area of interest.



Color calibration

9.1 A white balance and color calibration procedure should be carried out according to the system manufacturer.

9.2 Imaging parameters should permit color comparisons between images and over time.



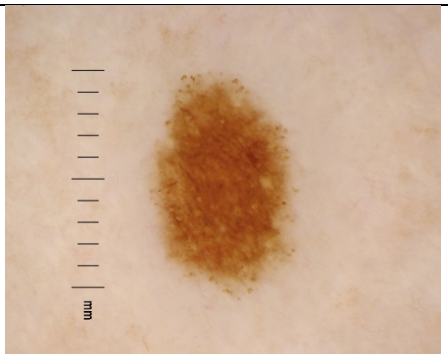


Image Storage

10.1 Images should be stored in formats that will not compromise the clinical quality of the images. Examples include, but are not limited to: JPG (minimally compressed), TIFF, PNG (lossless), and RAW.