

INTEGUMENT-1

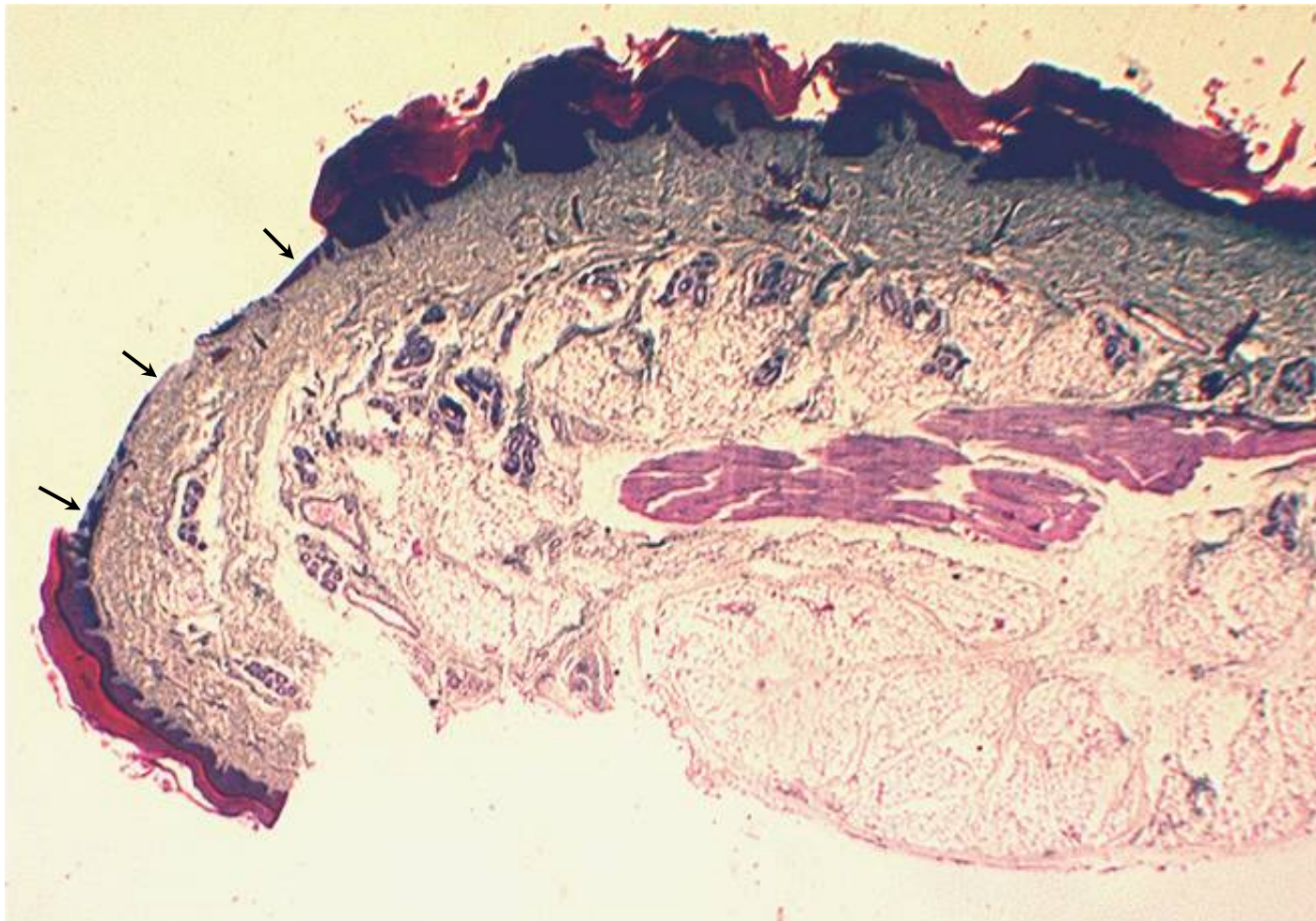
Objectives

- 1. To identify the main features of non-hairy heavily keratinised skin and compare with thinner hairy skin.**
- 2. To identify sebaceous and sweat glands.**

SLIDE 77 Digital skin (monkey)

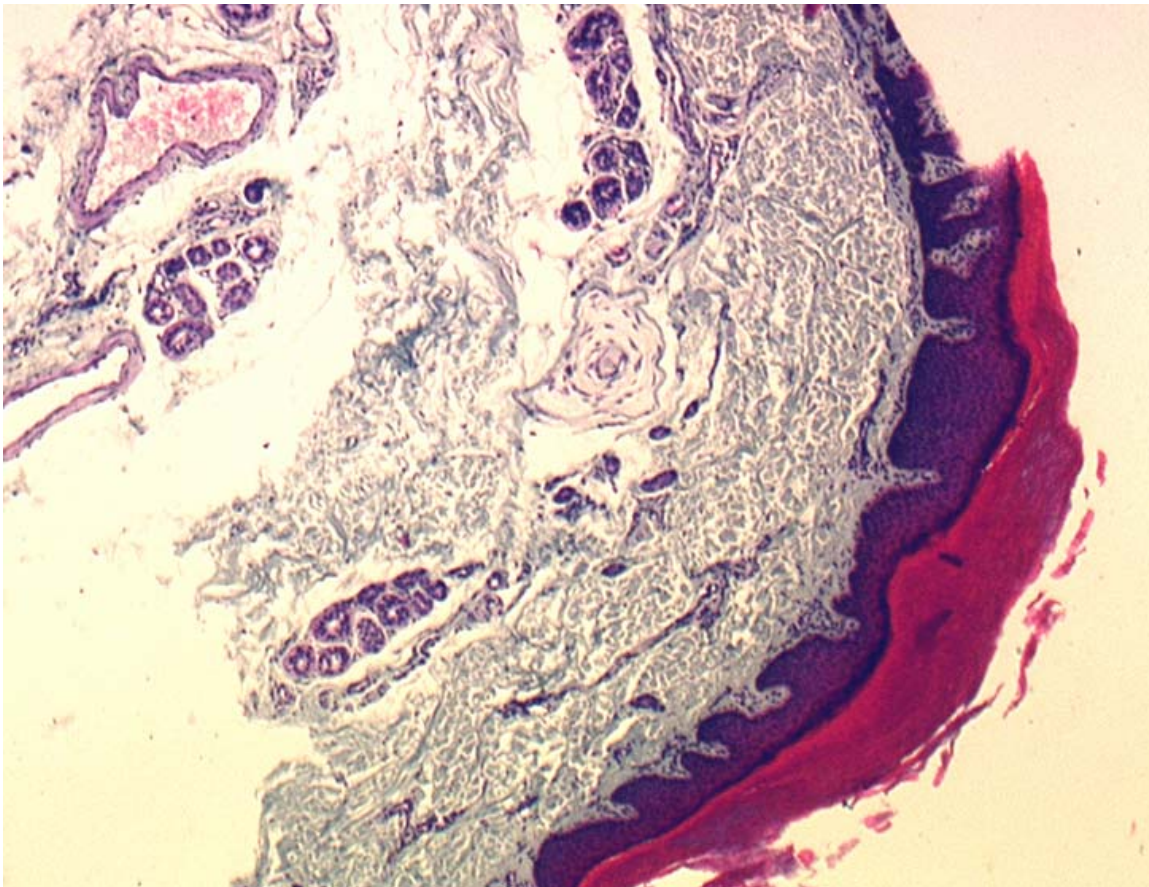
Examine the section under very low magnification, (Masson's trichrome stain).

Skin is a difficult structure to cut for histology; the outer keratinised layers often pull apart or tear during sectioning. Part of the epidermis in the section below has been lost (arrowed).



SLIDE 77 Digital skin (monkey)

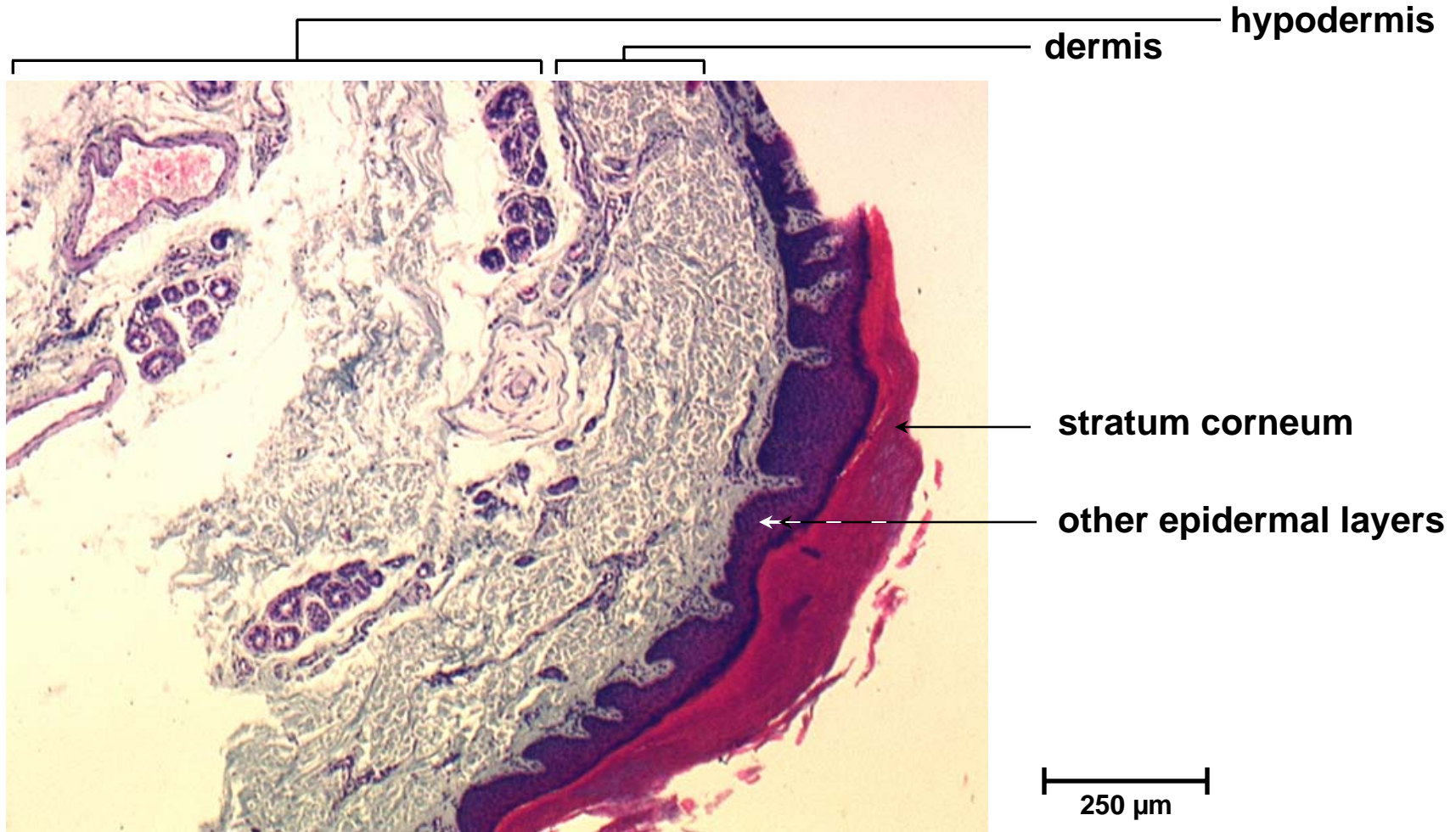
- Identify
- thick stratum corneum. What colour does it stain?
 - rest of the epidermis. What colour does it stain?
 - dermis
 - hypodermis



250 μ m

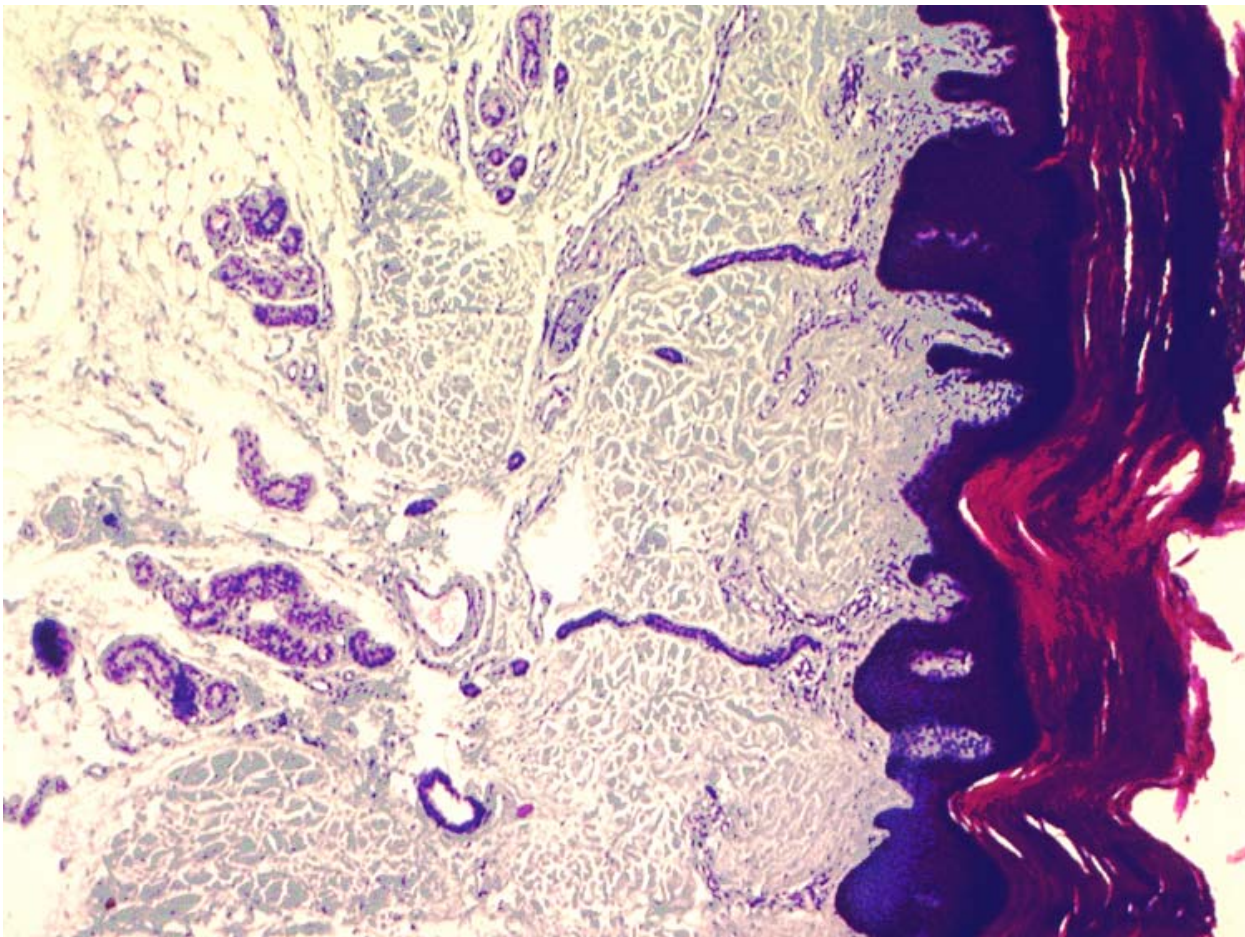
SLIDE 77 Digital skin (monkey)

- Identify
- thick stratum corneum. What colour does it stain? **Red.**
 - rest of the epidermis. What colour does it stain? **Purple.**
 - dermis
 - hypodermis



SLIDE 77 Digital skin (monkey)

What glands and their ducts can be seen in this section?



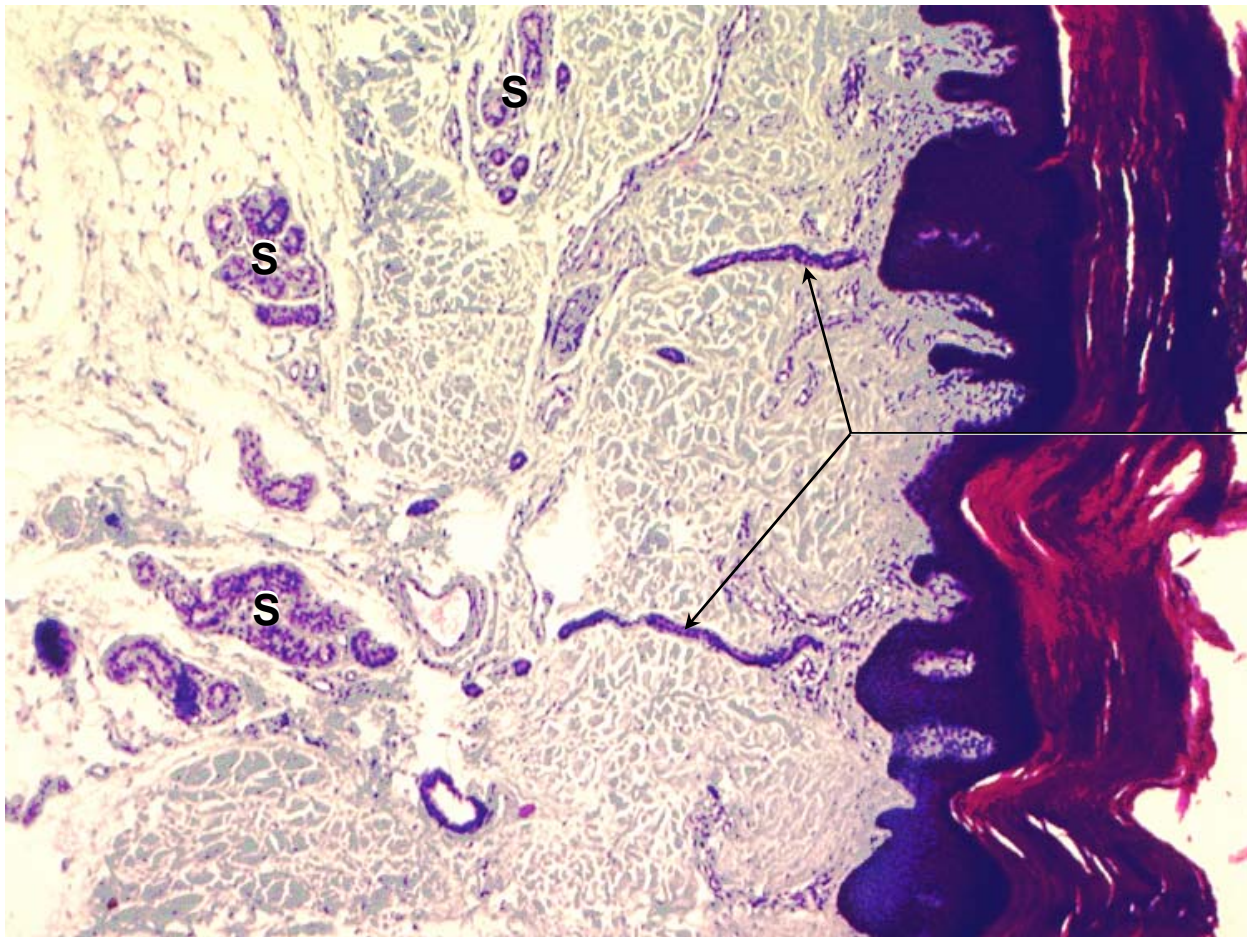
250 μ m

SLIDE 77 Digital skin (monkey)

What glands and their ducts can be seen in this section?

Sweat glands.

What is the predominant tissue in the hypodermis?



S : sweat glands

ducts from sweat glands

250 μ m

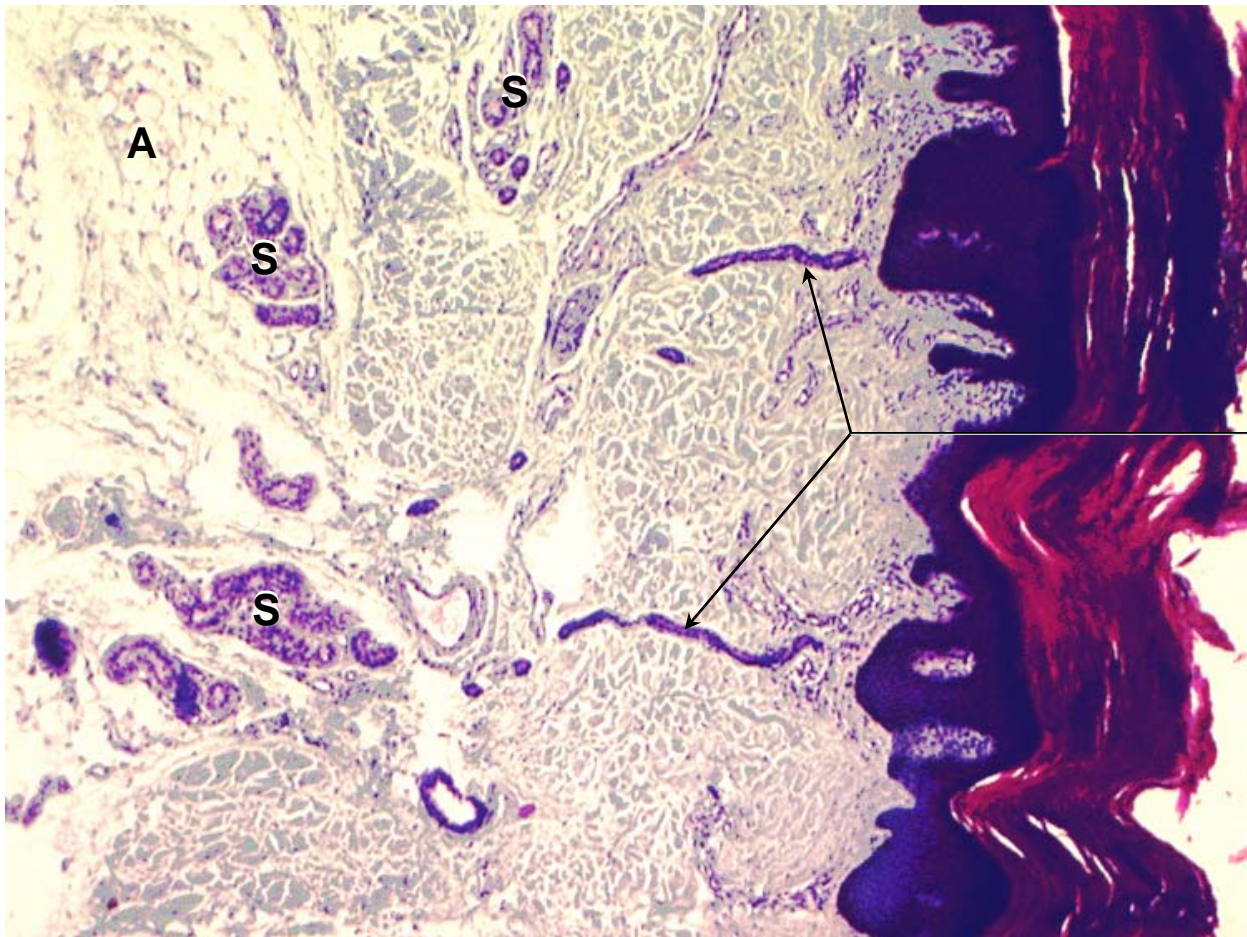
SLIDE 77 Digital skin (monkey)

What glands and their ducts can be seen in this section?

Sweat glands.

What is the predominant tissue in the hypodermis?

Adipose tissue.



**S : sweat glands
A : adipose tissue
in hypodermis**

**ducts from sweat
glands**

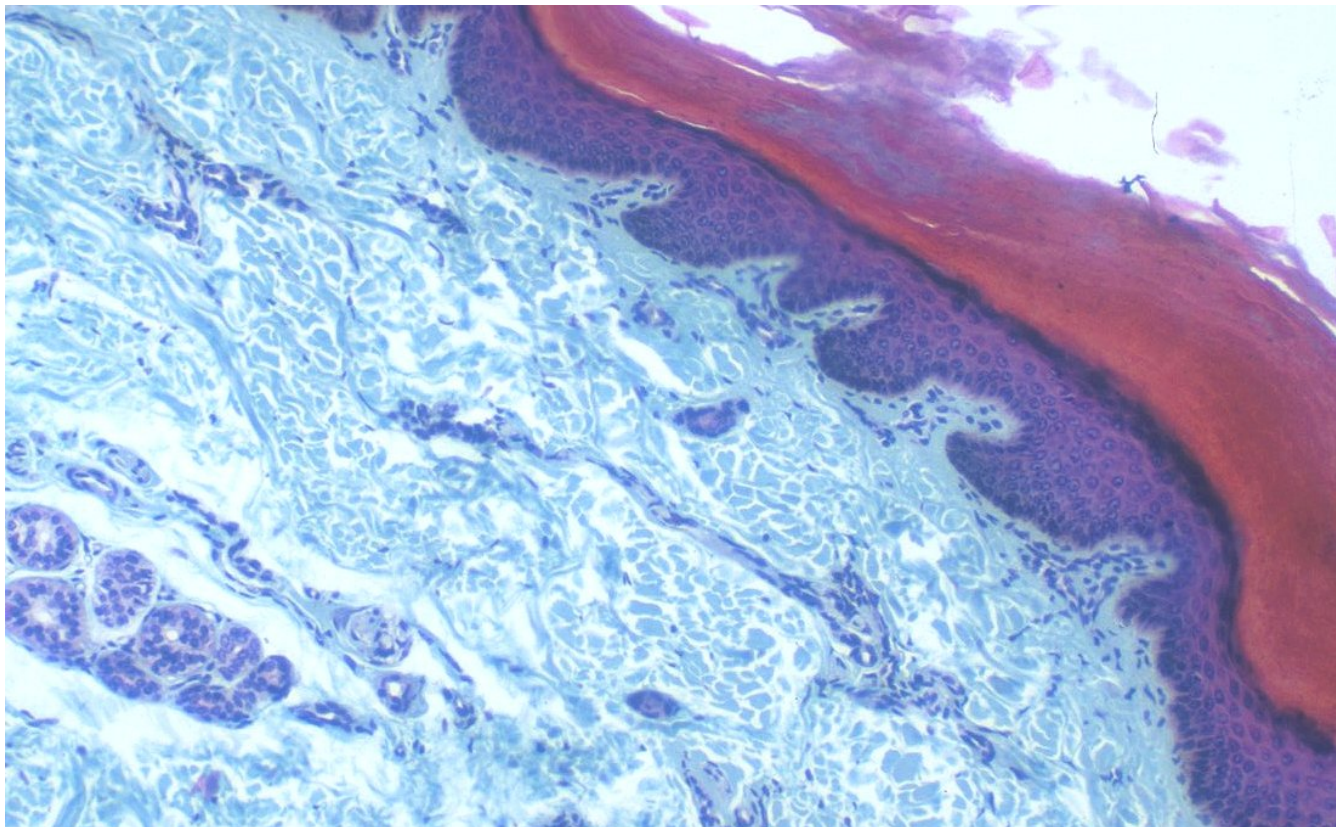
250 µm

SLIDE 77 Digital skin (monkey)

The stain used is Masson's Trichrome.

Dermal papillae interdigitating with the epidermal layers, strengthen the layers.

What is stained blue-green in the dermis?



100 μ m

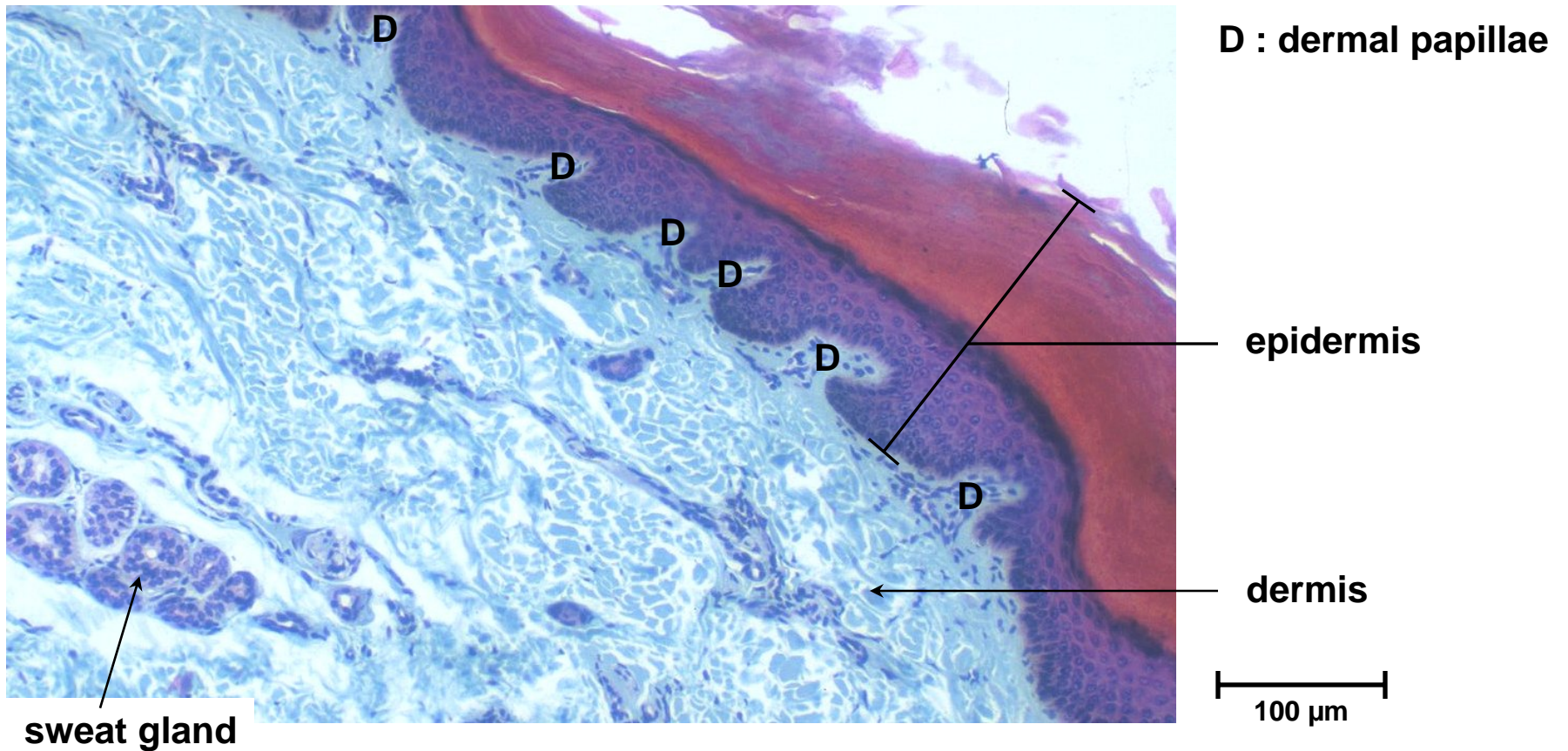
SLIDE 77 Digital skin (monkey)

The stain used is Masson's Trichrome.

Dermal papillae interdigitating with the epidermal layers, strengthen the layers.

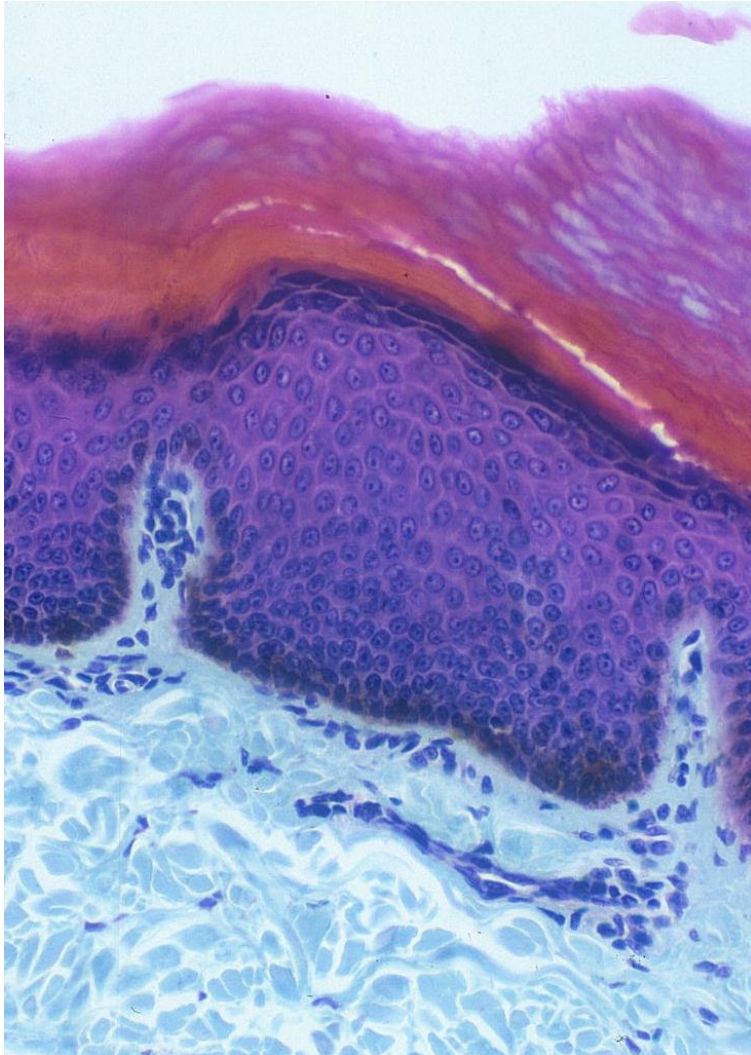
What is stained blue-green in the dermis?

The collagen fibres in the dermis stain blue-green.



SLIDE 77 Digital skin (monkey)

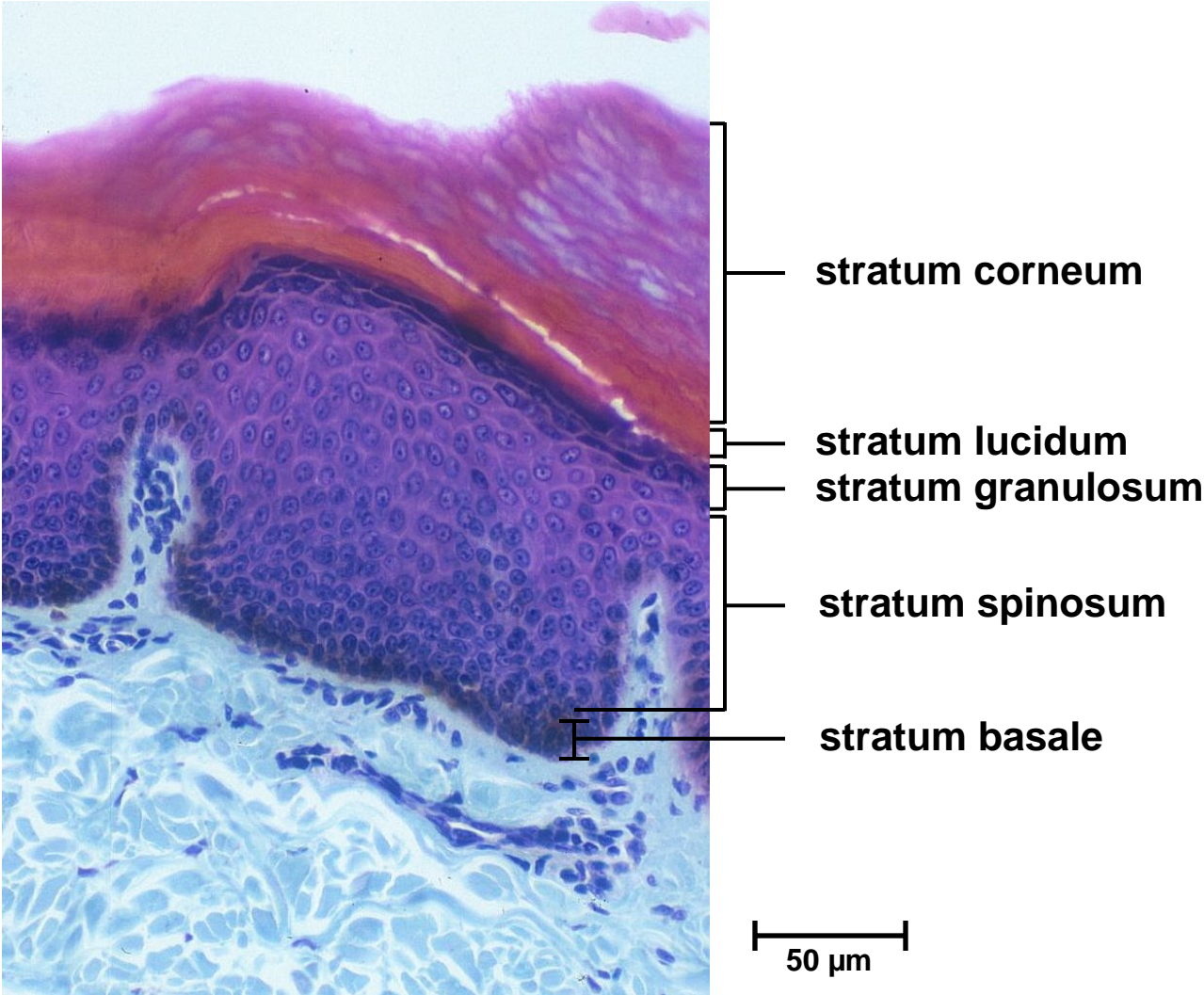
Label the five strata in the epidermis.



50 μ m

SLIDE 77 Digital skin (monkey)

Label the five strata in the epidermis.



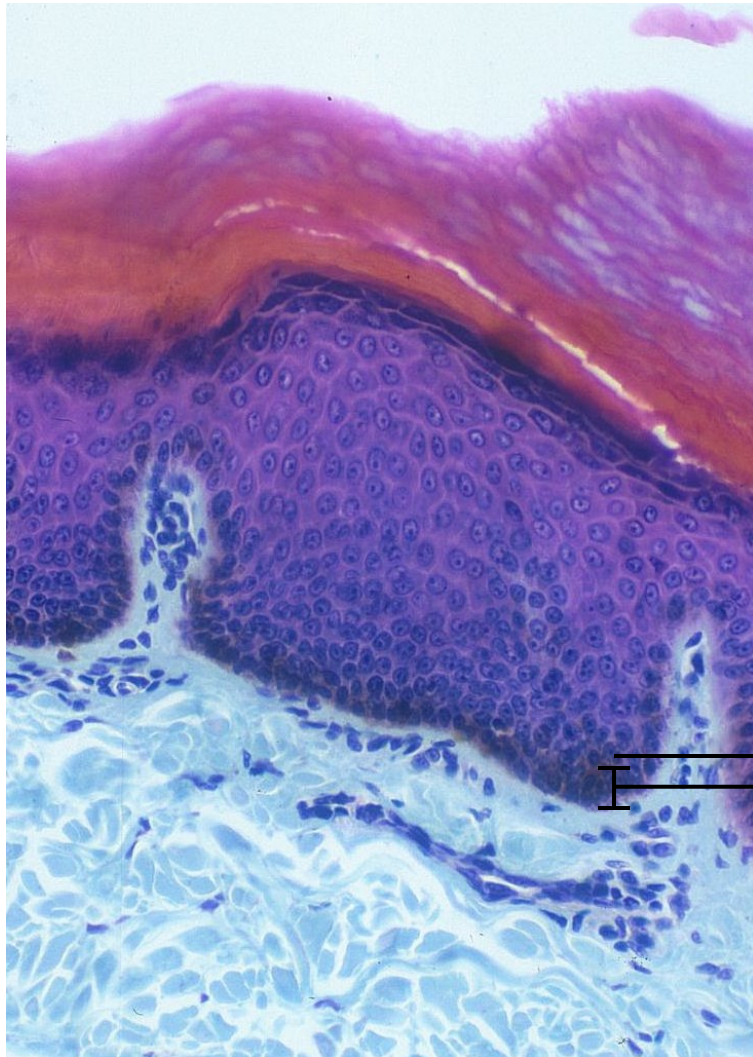
SLIDE 77 Digital skin (monkey)

Label the five strata in the epidermis.

In which of these layers might one observe

(a) mitosis?

(b) melanocyte (cell bodies)?



stratum corneum

stratum lucidum

stratum granulosum

stratum spinosum

stratum basale

50 μ m

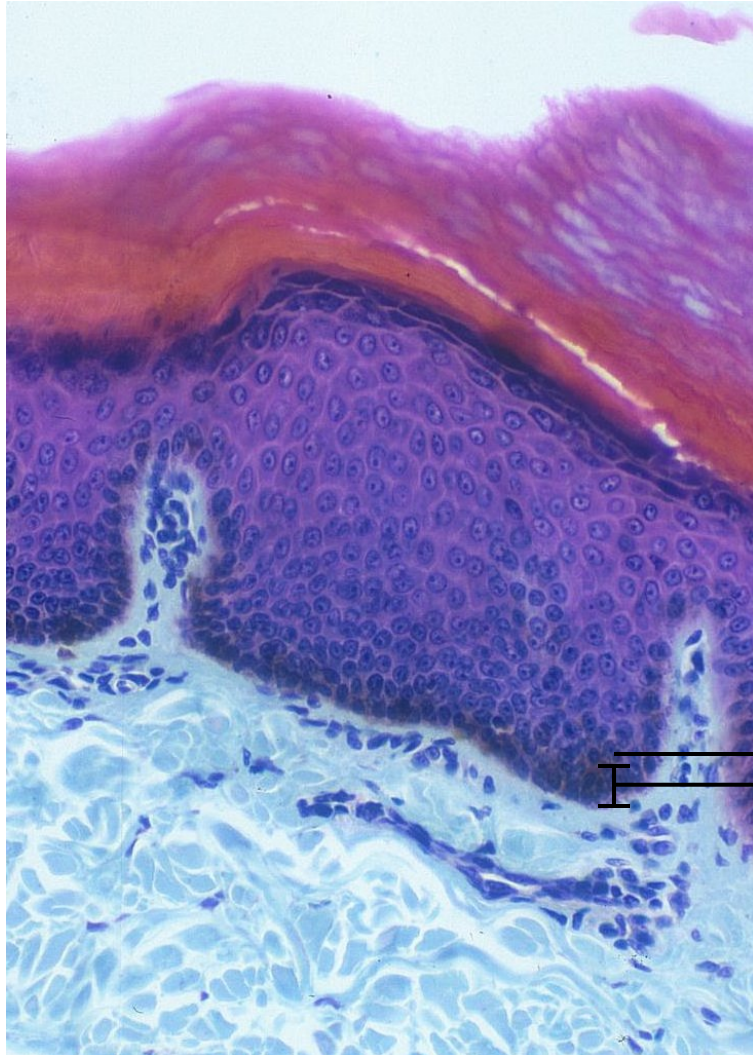
SLIDE 77 Digital skin (monkey)

Label the five strata in the epidermis.

In which of these layers might one observe

(a) mitosis? **Stratum basale.**

(b) melanocyte (cell bodies)?



- stratum corneum
- stratum lucidum
- stratum granulosum
- stratum spinosum
- stratum basale

50 μ m

(The stratum lucidum is often difficult to distinguish).