

Example Questions: Anatomic Pathology Phase II Certifying Examination

These questions illustrate possible question styles and content examples for the Phase II Certifying Examination.

- Helpful information is on the ACVP website, including the Candidate Handbook
- The Phase II Certifying Examination consists of 300 equally weighted multiple-choice questions (3, 4 or 5 choices) administered in 3 sections of 100 questions each:

Section 1:

- **Knowledge** – usually text only, can be single images or data tables

Section 2:

- **Interpretation** – usually single images or data tables

Section 3:

- **Microscopic** – single or multiple microscopic images
- Questions can be text only or can have images (gross and/or microscopic) and/or data tables
- Knowledge and skills tested in the microscopic section can include:
 - Ability to seek and find lesions
 - Pattern recognition
 - Use of appropriate terminology
 - Ability to justify diagnosis
- Unless otherwise informed, assume stain used for samples in microscopic images are Hematoxylin & Eosin (histology) or Wright-Giemsa (cytology & hematology).

Example Question 1

Section 1: Knowledge - text only

Thymomas are most likely to occur in which of these types of animals?

- A. Ox
- B. Goat
- C. Horse
- D. Alpaca

Answer: **B**

Example Question 2

Section 2: Interpretation - single image

The lesion shown is most likely to occur in which species?



- A. Ox
- B. Goat
- C. Horse
- D. Alpaca

Answer: **B**

Example Question 3

Section 2: Interpretation - single image

Rat.



What is the most likely diagnosis?

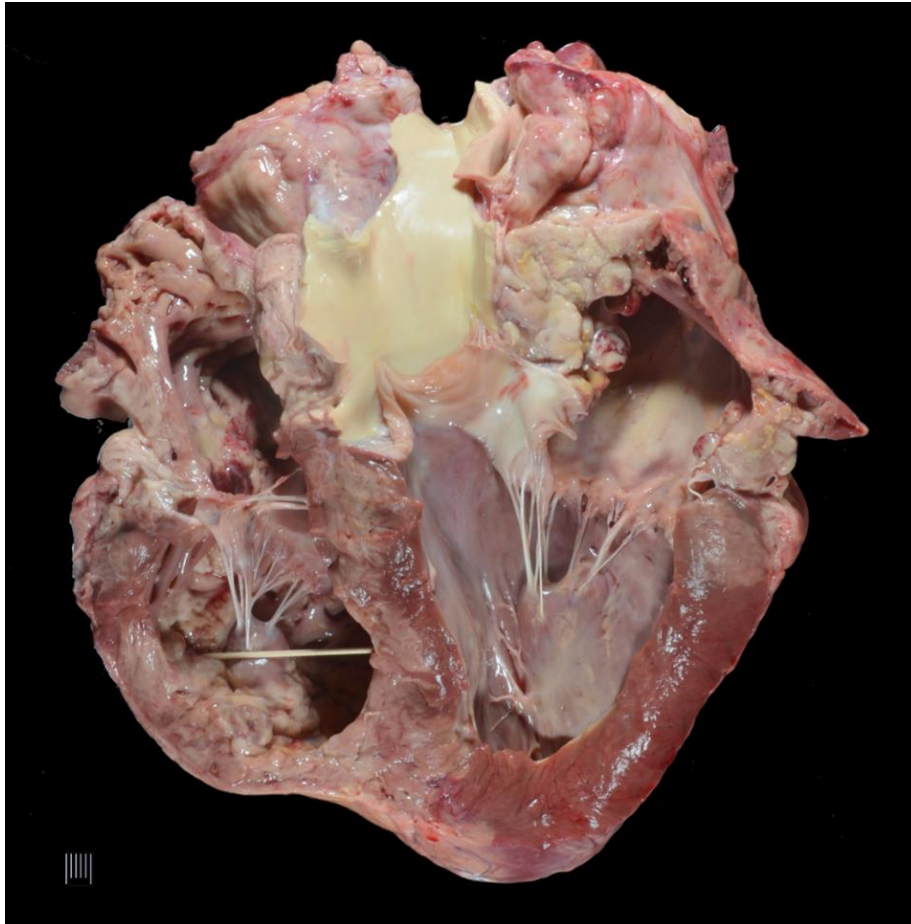
- A. Lipoma
- B. Testicular teratoma
- C. Mammary fibroadenoma
- D. Preputial sebaceous adenocarcinoma

Answer: **C**

Example Question 4

Section 2: Interpretation - single image

Tissue from a cow.



Which organ is most likely to be affected?

- A. Lung
- B. Liver
- C. Kidney
- D. Uterus

Answer: **D**

Example Question 5

Section 2: Interpretation - single image, data table

Hemostatic data from a dog.

Test	Units	Patient	Flag	Reference interval
Prothrombin time (PT)	seconds	>120	H	7 - 10
Partial thromboplastin time (PTT)	seconds	>120	H	12 - 18
Mucosal bleeding time	minutes	3		< 4
Platelets	$\times 10^3/\mu\text{L}$	201		200 - 450
Fibrinogen-fibrin degradation products (FDPs)	$\mu\text{g/mL}$	4		<5
Antithrombin III	%	99		90 - 120

Which condition is most likely?

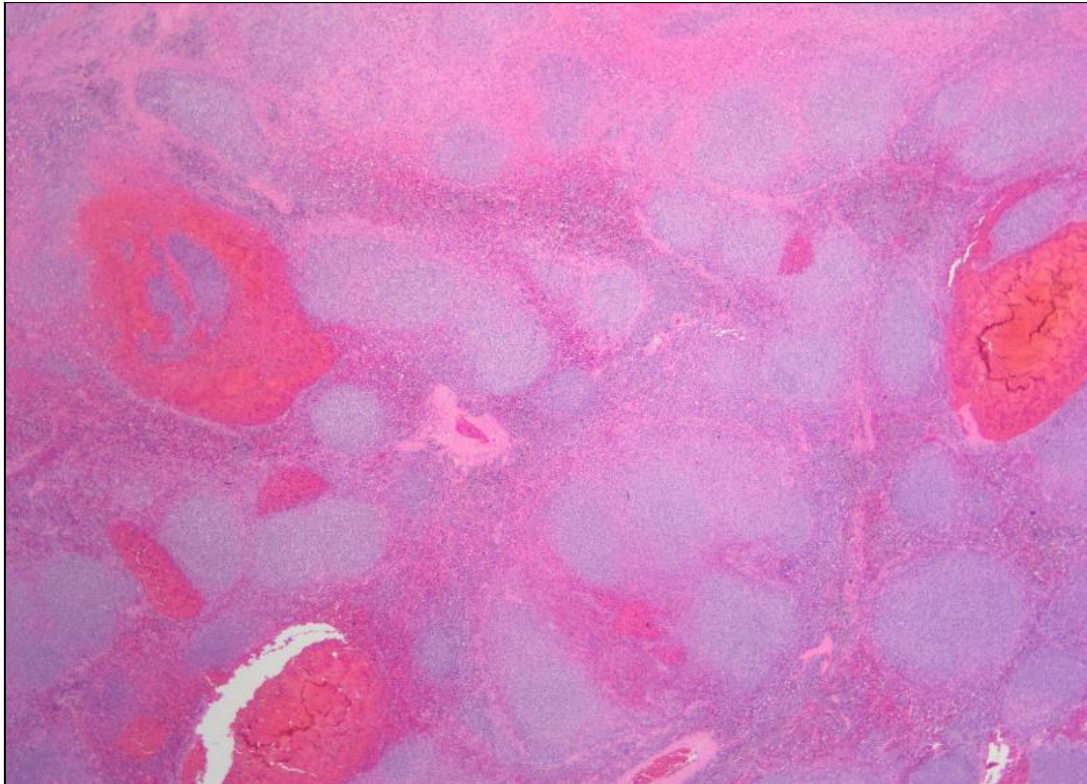
- A. Hemophilia A
- B. von Willebrand disease
- C. Anticoagulant rodenticide toxicosis
- D. Disseminated intravascular coagulation

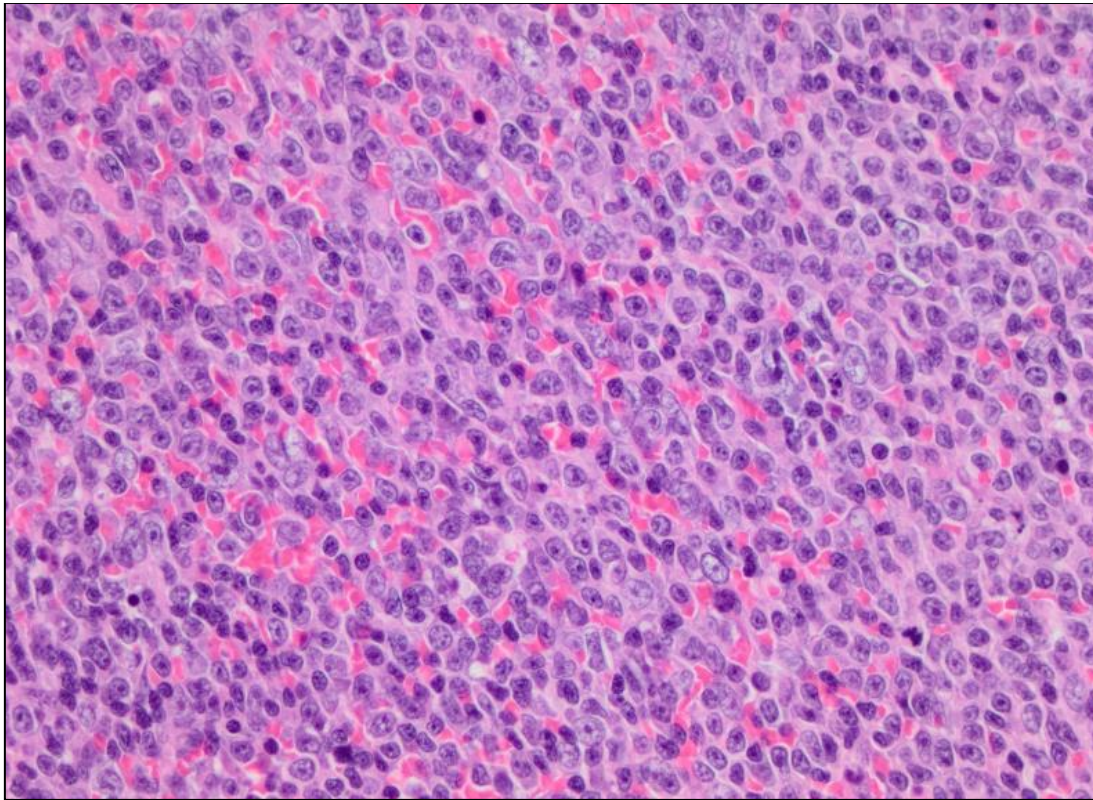
Answer: **C**

Example Question 6

Section 2: Interpretation - multiple images

Spleen from a dog.





Which immunomarker is most likely to be positive?

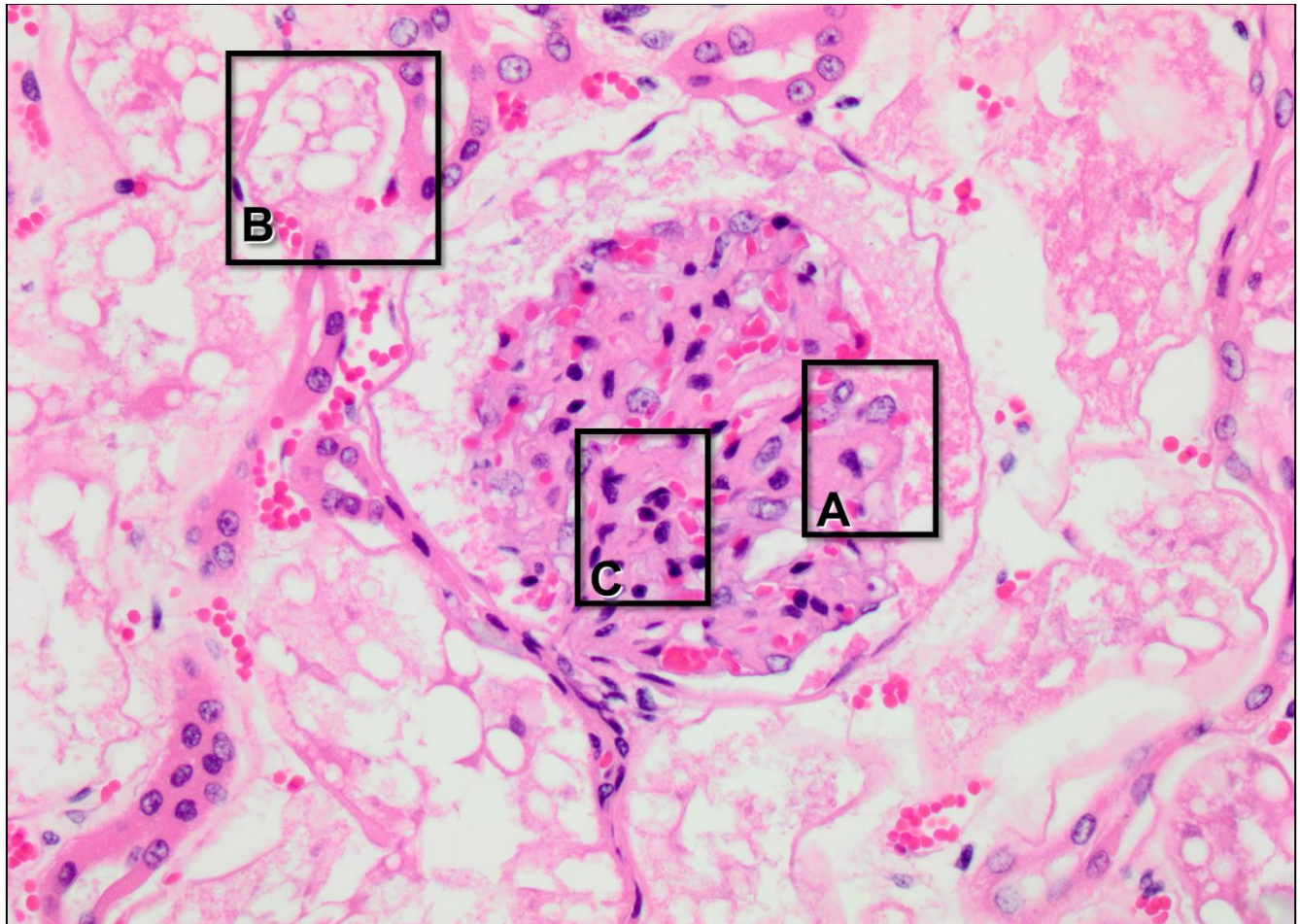
- A. CD3
- B. CD20
- C. CD31
- D. Iba-1

Answer: **B**

Example Question 7

Section 3: Microscopic – single image, seek and find

Tissue from a cat with proteinuria.



The diagnostic lesion is in which box?

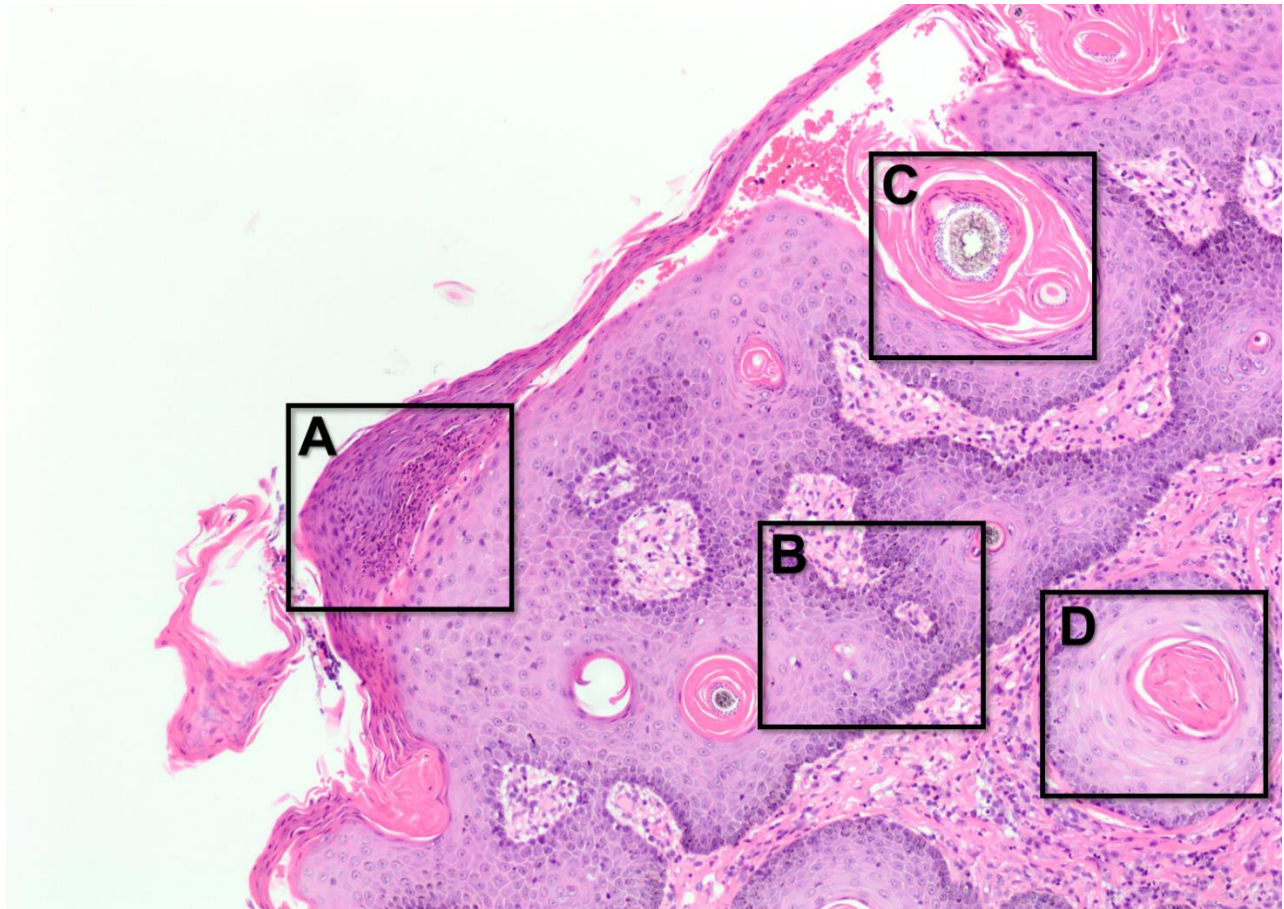
- A. A
- B. B
- C. C

Answer: **A**

Example Question 8

Section 3: Microscopic – single image, seek and find, diagnostic features

Tissue from a cat.



The diagnostic lesion is in which box?

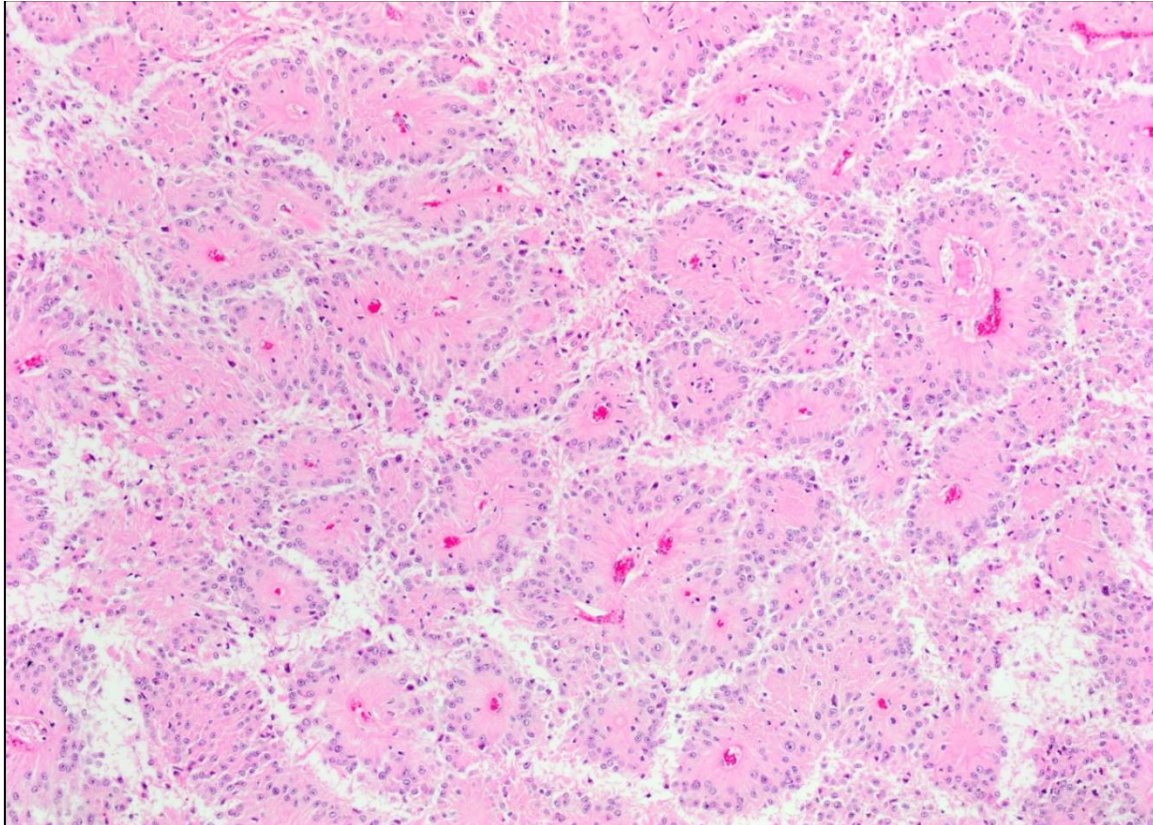
- A. A
- B. B
- C. C
- D. D

Answer: **C**

Example Question 9

Section 3: Microscopic – single image, pattern recognition, terminology

Intracranial mass from a cat.



What is the key diagnostic feature?

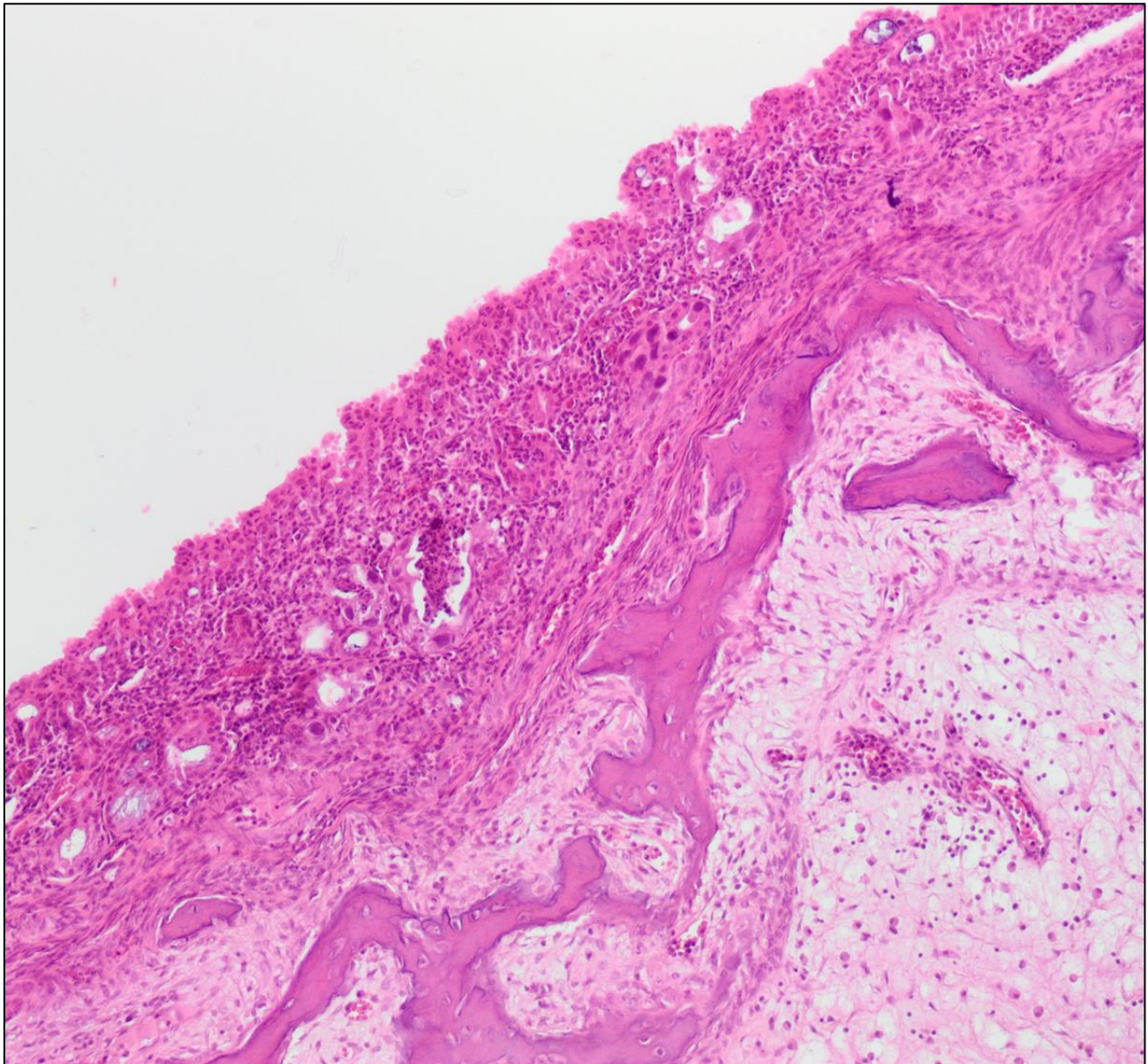
- A. Pseudorosettes
- B. Antibasilar nuclei
- C. Serpiginous necrosis
- D. Microvascular proliferation

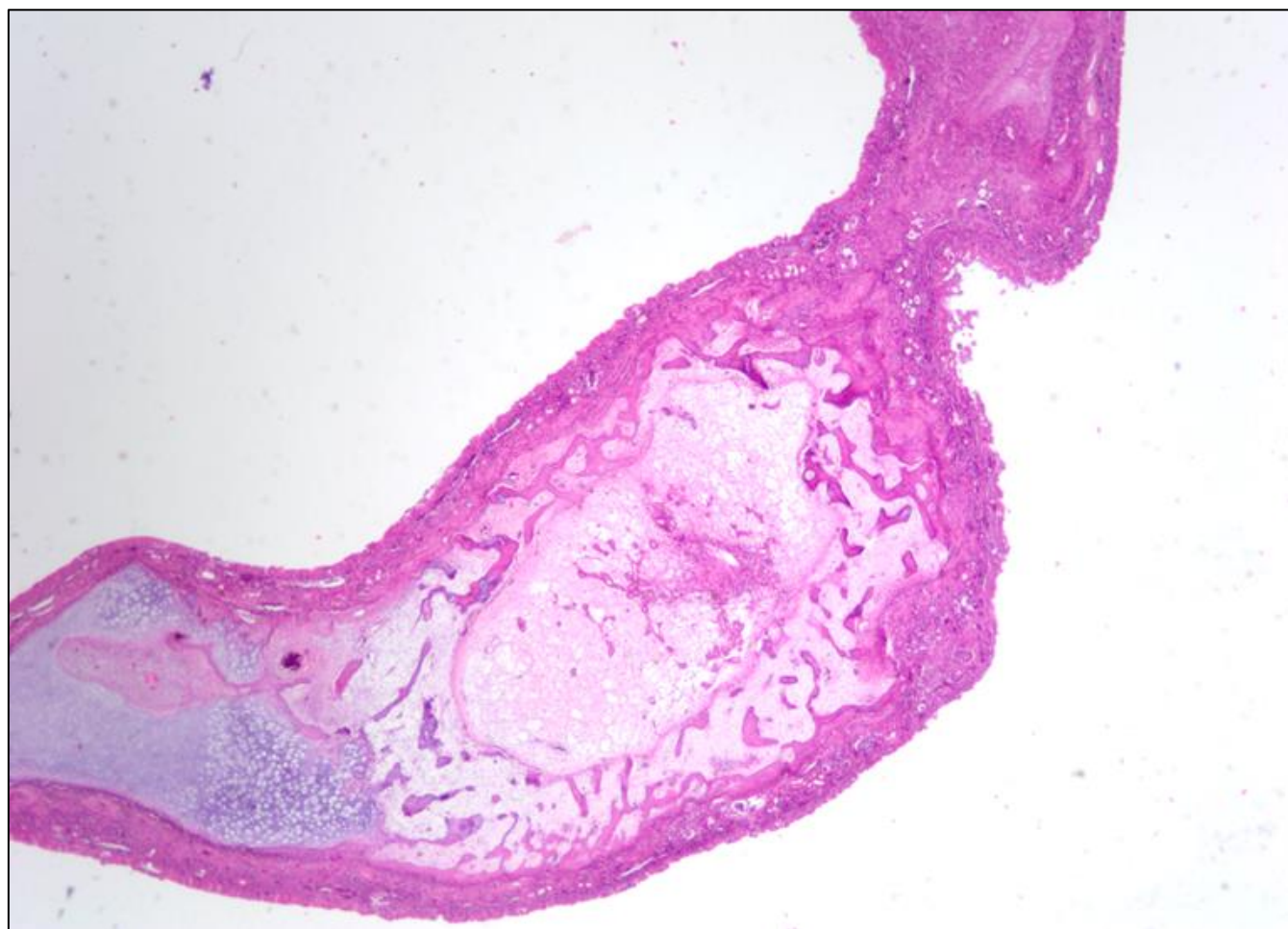
Answer: **A**

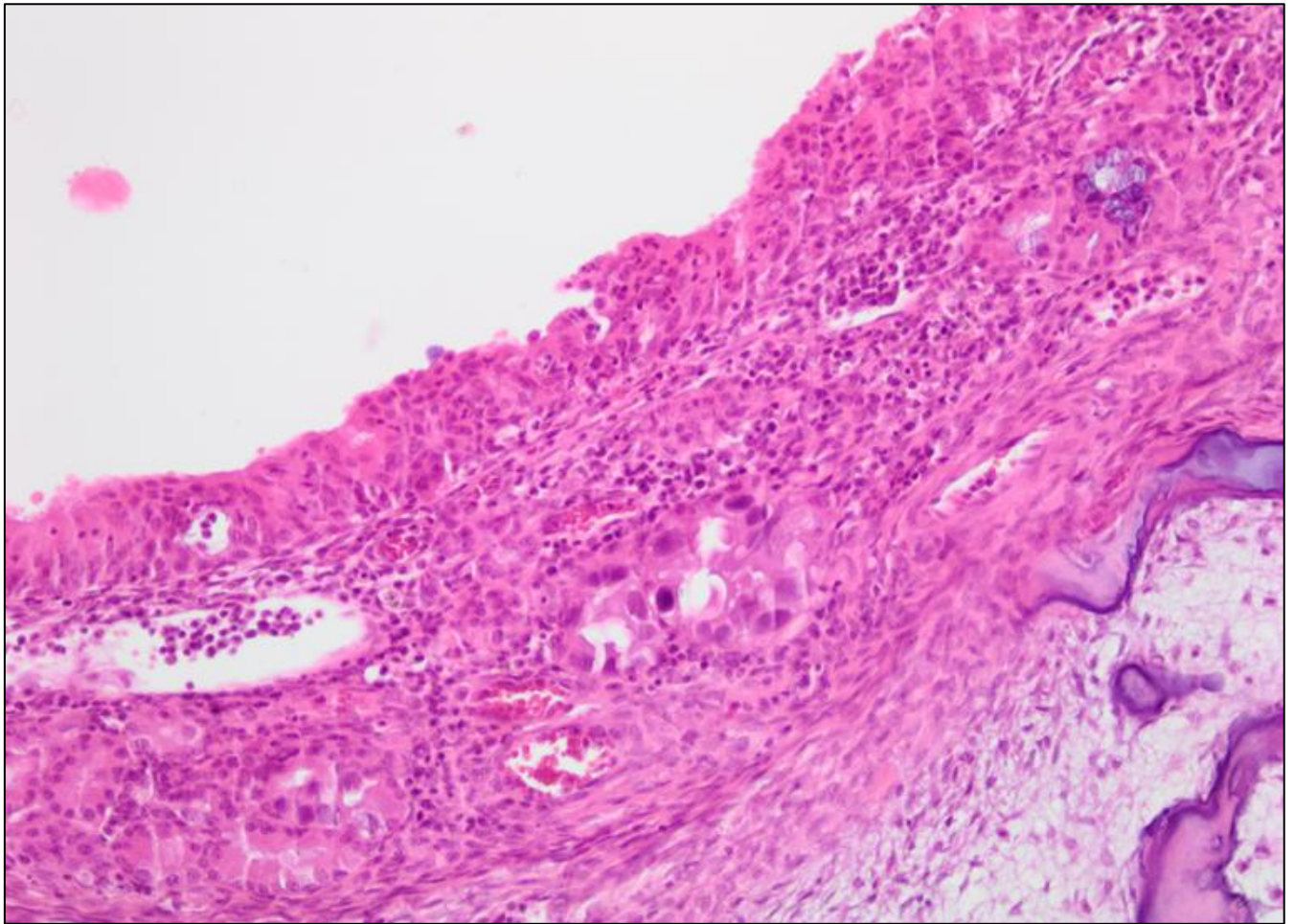
Example Question 10

Section 3: Microscopic – multiple images, pattern recognition, seek and find

Tissue from a pig.







What is the key diagnostic feature?

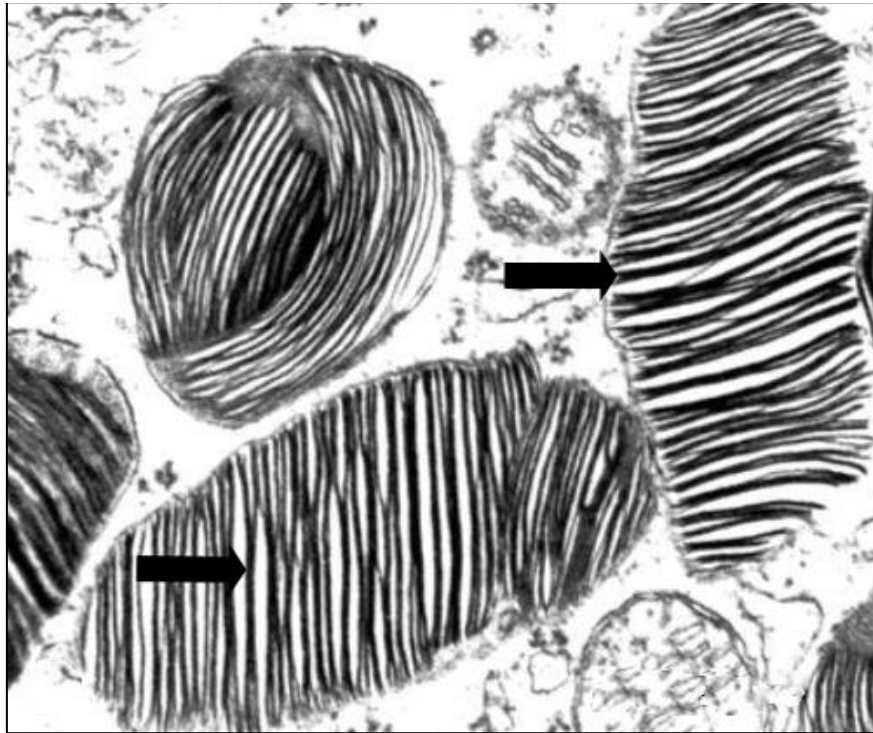
- A. Turbinate atrophy
- B. Epithelial necrosis
- C. Intranuclear inclusions
- D. Botryoid cytoplasmic inclusions

Answer: **C**

Example Question 11

Section 3: Microscopic – single image, pattern recognition, terminology

Transmission electron micrograph of spinal cord from a Humboldt penguin (*Spheniscus humboldti*).



What are the structures denoted by arrows?

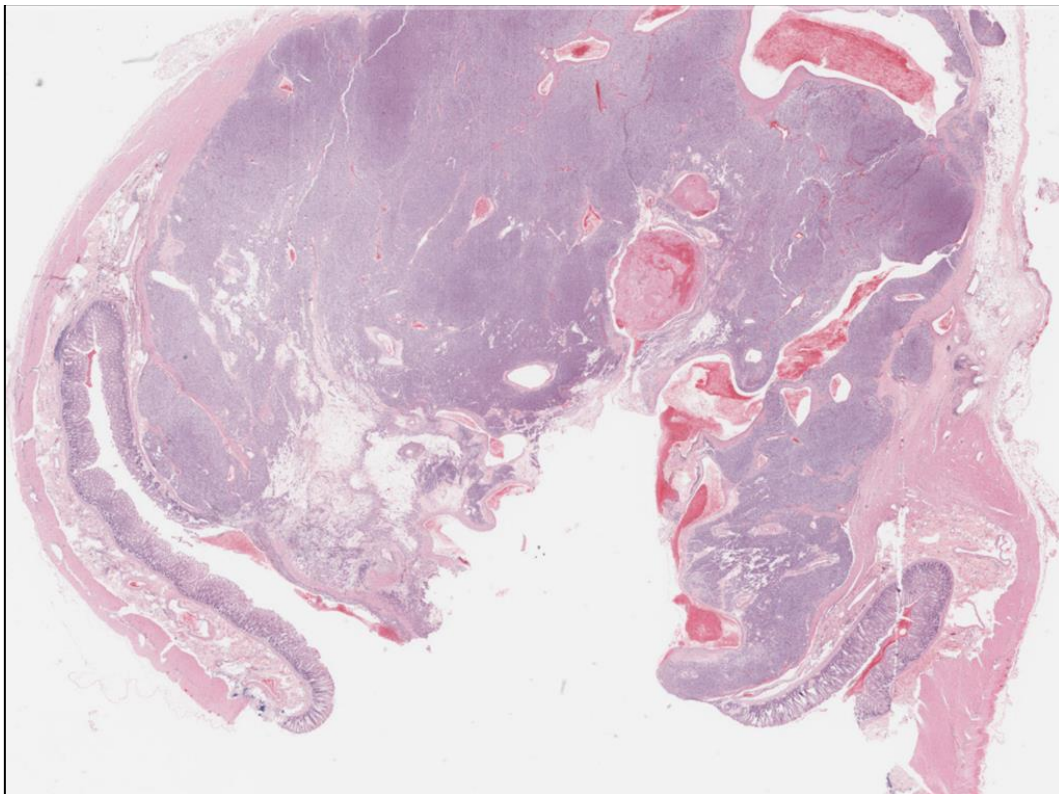
- A. Mitochondria
- B. Viral particles
- C. Myelin figures

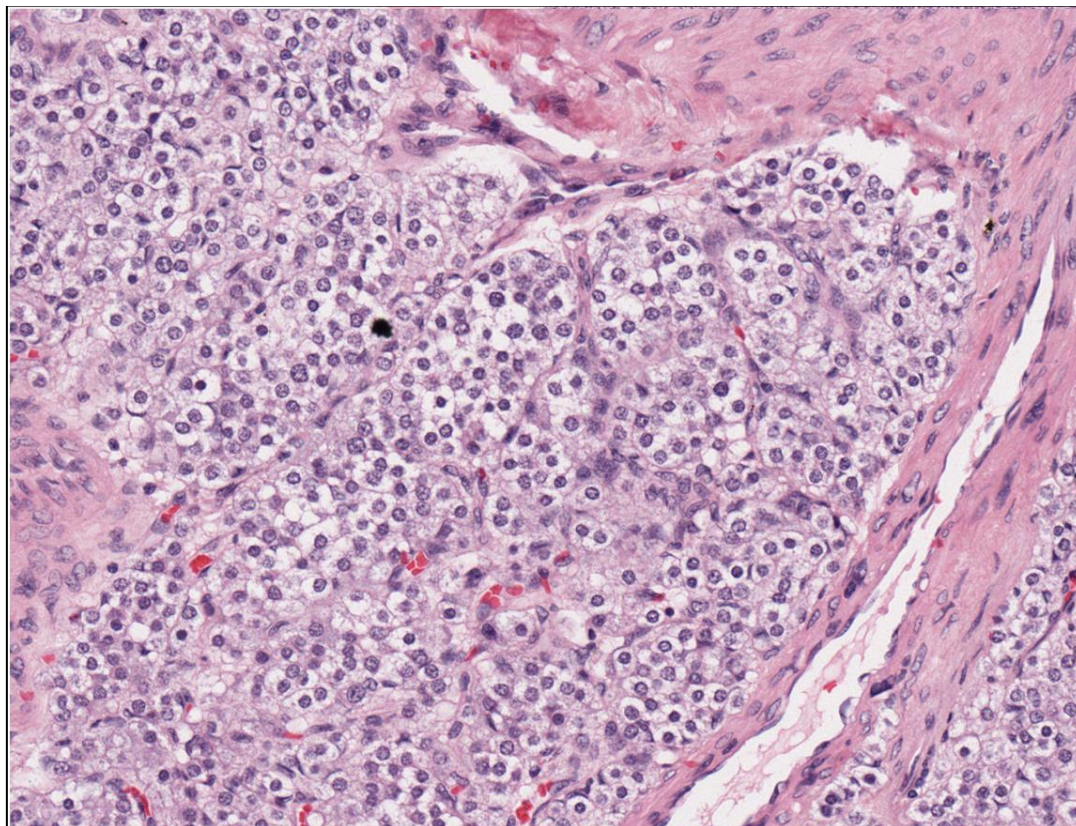
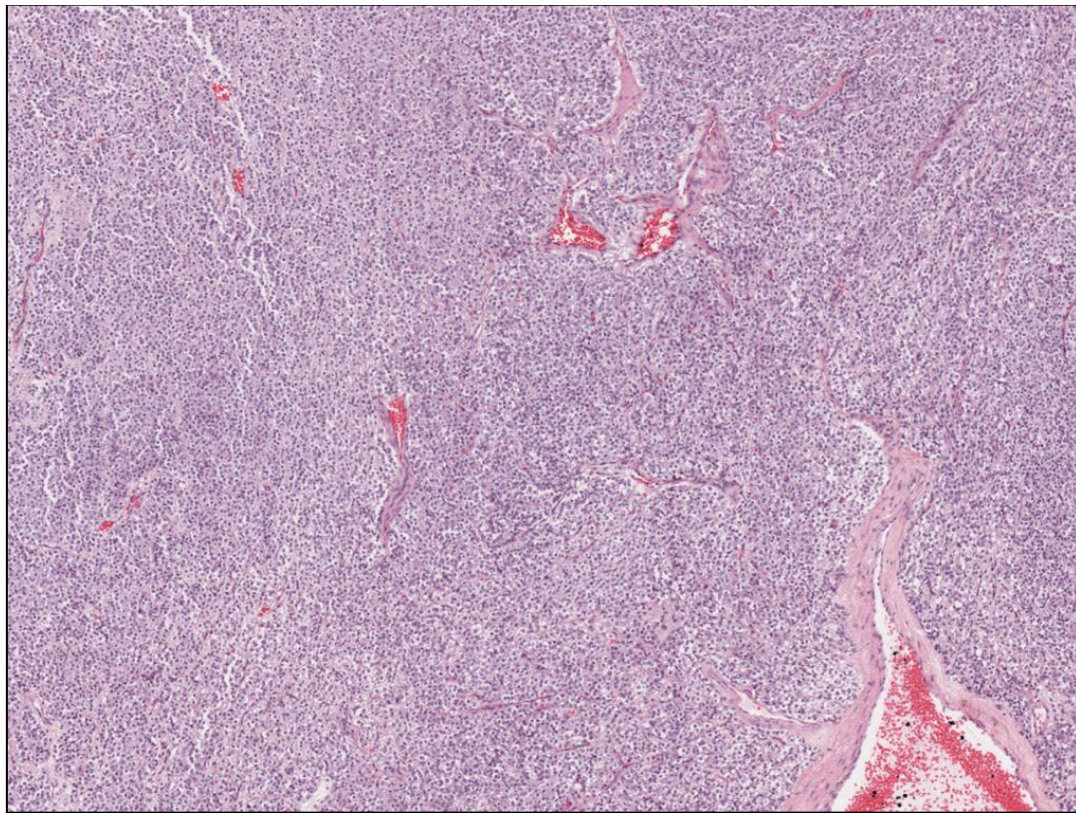
Answer: C

Example Question 12

Section 3: Microscopic – multiple images, terminology

Tissue from a dog.





Which is the most appropriate description?

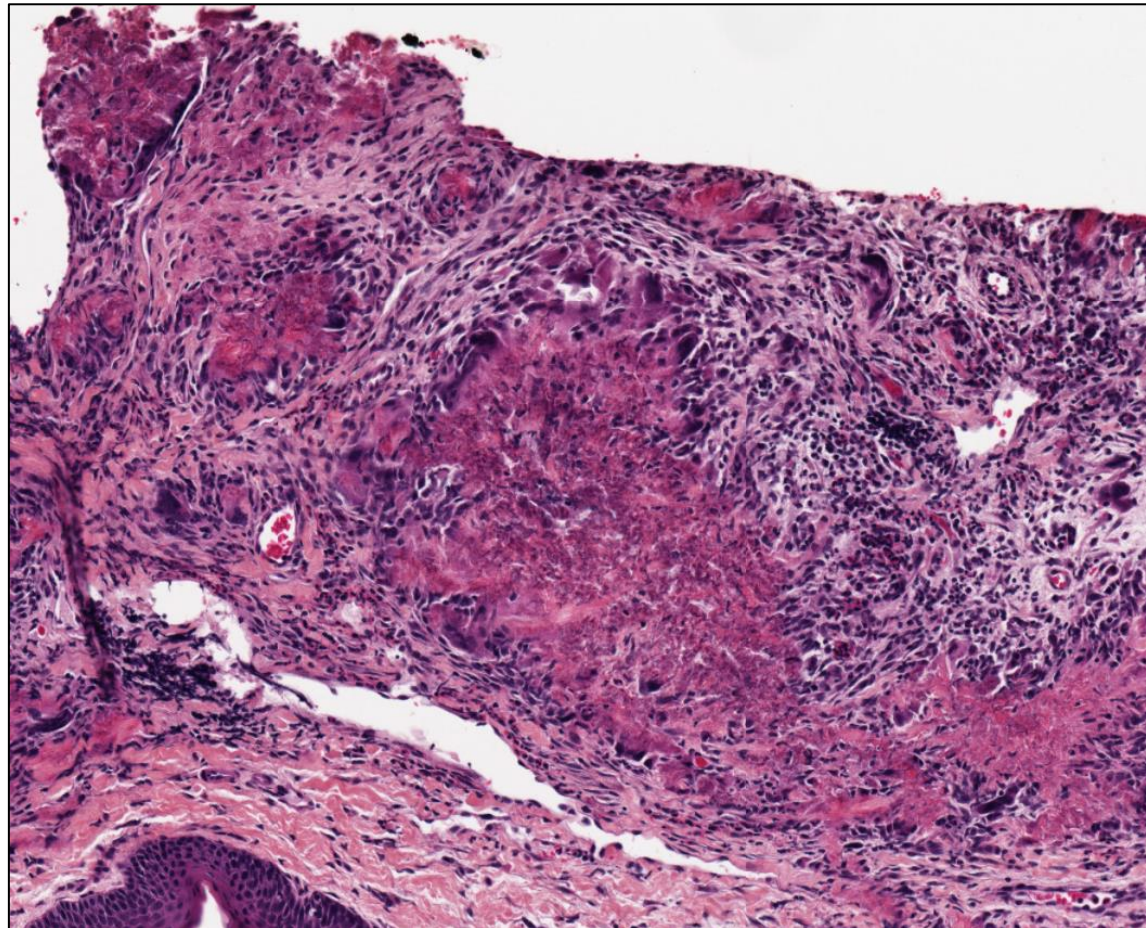
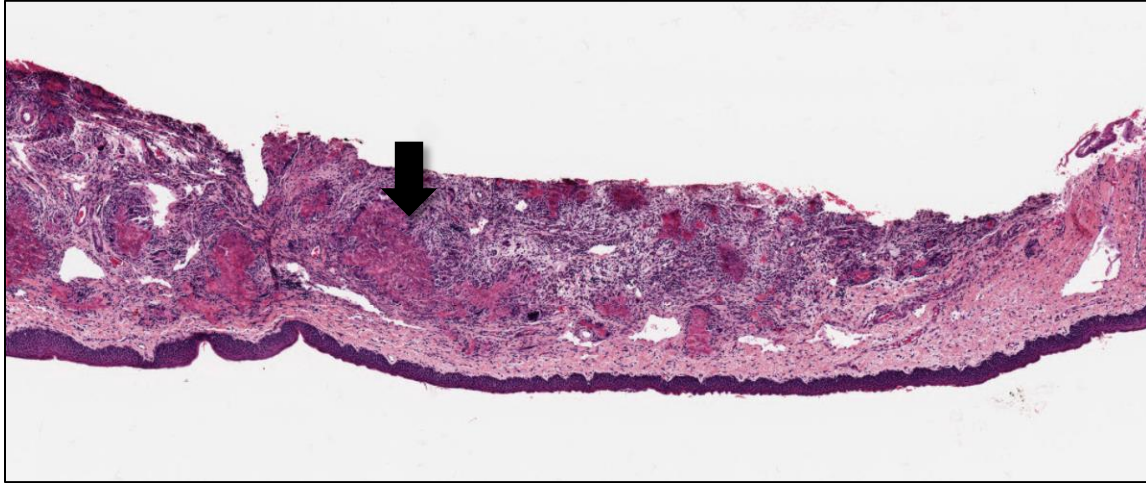
- A. Sheets of neoplastic round cells
- B. Streaming bundles of neoplastic cells
- C. Neoplastic cells form acinar structures
- D. Neoplastic cells arranged in nests and packets

Answer: **D**

Example Question 13

Section 3: Microscopic – multiple images, terminology

Tissue from a cat.



Which term is most appropriate for the lesion indicated by the arrow?

- A. Flame figure
- B. Caseating necrosis
- C. Dystrophic mineralization
- D. Splendore-Hoeppli material

Answer: **A**