

Principles of ACVP Examination Content Development (Anatomic and Clinical Pathology)

Test items developed for the certifying examination of the ACVP aim to assess the skills and knowledge that a “minimally competent” pathologist should possess. “Minimal competency” is the term used in high stakes examinations to define the level of knowledge and skill an individual has been certified to possess. Candidates certified as Veterinary Pathologists by ACVP are expected to continue to acquire the knowledge, skill and specific expertise to become “highly competent”.

The ACVP certifying examination is composed of written essays for description and interpretation of microscopic lesions and laboratory data, and of multiple-choice questions (MCQ) testing knowledge, and lesion and laboratory data interpretation. The rationale for testing a candidate’s ability to describe data and microscopic pathology in essay format, and for assigning a majority of points to description within essay grading, is that the description articulates the observational basis for arriving at an interpretation and diagnostic conclusion. The description demonstrates the candidate’s ability to navigate and observe pertinent features of entities presented for diagnostic or interpretive analysis, i.e. practice of pathology. More specifically, the description tests candidates in regard to:

- Knowledge and appropriate use of terminology
- Knowledge of microscopic anatomy and laboratory data
- Recognition and prioritization of key diagnostic features

Skillfully written descriptions are vital to the practice of pathology in the following ways:

- Description employs the language and vocabulary necessary to verbally communicate interpretations to other pathologists and end users
- The ability to communicate observed descriptive elements is critical for substantiating the interpretation

Multiple-choice questions within the ACVP certifying examination test the ability of candidates to appropriately interpret a range of macroscopic, microscopic and other laboratory abnormalities, and candidates’ knowledge in the discipline of veterinary pathology.

Competency

Defining the level of “minimal competency” for certification as a Veterinary Pathologist is challenging. It is recommended that the examination committee and College membership embrace the following concepts:

- Candidates qualified to write the certifying examination have only 3-5 years of pathology practice experience
- Certified Veterinary Pathologists are ready to practice pathology and will not contribute medical harm in case or study management
- Certified Veterinary Pathologists are practice-of-pathology competent but have not yet achieved expert or sub-specialty competency

Test Item Development

Test item development involves both validity and relevance considerations entrusted to the examination committees. The examination committees will use the following guidelines in developing and selecting the test item arrays:

- Distribution of items ensures the test is representative of the practice of veterinary anatomic or clinical pathology
- A sufficient number of items cover relevant areas of practice as determined by role delineation
- Content of test items is relevant, important, or encountered in practice with reasonable frequency

The examination committees will utilize the following checklist when reviewing relevance of each proposed test item for inclusion in the examinations:

- How important is the content of the item in practice?
- How essential is the content of the item for safe and effective practice?
- How relevant is the content of the item to current practice?
- How frequently does the practitioner encounter the content of the item?

It is not feasible to create a detailed list of topics or diseases that encompass “minimal competency”. The following general guidelines have been developed to aid candidates preparing for the examination:

Expected	Not expected
Knowledge held by most board-certified pathologists without consultation of other sources of information	Knowledge held by only a few pathologists or experts in other fields (parasitology, microbiology, etc.)
Common lesions such as those seen multiple times per year by pathologists	Once-in-a-lifetime diagnosis that are rarely encountered
Uncommon lesions such as seen once per year or less frequently by pathologists but that are well-documented in the literature, zoonotic, reportable, common in other countries, common in other species, and therefore represented in current textbooks	Little-known diseases with only one case report Controversial entities Conditions affecting specifically humans
General and foundational pathology knowledge that aids in understanding of disease pathogenesis, behavior and diagnosis	Trivial, esoteric, institution-specific or numerical details that do not aid in the understanding of disease pathogenesis, behavior or diagnosis

Examples:

- Clinical Pathology
 - Expected knowledge: Greyhounds have higher PCVs, higher creatinine concentration and lower platelet counts compared to the general canine population (something clinical pathologists should know without consultation other sources of information)
 - Not expected knowledge: The reference interval for PCV of Greyhounds is 40-60%, compared to the general canine population which is 35-55%

- Infectious Organisms
 - Expected knowledge: Parasite stages with calcareous corpuscles are consistent with cestode infection, and differential etiologies include *Echinococcus*, *Taenia*, *Mesocystoides* etc. (infections have been reported in multiple publications and textbooks and can be encountered in different species in different areas of the world)
 - Not expected knowledge: The specific size of the larvae or parasite, the geographic location and the presence of armed scolices to indicate *Taenia crassiceps* (knowledge required of a parasitologist, not a pathologist).

This document represents an effort to define the rationale for content and format of the phase II certifying examination. The document will be reviewed and revised at least bi-annually.

February 16, 2016

Certifying Examination Redesign Committee