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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 26436-2025

Replacing GB/T 26436-2010

Diagnostic techniques for avian leukosis

禽白血病诊断技术

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Table of Contents

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

This document replaces GB/T 26436-2010 "Diagnostic technology for avian leukosis".

Compared with GB/T 26436-2010, in addition to structural adjustments and In addition to editorial changes, the main technical changes are as follows.

-- Added "Abbreviations" (see Chapter 4);

--Added the ALV-p27 antigen immune colloidal gold test paper card detection method (see 8.1.4.3);

--The criteria for confirming a diagnosis based on antibody test results have been changed (see 8.4.5, 4.3.2.3 of the 2010 edition).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the Ministry of Agriculture and Rural Affairs of the People's Republic of China.

This document is under the jurisdiction of the National Technical Committee on Animal Health Standardization (SAC/TC 181).

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The previous versions of this document and the documents it replaces are as follows.

--First published in 2010 as GB/T 26436-2010; --This is the first revision.

Introduction

Avian leukosis (AL) is a multidrug-resistant disease in poultry caused by infection with avian leukosis virus (ALV).

A general term for various neoplastic diseases, which mainly cause malignant tumors and subclinical infections in chickens, leading to growth retardation, decreased egg production and immune suppression in chickens.

It is an immunosuppressive disease that can be transmitted vertically through breeding eggs. China classifies it as a Class III animal epidemic.

ALV belongs to the genus Alpharetrovirus, subfamily Orthoretrovirinae, family Retroviridae, and is currently classified according to the characteristics of its gp85 protein.

ALV is divided into 11 subgroups. A, B, C, D, E, F, G, H, I, J and K. ALV is divided into two major types. endogenous ALV and exogenous ALV.

Endogenous ALV refers to ALV that is integrated into the host cell chromosome genome and can be vertically transmitted through the chromosome.

Incomplete fragments of the viral genome do not produce infectious virions, but may be complete viral genomes and thus be able to produce infectious virions However, these viruses are usually of low or no pathogenicity, mainly E subgroup ALV. Exogenous ALV is different from endogenous ALV.

Correspondingly, it refers to ALVs that are not transmitted to the next generation through the host cell chromosome, including A, B, C, D, J and K subgroups.

ALV is an exogenous virus. The interference of endogenous ALV is the first thing to be excluded when conducting laboratory tests, especially nucleic acid tests. factor.

The disease has no obvious seasonal or regional characteristics and is usually caused by raising chicks whose seed sources are not purified of ALV, as well as by The disease may be caused by mixing chickens with infected chickens for a period of time or using biological products contaminated with exogenous ALV.

The diagnostic technology content of this document includes clinical diagnosis, etiological diagnosis and serological diagnosis methods.

It is based on the World Health Organization (WOAH)'s Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, and combines it with China's new research results on related technologies.

Avian Leukosis Diagnostic Technology

1 Scope

This document describes the clinical diagnosis of avian leukosis, sample collection and processing, as well as virus isolation and identification, identification of virus subgroups, Laboratory diagnostic methods such as real-time RT-PCR, ALV-J amplification, and serological diagnosis.

This document applies to the diagnosis, detection, quarantine, monitoring and epidemiological investigation of avian leukosis in chicken flocks.

2 Normative references

GB/T 6682

GB/T 18088

GB/T 18643