U.S. Poultry Product Guide

zoetis

Contact us

Zoetis provides insightful technical support of our products to ensure they meet your flock and business needs.

Website: www.zoetisUS.com/poultry

Address: 1040 Swabia Court
Durham, NC 27703-8481

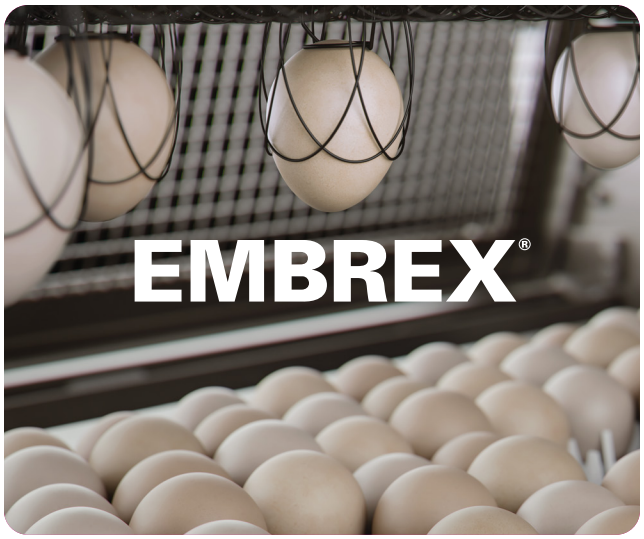
zoetis

Industry–shaping products to help meet your business goals.

Zoetis is proud to contribute to the important role of poultry health in providing a safe, sustainable food supply. Our broad portfolio of products and services supports customers in their work to predict, prevent, detect and treat health conditions at critical points along the poultry production chain. Our comprehensive product offering includes Embrex® BioDevices for hatcheries, conventional Poulvac® vaccines and Poulvac Procerta® vector vaccines, and a broad portfolio of medicated feed additives serving breeder, broiler, layer and turkey production systems. Our effective, reliable products are backed by a range of services and diagnostics and an expert team of veterinary specialists who tailor solutions to help customers meet their goals.

Embrex® BioDevices

The portfolio for Embrex® BioDevices is the trusted *in ovo* vaccination brand that helps effectively immunize chicks.[1] Since 1992, the Embrex portfolio has helped hatcheries through trusted technology, services and results.



Inovoject® NXT

The Embrex® Inovoject® NXT system represents a new generation of the industry-leading Inovoject® system. The Embrex dual-needle technology in the Inovoject NXT system has demonstrated the highest injection-site accuracy when compared with a single-needle device.[1] With the right stage of embryo development and recommended transfer time, data shows this technology delivers up to 100% accurate site of injection within the embryo.[1] This precision of vaccine deposition helps initiate a better immune response,[1] resulting in newly hatched chicks with protection from disease challenges.[2]

This high-throughput biodevice, which vaccinates up to 70,000 eggs per hour, brings three patented technologies exclusive to the NXT system — egg identification, injection-site accuracy and egg handling.

Embrex Accusight™: On the control module, Embrex Accusight technology identifies nonviable eggs as part of the *in ovo* injection process. This results in more than 99% accuracy for infertile and early dead eggs — despite tray color, egg size, speed or ambient lighting — to optimize egg removal and vaccine savings.[3]

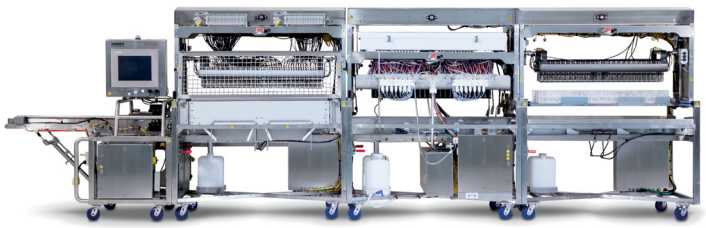
Embrex Precixion™: On the injection module, Embrex Precixion technology delivers a fast punch and allows 360-degree egg locator cup positioning designed to provide up to 100% injection-site accuracy.[4]

Haylo™ technology: On the transfer table and egg remover, Haylo technology removes and transfers eggs with patented loop-wire design, reducing cracks,[*,5] minimizing egg contact and enabling easier disinfection.

Configurations for Inovoject® NXT vary. Consult with your Zoetis representative.

Egg Remover® NXT

The Embrex® Egg Remover® NXT with Haylo technology provides egg identification independent of flat color or lighting. Wholebasket processing allows for efficient throughput. Removing clear eggs (infertile and early embryonic dead eggs) can help improve hatcher airflow and can help reduce microbial exposure to hatching chicks.[6]



Double Breast Vaccinator

The Double Breast Vaccinator is an innovative vaccine delivery solution for pullets that can deliver one or two vaccines simultaneously. It is designed to help reduce the risk of self-injection while supporting efficiency during the vaccination process.

*The reduction in egg cracking with the Inovoject® NXT system is numerically less than with the Inovoject® system, although not statistically significant.

Feed Additives

Gut health management requires balancing program requirements with science-backed, effective products to create a long-term rotation strategy for coccidiosis prevention and necrotic enteritis management.

ANTICOCCIDIAL IONOPHORE

Avatec®

The only commercially available divalent ionophore, Avatec® (*lasalocid*) employs a unique mode of action that can support rotation programs. It attacks coccidia early, before species can mature, replicate and drain performance.[7]

SYNTHETIC ANTICOCCIDIALS

Deccox®

Deccox® (*decoquinate*) is a nonantibiotic coccidiostat that can be used in rotation programs. Deccox is developed specifically for coccidiosis prevention in broilers, killing *Eimeria* species early in development — helping minimize performance losses.[8,9]

Robenz®

Robenz® (*robenidine hydrochloride*) is a powerful broad-spectrum nonantibiotic coccidiostat.[9,10] Robenz has a unique chemical structure — helping sustain value for your rotation program and minimizing the likelihood of resistance.[11]

Zoamix®

Zoamix® (*zoalene*) is a nonantibiotic coccidiostat that helps prevent and control coccidiosis. The product has characteristics of both a synthetic anticoccidial and an ionophore, as it allows immunity to develop while allowing some cycling of the parasite.[12]

BMD® 50

BMD® 50 (*bacitracin methylenedisalicylate*) aids in the prevention and control of necrotic enteritis in chickens caused or complicated by *Clostridium* spp. BMD also aids in the control of transmissible enteritis in growing turkeys. The product, which does not require a Veterinary Feed Directive, has cross-clearance approvals with several anticoccidials to help improve overall gut health. BMD also is approved for increased egg production and improved feed efficiency during the first seven months of production in layers.

BMD® Soluble

Bacitracin methylenedisalicylate oral (soluble powder) is approved in broiler and replacement chickens for prevention and control of necrotic enteritis and approved for control of transmissible enteritis in growing turkeys.

Aureomycin® 50, 90, 100 Granular and 90 Meal*

A broad-spectrum antibiotic, Aureomycin® (*chlortetracycline*) controls chronic respiratory disease and air sac infection, and it reduces mortality due to *E. coli* in chickens. In turkeys, Aureomycin controls complicating bacterial organisms associated with Bluecomb and hexamitiasis. Aureomycin may be used in laying chickens, and it also controls infectious synovitis.

Lincomix® 20 and 50*

Lincomix® (*lincomycin hydrochloride*) offers proven and consistent control of necrotic enteritis caused by *Clostridium perfringens*.

***CAUTION: Federal law restricts medicated feed containing this veterinary feed directive (VFD) drug to use by or on the order of a licensed veterinarian.**

- Do not use Deccox in laying chickens.
- Withdraw Robenz 5 days prior to slaughter. Do not feed to chickens producing eggs for human consumption.
- Do not use Zoamix in laying birds.
- Do not feed Aureomycin to turkeys or ducks producing eggs for human consumption. Withdraw 5 days prior to slaughter of broiler or replacement chickens, ducks or turkeys.
- Do not use Lincomix in feeds for layers, breeders, or turkeys. Do not allow unapproved species access to feeds containing lincomycin.

Vaccines

Mitigating and preventing poultry diseases starts with our portfolio of inactivated, modified-live and vector vaccines to help manage key bacterial and viral challenges in commercial flocks. Poulvac® vaccines protect against infectious bursal disease virus, Marek's disease, infectious bronchitis virus, Newcastle disease, *Escherichia coli* (*E. coli*) and *Salmonella*. Poulvac Procerta® single and dual vector vaccines can be paired with our Embrex® Inovoject® process to deliver fast, powerful protection to broilers and layers.

Learn more about our vaccine portfolio features:

Poulvac® Procerta® vectored portfolio

Poulvac® respiratory portfolio

Poulvac® E. coli

AVIAN ENCEPHALOMYELITIS (AE) AND FOWL POX (FP) VACCINE

AE–Poxine® modified–live freeze–dried vaccine

Composition: Avian encephalomyelitis and live fowl pox virus

Indications: Has been shown to be effective for the vaccination of healthy pullets 8 weeks of age or older (and four weeks before the start of egg production) against avian encephalomyelitis and fowl pox virus in chickens.

Method of administration: Wing web injection

Packaging: 10 x 1,000 ds

LIVE INFECTIOUS LARYNGOTRACHEITIS VACCINE

Laryngo–Vac® modified–live freeze–dried vaccine

Composition: Modified-live infectious laryngotracheitis virus

Indications: Has been shown to be effective for the vaccination of healthy chickens 4 weeks of age or older against infectious laryngotracheitis virus. If conditions dictate, birds may be vaccinated as early as 10 days of age.

Method of administration: Coarse spray, drinking water or intraocular

Packaging: 10 x 1,000 ds or 10 x 10,000 ds

INFECTIOUS BURSAL DISEASE VACCINES

Poulvac® Bursaplex® live immune complex freeze–dried vaccine

Composition: Live intermediate plus strength, Winterfield 2512 strain and specific infectious bursal disease virus antibody

Indications: Has been shown to be effective for the vaccination of healthy 1-day-old chicks or the *in ovo* vaccination of 18- to 19-day-old embryonated chicken eggs against infectious bursal disease.

Method of administration: *In ovo* injection or subcutaneous injection

Packaging: 10 x 8,000 ds

Bursine®–2 modified–live freeze–dried vaccine

Composition: Modified-live infectious bursal disease virus, Bursine-2 strain

Indications: Has been shown to be effective for the vaccination of healthy chickens 7 days of age or older against infectious bursal disease.

Method of administration: Drinking water

Packaging: 10 x 10,000 ds

Bursine® Plus modified–live freeze–dried vaccine

Composition: Live infectious bursal disease virus

Indications: Has been shown to be effective for the vaccination of healthy chickens 7 days of age or older against infectious bursal disease.

Method of administration: Drinking water

Packaging: 10 x 5,000 ds

LIVE MAREK'S DISEASE VACCINES

MD–Vac® CFL modified–live freeze–dried vaccine

Composition: Live Marek's disease virus, serotype 3

Indications: Has been shown to be effective for the vaccination of healthy 1-day-old chicks against Marek's disease, serotype 3.

Method of administration: Subcutaneous injection

Packaging: 10 x 1,000 ds

Poulvac® Ovoline® CVI modified–live frozen vaccine

Composition: Marek's disease vaccine, serotype 1 (Rispens CVI), live virus, frozen

Indications: Has been shown to be effective for the vaccination of healthy 1-day-old chicks or the *in ovo* vaccination of 18- to 19-day-old embryonated chicken eggs against very virulent Marek's disease.

Method of administration: *In ovo* injection or subcutaneous injection

Packaging: 5 x 2,000 ds

Poulvac® Marek CVI + HVT modified–live frozen vaccine

Composition: Live Marek's disease virus, serotypes 1 and 3

Indications: Has been shown to be effective for the vaccination of healthy 1-day-old chicks or the *in ovo* vaccination of 18- to 19-day-old embryonated chicken eggs against Marek's disease, serotypes 1 and 3.

Method of administration: *In ovo* injection or subcutaneous injection

Packaging: 5 x 2,000 ds

VECTORED MAREK'S DISEASE VACCINE

Poulvac® Procerta® HVT–ND modified–live vectored frozen vaccine

Composition: This vaccine is a frozen, cell-associated, live virus vaccine that contains the recombinant serotype 3 turkey herpesvirus with the F gene from Newcastle disease virus.

Indications: Has been shown to be effective for the vaccination of healthy 1-day-old chicks or the *in ovo* vaccination of 18- to 19-day-old embryonated chicken eggs against Marek's disease and Newcastle disease.

Method of administration: *In ovo* injection or subcutaneous injection

Packaging: 5 x 4,000 ds

Poulvac® Procerta® HVT–IBD modified–live vectored frozen vaccine

Composition: This vaccine is a frozen, cell-associated, live virus vaccine that contains the recombinant serotype 3 turkey herpesvirus with the VP2 gene from infectious bursal disease virus.

Indications: Has been shown to be effective for the vaccination of healthy 1-day-old chicks or the *in ovo* vaccination of 18- to 19-day-old embryonated chicken eggs against Marek's disease and infectious bursal disease.

Method of administration: *In ovo* injection or subcutaneous injection

Packaging: 5 x 2,000 ds or 5 x 4,000 ds

Poulvac® Procerta® HVT–IBD–ND modified–live vectored frozen vaccine

Composition: This vaccine is a frozen, cell-associated, live virus that contains the recombinant serotype 3 turkey herpesvirus with the VP2 gene from infectious bursal disease virus and the F gene from Newcastle disease virus.

Indications: Has been shown to be effective for the vaccination of healthy 1-day-old chickens or the *in ovo* vaccination of 18- to 19-day-old embryonated chicken eggs against Marek's disease, infectious bursal disease and Newcastle disease.

Method of administration: *In ovo* injection or subcutaneous injection

Packaging: 5 x 2,000 ds or 5 x 4,000 ds

LIVE INFECTIOUS BRONCHITIS VACCINES

Poulvac® Bron GA08 modified–live frozen vaccine

Composition: Live virus containing a modified strain of Georgia 08 infectious bronchitis

Indications: Has been shown to be effective for the vaccination of healthy chickens 1 day of age or older against infectious bronchitis caused by the Georgia 08 strain.

Method of administration: Coarse spray

Packaging: 5 x 10,000 ds or 5 x 20,000 ds

Poulvac® Bron GA98 modified–live freeze–dried vaccine

Composition: Live virus vaccine containing a modified strain of Georgia 98 infectious bronchitis

Indications: Has been shown to be effective for the vaccination of healthy chickens 1 day of age or older against infectious bronchitis caused by the Georgia 98 strain.

Method of administration: Coarse spray

Packaging: 10 x 10,000 ds

Poulvac® IB Ark modified–live freeze–dried vaccine

Composition: Live infectious bronchitis virus, Arkansas serotype

Indications: Has been shown to be effective for the vaccination of healthy chickens 1 day of age or older against infectious bronchitis caused by the Arkansas serotype.

Method of administration: Drinking water

Packaging: 10 x 10,000 ds

Poulvac® IB Mass modified–live freeze–dried vaccine

Composition: Live infectious bronchitis virus, Massachusetts serotype

Indications: Has been shown to be effective for the vaccination of healthy chickens 2 weeks of age or older against infectious bronchitis caused by the Massachusetts serotype.

Method of administration: Coarse spray or drinking water

Packaging: 10 x 10,000 ds

Poulvac® IBMM + Ark modified–live freeze–dried vaccine

Composition: Live virus vaccine containing Massachusetts and Arkansas strains of infectious bronchitis

Indications: Has been shown to be effective for the vaccination of healthy chickens 1 day of age or older against infectious bronchitis, Massachusetts and Arkansas serotypes.

Method of administration: Drinking water

Packaging: 10 x 10,000 ds

LIVE NEWCASTLE DISEASE VACCINES

Newcastle LaSota modified–live freeze–dried vaccine

Composition: Newcastle disease vaccine, B1 type, LaSota strain, live virus

Indications: Has been shown to be effective for the vaccination of healthy chickens 2 weeks of age or older against Newcastle disease, LaSota strain.

Method of administration: Drinking water or coarse spray

Packaging: 10 x 5,000 ds

COMBINATION LIVE NEWCASTLE DISEASE AND INFECTIOUS BRONCHITIS VACCINES

Newcastle Disease B_1 & Bronchitis Conn Mass modified–live freeze–dried vaccine

Composition: Live Newcastle disease virus, B1 type, B1 strain, live infectious bronchitis virus, Massachusetts and Connecticut serotypes

Indications: Has been shown to be effective for the vaccination of healthy chickens 2 weeks of age or older against Newcastle disease and infectious bronchitis, Massachusetts and Connecticut serotypes.

Method of administration: Drinking water or coarse spray

Packaging: 10 x 10,000 ds

LaSota Mass II™ modified–live freeze–dried vaccine

Composition: Live Newcastle disease virus, B1 type, LaSota strain and live infectious bronchitis virus, Massachusetts serotype

Indications: Has been shown to be effective for the vaccination of healthy chickens 2 weeks of age or older against Newcastle disease and infectious bronchitis, Massachusetts serotype.

Method of administration: Drinking water

Packaging: 10 x 10,000 ds

Poulvac Aero® modified–live freeze–dried vaccine

Composition: Modified-live Newcastle disease virus, B1 type, B1 strain, modified-live infectious bronchitis virus, Holland strain Massachusetts serotype

Indications: Has been shown to be effective for the vaccination of healthy chickens 1 day of age or older against Newcastle disease and infectious bronchitis, Massachusetts serotype.

Method of administration: Coarse spray

Packaging: 10 x 10,000 ds

LIVE TENOSYNOVITIS (VIRAL ARTHRITIS, VA) VACCINE

V.A. ChickVac™ modified–live freeze–dried vaccine

Composition: Modified-live avian reovirus, 1133 strain

Indications: Has been shown to be effective for the vaccination of healthy chickens 1 to 10 days of age against viral arthritis (tenosynovitis) caused by avian reovirus.

Method of administration: Subcutaneous injection

Packaging: 10 x 1,000 ds

LIVE BACTERIAL VACCINES

Poulvac® Cholera PM–1 modified–live freeze–dried vaccine

Composition: Contains known avirulent isolate of *Pasteurella multocida* (PM-1)

Indications: Has been shown to be effective for the vaccination of healthy chickens 10 to 12 weeks of age against *P. multocida* Type 1.

Method of administration: Wing web

Packaging: 10 x 1,000 ds

Poulvac® E. coli modified–live freeze–dried vaccine

Composition: *Escherichia coli* vaccine, live culture

Indications: Has been shown to be effective for the vaccination of healthy chickens 1 day of age or older and turkeys at 3 days of age against *E. coli* bacteria.

Method of administration: Coarse spray or drinking water

Packaging: 10 x 5,000 ds or 10 x 20,000 ds

Poulvac® Myco F modified–live freeze–dried vaccine

Composition: Contains the F strain of *Mycoplasma gallisepticum*

Indications: Has been shown to be effective for the vaccination of healthy chickens 9 weeks of age or older against *M. gallisepticum* bacteria.

Method of administration: Coarse spray or intraocular

Packaging: 10 x 1,000 ds or 10 x 5,000 ds

Poulvac® ST modified–live freeze–dried vaccine

Composition: Modified-live *Salmonella* typhimurium

Indications: Has been shown to be effective for the vaccination of healthy chickens 1 day of age or older against *S.* enteritidis, *S.* heidelberg and *S.* typhimurium bacteria.

Method of administration: Coarse spray or drinking water

Packaging: 10 x 5,000 ds, 10 x 10,000 ds or 10 x 20,000 ds

INACTIVATED VACCINES AND BACTERINS
10 BOTTLES PER CASE

MG–Bac® inactivated oil emulsion vaccine

Composition: Inactivated *Mycoplasma gallisepticum*

Indications: Has been shown to be effective for the vaccination of healthy chickens 1 week of age or older against *M. gallisepticum*.

Method of administration: Subcutaneous injection or intramuscular injection

Packaging: 1 x 1,000 ds

Poulvac® Coryza ABC IC_3 inactivated oil emulsion vaccine

Composition: Inactivated *Avibacterium paragallinarum*, serovars A, B and C

Indications: Has been shown to be effective for the vaccination of healthy chickens 8 weeks of age or older against infectious coryza (*A. paragallinarum*) caused by serovars A, B and C.

Method of administration: Subcutaneous injection or intramuscular injection

Packaging: 1 x 1,000 ds

Poulvac® iN + B

Composition: Inactivated Newcastle disease virus, LaSota strain, inactivated infectious bronchitis virus, Massachusetts serotype

Indications: Aids in the prevention of the signs and lesions associated with Newcastle disease and infectious bronchitis.

Method of administration: Subcutaneous injection

Packaging: 1 x 1,000 ds

Poulvac Maternavac® IBD–Reo inactivated oil emulsion vaccine

Composition: Contains killed infectious bursal disease virus (Variant Group-6 and Lukert strains), killed reovirus (Tenosynovitis strain 1733 and Malabsorption strain 2408)

Indications: Has been shown to be effective for the vaccination of healthy chickens 16 to 22 weeks of age against infectious bursal disease and reovirus disease.

Method of administration: Intramuscular injection or subcutaneous injection

Packaging: 1 x 1,000 ds

Poulvac Maternavac® 4 inactivated oil emulsion vaccine

Composition: Contains killed infectious bursal disease virus (Variant Group-6 and Lukert strains), killed reovirus (Tenosynovitis Strain 1733 and Malabsorption Strain 2408), killed infectious bronchitis virus (Massachusetts strain), killed ND virus (Kimber strain)

Indications: Has been shown to be effective for the vaccination of healthy chickens 16 to 22 weeks of age against infectious bursal disease; Newcastle disease; reovirus; and infectious bronchitis, Massachusetts strain.

Method of administration: Intramuscular injection or subcutaneous injection

Packaging: 1 x 1,000 ds

Poulvac® SE inactivated oil emulsion vaccine

Composition: Inactivated *Salmonella* enteritidis, phage types 4, 8 and 13a

Indications: Has been shown to be effective for the vaccination of healthy chickens 12 weeks of age or older against *S.* enteritidis bacteria.

Method of administration: Subcutaneous injection

Packaging: 1 x 1,000 ds

Poulvac® SE–ND–IB inactivated oil emulsion vaccine

Composition: Inactivated *Salmonella* enteritidis phage types 4, 8 and 13a; inactivated Newcastle disease virus, LaSota strain; inactivated infectious bronchitis virus, Massachusetts serotype, M-41 strain

Indications: Has been shown to be effective for the vaccination of healthy chickens 12 weeks of age against *S.* enteritidis bacteria, Newcastle disease and infectious bronchitis.

Method of administration: Subcutaneous injection

Packaging: 1 x 1,000 ds

Diagnostic Kits for ProFLOK®

Zoetis offers ELISA (enzyme-linked-immunosorbent assay) test kits, insightful technical support and upgraded software for ProFILE®.

Kit	Chicken	Turkey
ProFLOK AE Ab	✓	
ProFLOK BA-T Ab		✓
ProFLOK HEV-T Ab		✓
ProFLOK LT Ab	✓	
Flu DETECT Avian	✓	✓
ProFLOK® NDV T Ab		✓
ProFLOK® NDV Ab	✓	
ProFLOK® REO Ab	✓	
ProFLOK® IBV Ab	✓	
ProFLOK® MS Ab	✓	
ProFLOK® MS T Ab		✓
ProFLOK® MG Ab	✓	
ProFLOK® MG T Ab		✓
ProFLOK® MG-MS Ab	✓	✓
ProFLOK® IBD Ab	✓	
ProFLOK® IBD Plus Ab	✓	
ProFLOK® AIV Ab	✓	✓
ProFLOK® MM Ab		✓

In addition to kits, Zoetis offers diagnostic laboratory services for infectious bursal disease and Marek's disease, along with environmental surveys of hatchery and bacterial surveys from growout farms.

[1] Avakian AP, Wakenell PS, Bryan T, Schaeffer JL, Williams CJ, Whitfill C. In ovo administration of Marek's disease vaccine: Importance of vaccine deposition site in the fertile egg, in *Proceedings*. 51st Western Poultry Disease Conference 2002;119-121. Avakian, APS, et al. WPDC, 2002 (v1.0).

[2] Barbosa T, Williams C, Villalobos T. Efficacy and Marek's disease protection comparison between different vaccination methods, in *Proceedings*. 18th Congress World Veterinary Poultry Association 2013;217. (v1.0).

[3] Data on file, Study Report No. 1-20-70R7D (v1.0), Zoetis Inc.

[4] Data on file, Study Report Nos. 02-18-70R7D PS-5802CDI SR, 02-18-70R7D PS-5802B SR, 02-18-70R7D PS-5802C SR, 02-18-70R7D PS-5802CD SR, 02-18-70R7D PS-5802D SR and 02-18-70R7D PS-5802I (v1.0) SR, Zoetis Inc.

[5] Data on file, Study Report No. 01-19-70R7D (v1.0), Zoetis Inc.

[6] Williams CJ, Radford AT, Shepherd LE, Richardson DR. The Effects of Automated Clear Egg Removal Prior to Transfer and In Ovo Vaccination. Technical Review, July 2002.

[7] Felici M, Tugnoli B, Piva A, Grilli E. In Vitro Assessment of Anticoccidials: Methods and Molecules. *Animals*. 2021;11:1-19.

[8] McDougald LR. Chemotherapy of coccidiosis. In: Long PL, ed. *The Biology of the Coccidia*. Baltimore: University Park Press, 1982;373-427 (v1.0).

[9] McDougald LR, Roberson EL. Antiprotozoan drugs. In: Booth NH, McDonald LE, eds. *Veterinary Pharmacology and Therapeutics*. Ames, Iowa: Iowa State Press, 1988;950-968 (v1.0).

[10] Chapman HD. Use of Anticoccidial Drugs in Broiler Chickens in the USA: Analysis for the Years 1995 to 1999. *Poult Sci*. 2001;80(5):572-580. Chapman, HD., *Poult Sci*, 2001 (v1.0).

[11] McLoughlin DK, Chute MB. Robenidine Resistance in Eimeria Tenella. *J Parasitol*. 1978;64(5):874-877. McLoughlin, DK, et al., *J Parasitol*, 1978. (v1.0).

[12] Reid WM, Womack HE, Johnson J. Coccidiosis Susceptibility in Layer Flock Replacement Programs. *Poult Sci*. 1968;47(3):892-899.

zoetis