Cevac IBird®

CEVAC IBIRD®: INFECTIOUS BRONCHITIS UNDER CONTROL FROM THE HATCHERY.

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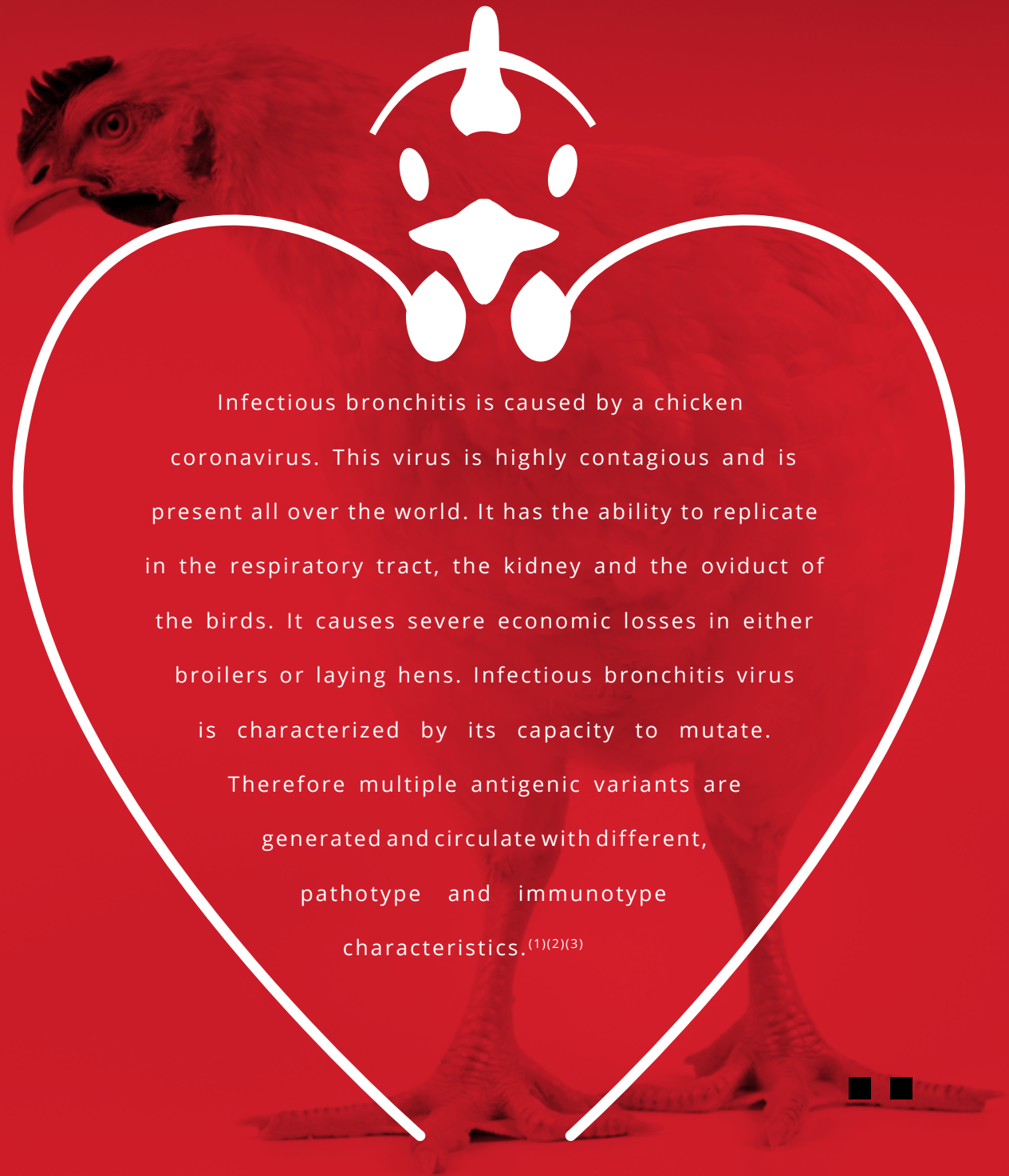
IBird®

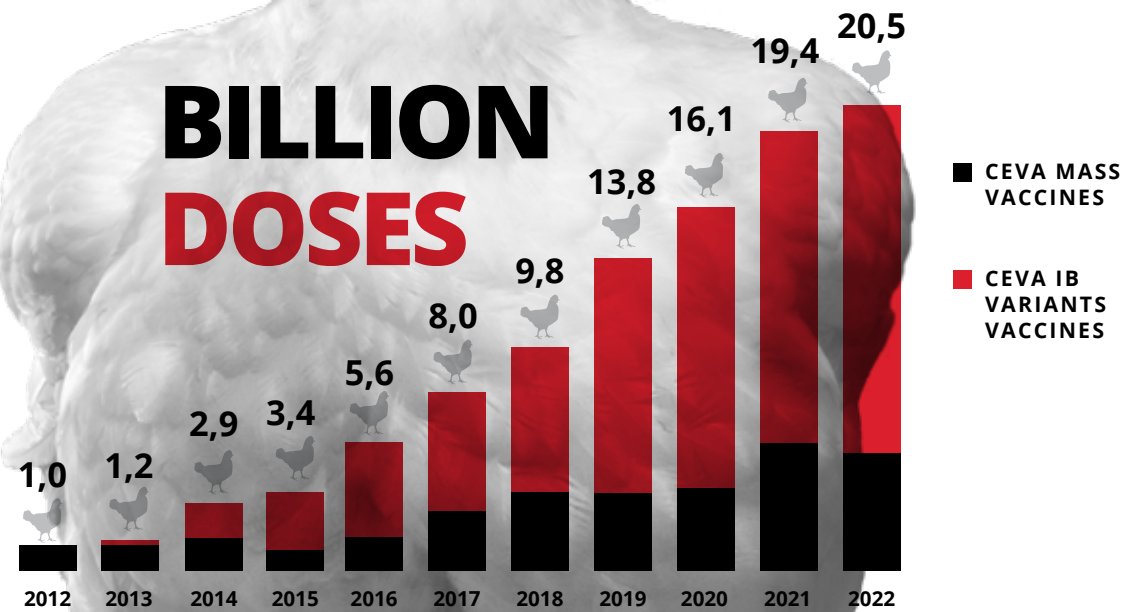


Infectious bronchitis is caused by a chicken coronavirus. This virus is highly contagious and is present all over the world. It has the ability to replicate in the respiratory tract, the kidney and the oviduct of the birds. It causes severe economic losses in either broilers or laying hens. Infectious bronchitis virus is characterized by its capacity to mutate. Therefore multiple antigenic variants are generated and circulate with different, pathotype and immunotype characteristics.[1][2][3]

Cevac IBird®

CEVA GLOBAL REFERENCE IN INFECTIOUS BRONCHITIS CONTROL

BILLION DOSES



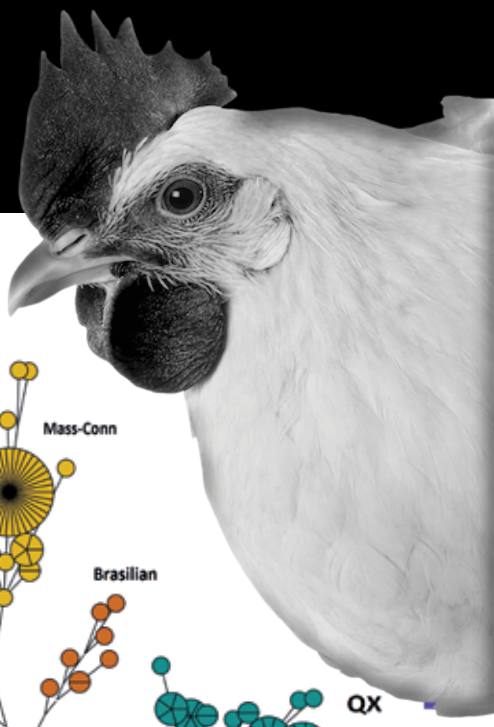
Cevac IBird®

THE VACCINE

Cevac IBird® is a vaccine which contains the attenuated 1/96 IBV strain, classified within the 793B genetic group. Applied together with a live Mass-type vaccine, Cevac IBird® provides a strong protection against Mass, 793B, QX, Q1, variant-2 (IS/1494), Italy-02, IS/885, D1456, Tunisian, Taiwanese and Malaysian IBV strains, including a reduction of the field virus shedding.

Through numerous laboratory and field trials, the safety and the efficacy of these vaccines, in combination with a Mass type live vaccine were demonstrated. Proper spray application protocols using Desvac® In Line Spray, and well defined post-vaccination monitoring procedures, help to achieve a high vaccination rate and a proper quality of application.

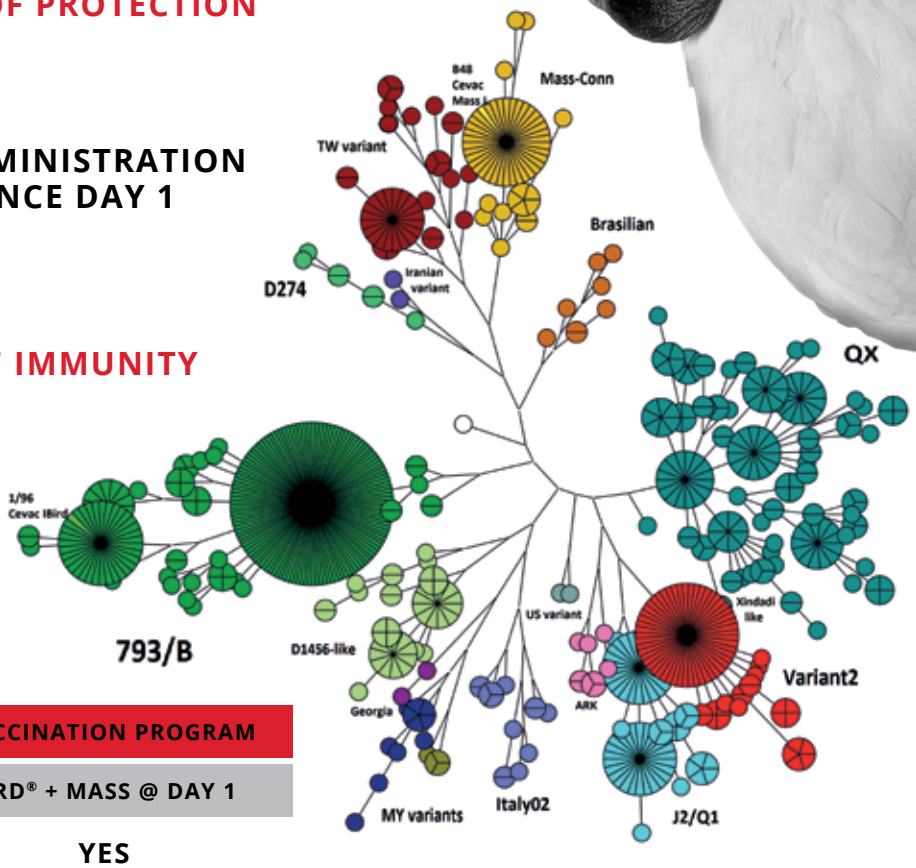
Cevac IBird®



BROAD SPECTRUM OF PROTECTION

HOMOGENEOUS ADMINISTRATION FOR PROTECTION SINCE DAY 1

LONG DURATION OF IMMUNITY



CHALLENGE STRAIN	VACCINATION PROGRAM
	IBIRD® + MASS @ DAY 1
793B	YES
MASS	YES
QX	YES
Q1 / J2	YES
ITALIAN 02	YES
EGYPTIAN VARIANT	YES
VARIANT 2	YES
MALAYSIAN VARIANT	YES
TUNISIAN VARIANT	YES
TAIWANESE VARIANT	YES

Ceva demonstrated that Cevac IBird® + Mass vaccine were fully compatible & safe when mixed for spray application in the hatchery, and provided protection against several challenge strains listed above.

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CEVAC IBIRD® REDUCES THE CHALLENGE VIRUS SHEDDING OF VACCINATED BIRDS AFTER FIELD IBV CHALLENGE

VACCINATION	CHALLENGE STRAIN	IBV RNA LOAD REDUCTION
CEVAC IBIRD® + MASS VACCINE	QX	4.8 log_{10}
	VARIANT-2	3.9 log_{10}
	D1456 MIDDLE-EAST	3.1 log_{10}
	J2/Q1	4.1 log_{10}
	GA08	3.8 log_{10}
	ARK	4.6 log_{10}
	TUNISIAN	3.9 log_{10}
	MALAYSIAN	4.6 log_{10}

*The treated group birds received of the vaccines (CEVAC IBird® + Massachetts) at day-old, challenged at 3 weeks of age, and evaluated 5 days pós-challenge.
The control group was not vaccinated, challenged at 3 weeks of age, and evaluated 5 days pós-challenge.
The reduction was calculated based on the difference between the control and treated group.

THE REDUCTION

OBTAINED WAS BETWEEN 3,1 TO 4,8 LOG10, WHAT MEANS A REDUCTION OF 1.200 TO 60.000-FOLD REDUCTION OF VIRUS SHEDDING

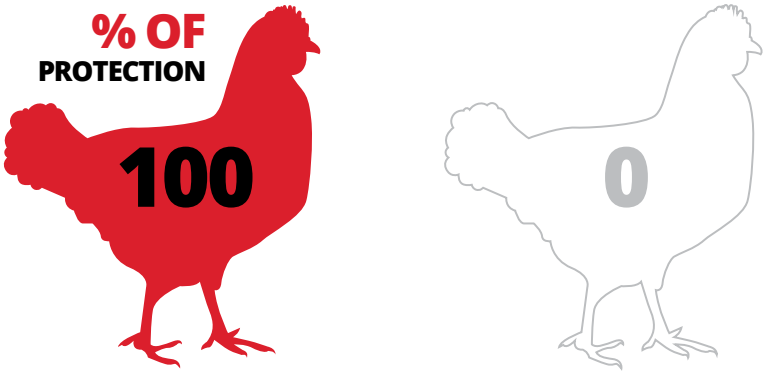
Cevac IBird®

LONG DURATION OF IMMUNITY

Cevac IBird® + Cevac® Mass L

ASSOCIATION OF CEVAC IBIRD® + MASS VACCINE IN THE HATCHERY CAN PROTECT FOR 9 WEEKS.

PROTECTION OF CILIARY ACTIVITY



CEVAC IBIRD® + MASS STRAIN

CONTROL

Copy number/ml*	
negative	1.16 x 10^8

ANIMALS: COMMERCIAL BROILERS WITH MDA^{IBV}

VACCINATION: ONE-DAY-OLD BROILERS (D0) WERE VACCINATED WITH CEVAC IBIRD® AND CEVAC MASS L BY SPRAY.

CHALLENGE: ON D63, CHALLENGED WITH IB 793B (5 LOG_{10} EID_{50} PER BIRD BY EYE-DROP)

ASSESSMENT CRITERIA: : CILIARY ACTIVITY OF TRACHEAL EXPLANTS ON THE 5^{TH} DAY AFTER CHALLENGE (D68) AND QUANTIFICATION OF THE CHALLENGE VIRUS.

Source: Duration of Immunity following combined administration of Cevac IBird and Cevac Mass L in Broilers. Study summary (DV-093-2015), 2015

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Cevac IBird®

DESVAC®

SPECIFIC EQUIPMENT HAVE BEEN SET TO APPLY CEVAC IBIRD® AT THE HATCHERY.

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