

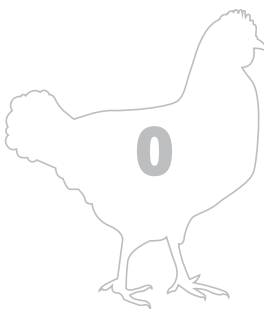
Cevac
IBird®
+ Cevac® Mass L

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 BIRDS
WITH MDA^{IBV}

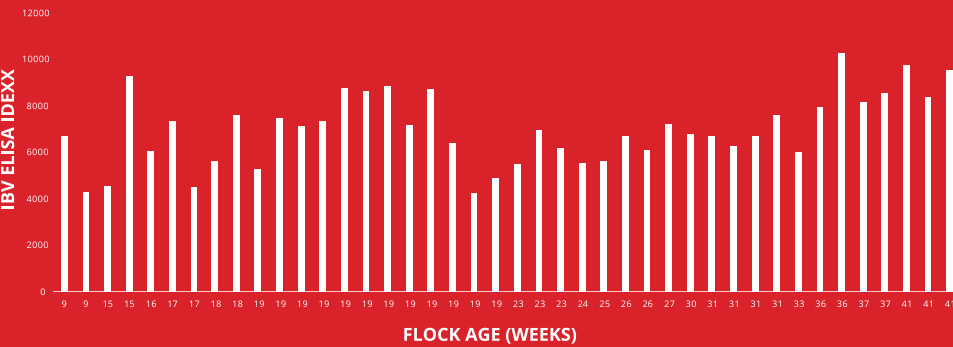
VACCINATION: ONE-DAY-OLD
BIRDS (D0) WERE VACCINATED
WITH CEVAC IBIRD® AND CEVAC
MASS L BY SPRAY.

CHALLENGE: ON D63, CHAL-
LENGED WITH IB 793B (5 LOG₁₀
EID₅₀ PER BIRD BY EYE-DROP)

ASSESSMENT CRITERIA: : CILIARY
ACTIVITY OF TRACHEAL EXPLANTS
ON THE 5TH 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 Birds. Study summary (DV-093-2015), 2015

SEROLOGY - IB TITERS



IB SEROLOGY OF
LAYER FLOCKS
MONITORED
BY IBV ELISA
IDXX AFTER
VACCINATION
FROM THE
HATCHERY (DAY
1), AND EACH 9
WEEKS.

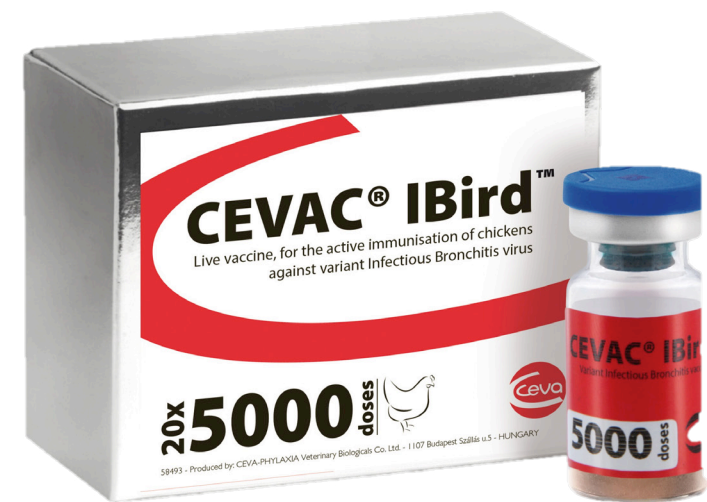
EARLY &
BROAD
PROTECTION

9 WEEKS
DURATION
OF IMMUNITY

REDUCTION
ON THE CIRCULATION
OF FIELD VIRUS



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



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.



BROAD SPECTRUM OF PROTECTION

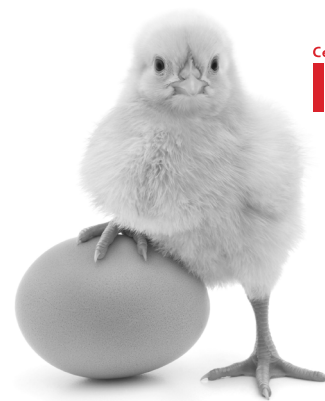


HOMOGENEOUS ADMINISTRATION FOR PROTECTION SINCE DAY 1



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



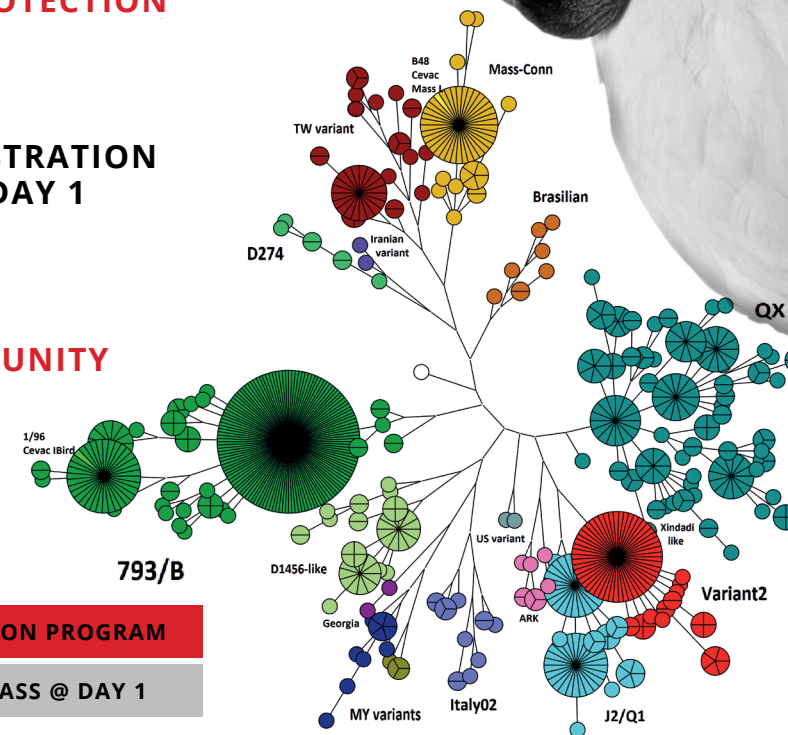
Cevac
IBird®

+



9 weeks of protection

HIGHER FLEXIBILITY
IN THE VACCINATION PROGRAM SET-UP



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.

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

