



# THE NEXT GENERATION OF IMMUNITY

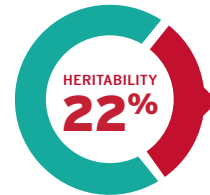
## THE WORLD'S BEST HEALTH INDEX

Starting with August 2022 proofs

**IMMUNITY AND CALF IMMUNITY INDEX**  
will be published on all Semex sires and Elevate® tested females

High immune genomic females have **33%**  
**LESS DISEASE**

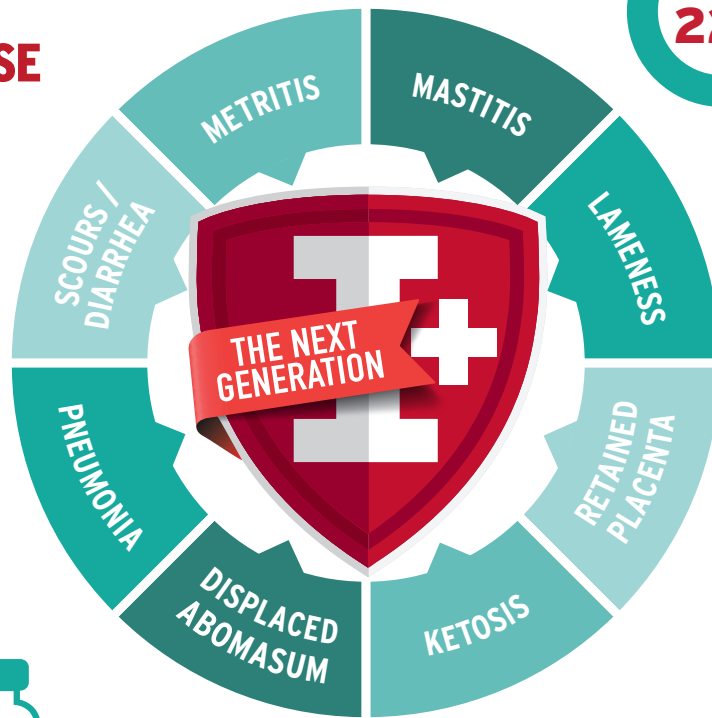
### HIGHLY HERITABLE



- Production Traits 25-35%
- Conformation Traits 15-40%
- Immune Response 30%**
- Immunity Index 22%**
- Longevity 8-10%
- Daughter Fertility 4-7%
- Disease Incidence 2-10%

Using the next generation Immunity+® sires can lead to **REDUCTION IN DISEASE**

- Daughter of Immunity+® Bull **29% LESS DISEASE\***
- High Immune Genomic Female **33% LESS DISEASE\***



**NITRIC OXIDE** production is included in the Immunity Index

Cows with insufficient Nitric Oxide have **46%** more cases of Mastitis

**BETTER VACCINE RESPONSE**

High immune cows respond better to commercial vaccines

Immunity+ Daughters Have **HIGHER QUALITY COLOSTRUM**

Through first 6 weeks of lactation High immune cows have significantly more total immunoglobulin and betalactoglobulin in colostrum

Fleming et al 2014.

**ECONOMIC IMPACT**

- +\$147 USD\*** Daughter benefit for Immunity+ bull or \$23 USD\* per point of Immunity Index
- +\$33 USD\*** per point of Immunity Index for genomic tested female



\*compared to herdmates