

A close-up, high-contrast photograph of a cow's eye, showing the eyelashes and the texture of the fur. The eye is partially visible on the left side of the frame.

geno

GENO AND NORWEGIAN RED

Unique system for profitable dairy and
beef production globally

Breeding for better **lives**

GENO

BREEDING FOR BETTER LIVES



Geno Since 1935 – unique program

10.000 members

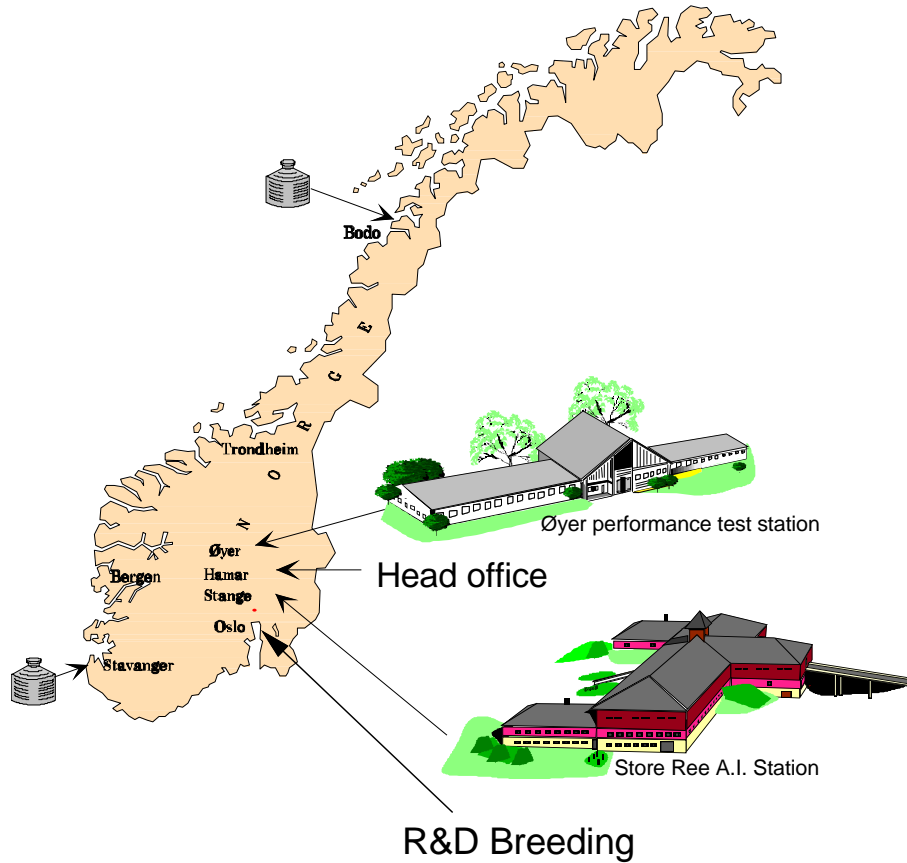
- 210.000 NRF cows in the nucleus
- High attention on R & D, Innovation, 13 PhD and 23 with Master.
- 240 employees.
- Strong financial position

•Norwegian Red internationally:

- Equal production to Holstein
- Superior Fertility & Health
- Superior Calving traits
- Strong Feet and Legs



GENO'S FACILITIES



35 % OF THE COWS ON ROBOTICS



USE OF ANTIBIOTICS TO FARM-ANIMALS IN EUROPE

- Important regarding the increased challenge with resistance and
- Breeding for improved health is one important reason why Nor

Stor skillnad i antibiotikaanvändning

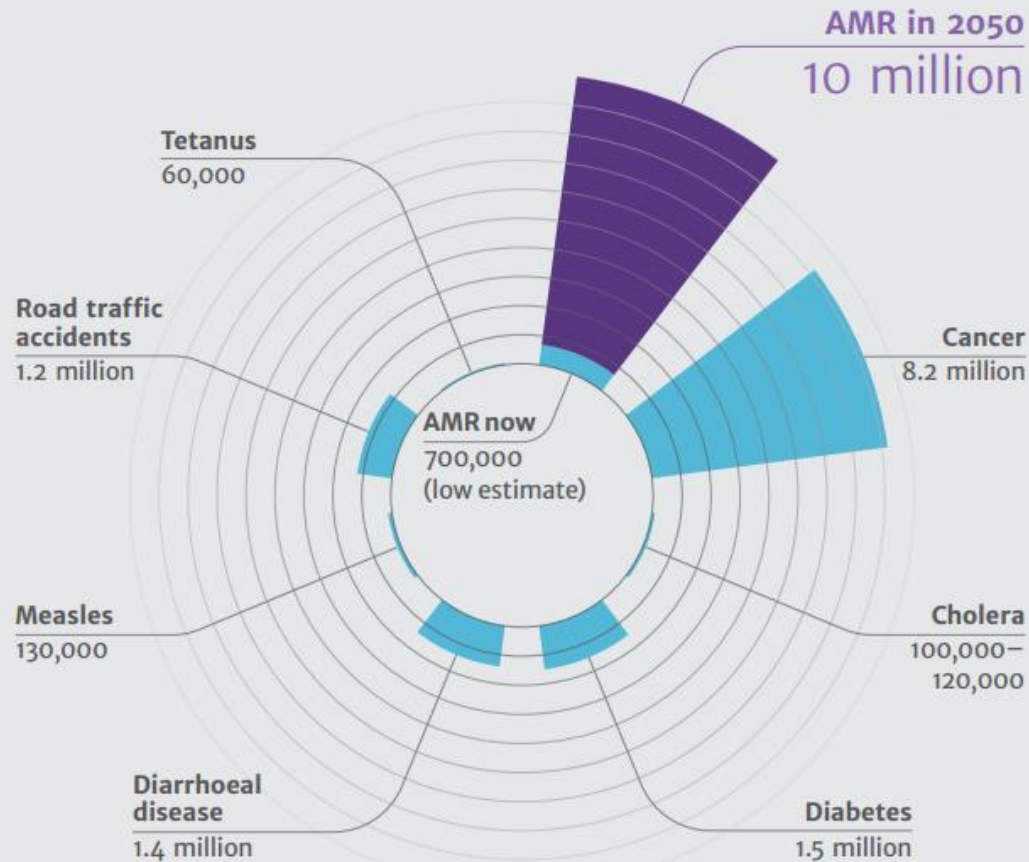
Försäljning av antibiotika till livsmedelsproducerande djur i 25 europeiska länder, räknat som milligram per kilo skattad levandevikt. (Avrundat till heltal)

Källa: EMA

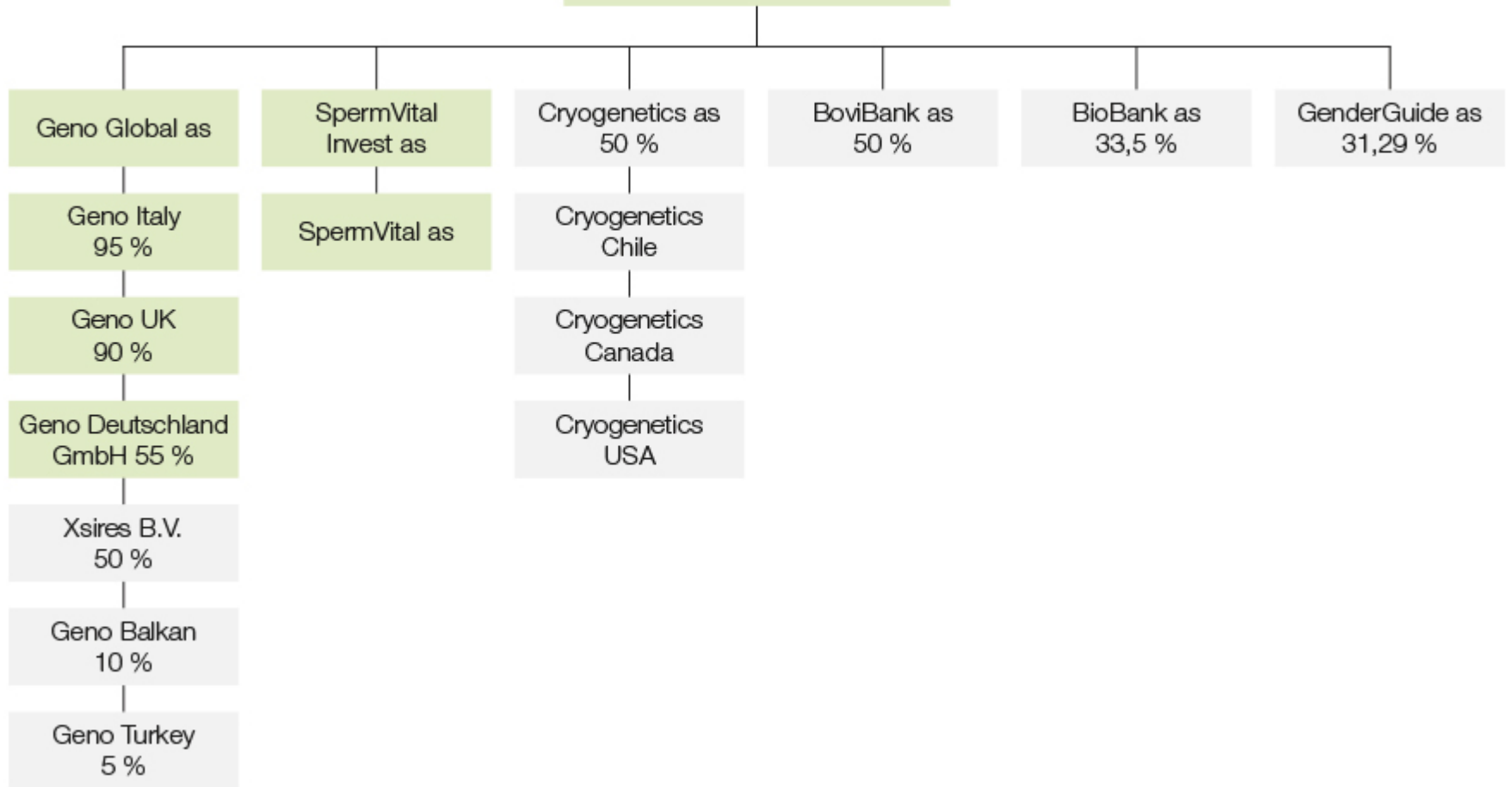


ANTIBIOTIC RESISTANCE IN 2050 ?

Deaths attributable to AMR every year compared to other major causes of death



Geno SA





**New revolutionary technology
– prolongs the lifespan of semen**



SPERMVITAL – INCREASING POSSIBILITIES

The idea behind the SpermVital technology is to extend the life of spermatozoa after insemination. To achieve this, sperm cells are immobilized in a natural substance before cryopreservation. This immobilization preserves energy and enables a controlled release of sperm cells in the uterus after insemination over an extended period of time. This makes timing of insemination less critical with regards to ovulation in the female, and increases the odds of fertilization success.

New revolutionary technology – prolongs the lifespan of semen

ADVANTAGES

THE TECHNOLOGY





Preserving Aquatic Genes

AQUACULTURE



Aquaculture is an important source of food for the world's growing population. Cryogenetics develops products and services for safe and efficient fish reproduction. We secure your genetic value, biosecurity and saves cost.

[READ MORE](#)

CONSERVATION



Genetic back-up of endangered fish species is a valuable contribution to conservation programs and nature management. Cryogenetics offers tools to optimize the reproduction potential for each species of concern.

[READ MORE](#)

ZEBRAFISH



Zebrafish is an important model organism for biomedical research. Secure and cost-efficient back up for invaluable lines is important. Cryogenetics offers client-specific services with the highest level of biosecurity.

[READ MORE](#)

Sign up for our newsletter

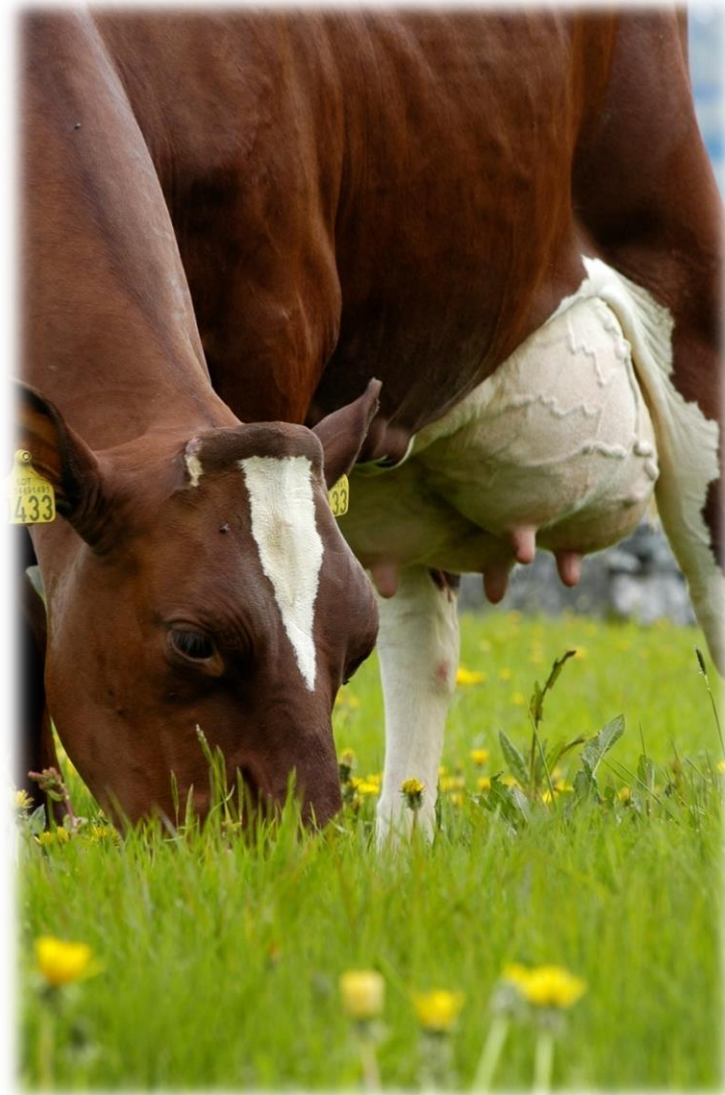
NORWEGIAN RED – UNIQUE BREEDING PROGRAM



AVERAGE PHENOTYPIC RESULTS NORWAY 2014

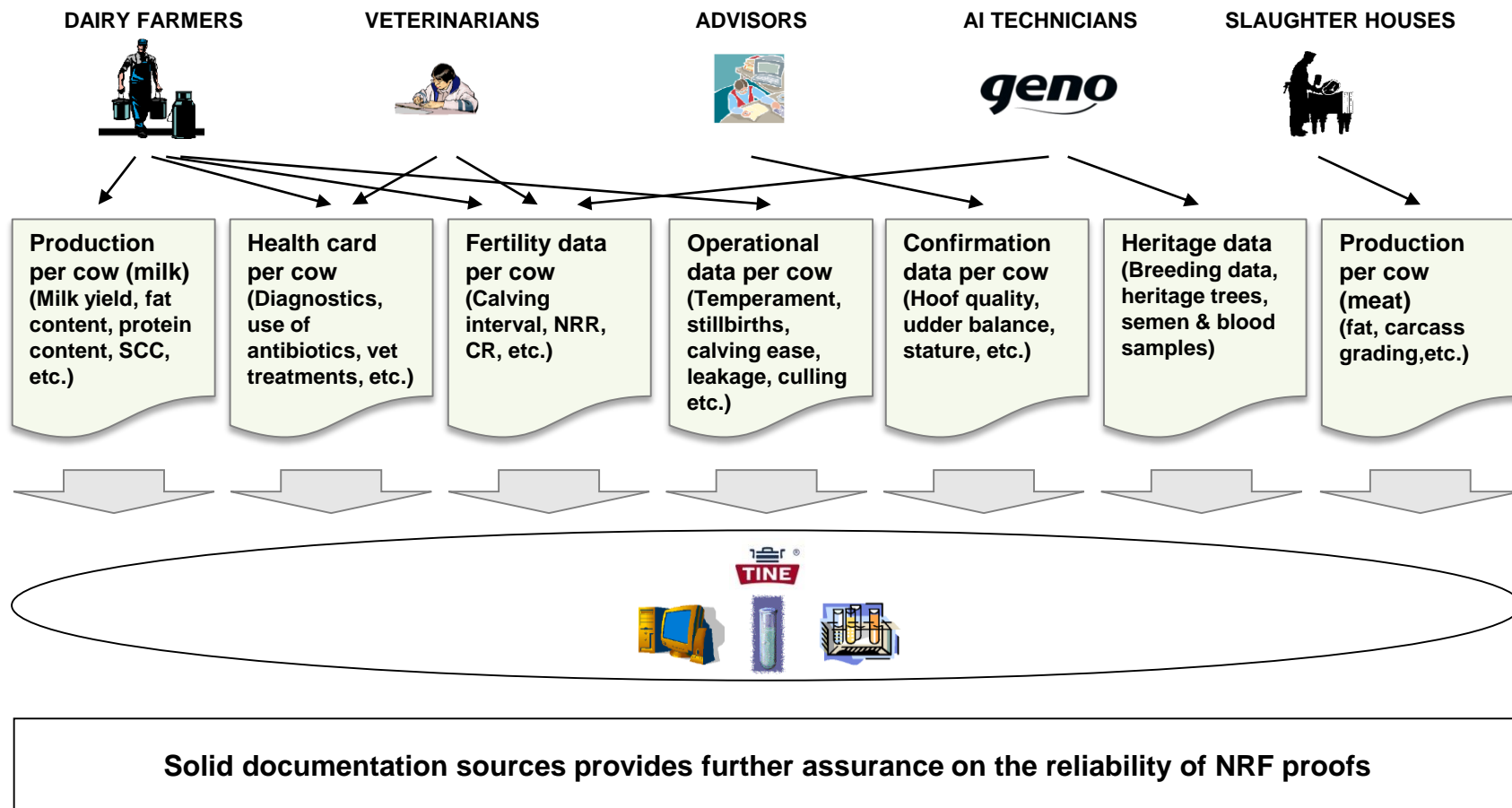
ALL COWS IN NORWAY.

- Milk yield 8.000 kgs
- 4,2 % fat and 3,4 % prot
- SCC 127.500
- 72,5 % NRR 60 days
- 1,6 doses per pregnancy
- CI 373 days
- 2,7% stillborn calves
- 60 % of the calves born polled.
- Age at 1st calving 25,7 months



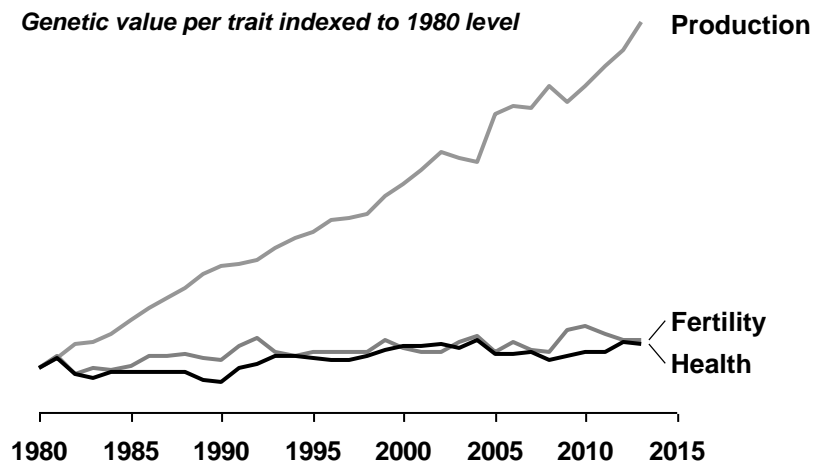
COMPLETE PHENOTYPE DATA DOCUMENTED THROUGH THE NORWEGIAN MILK RECORDING SYSTEM OVER THE LAST 50 YEARS

The Norwegian Dairy Herd Recording System in operations since the 1960s

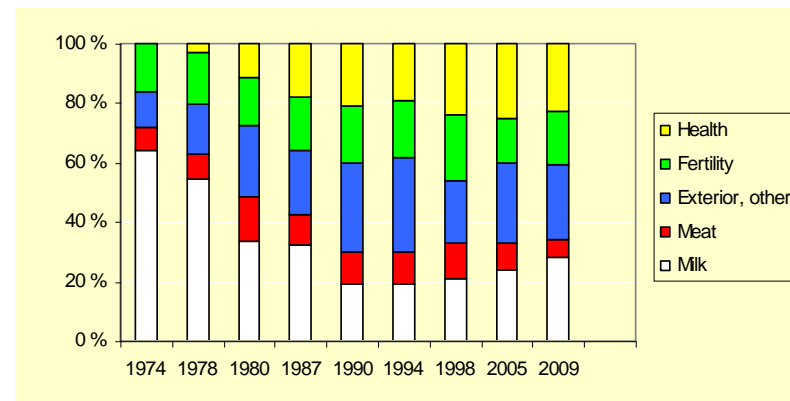


A BALANCED BREEDING GOAL OVER TIME HAS ENSURED A BREED WITH EXCELLENT FERTILITY, HEALTH AND PRODUCTION TRAITS

Development of key traits



Breeding goal



The road to success for Norwegian Red

- **Geno has overcome the negative correlation between production traits and fertility/health traits by keeping a balanced breeding goal over the last 30 years**
- **The result is excellent production performance in combination with the world's best performance on fertility and health traits**

Average results from Norway 2013

- Yield: 7.435 kgs
- Fat content: 4,3 %
- Protein content 3,4%
- NRR 60 days: 71,2 % (heifers)
- Doses per pregnancy: 1,6
- Calving Interval: 375d
- Polled: 40%
- Age at 1st calving: 26,1 months

GENO BREEDING PROGRAM – NORWEGIAN RED

Milk rec

- Unique recording system.
- 97 % of cows, 240.000.
- All health card
- One system only

Elite matings

- Top 10.000 cows
- Computer mating plan – Elite Sires

Bull calves

- 3.700 born
- Top 300 bought by Geno

Performance test

- Tested from 5 – 11 month of age.
- Based on daily gain, pedigrees, GS, type and semen quality, select top 125

Progeny test

- 125 bulls tested annually
- Each 250 daughters when launching the index.

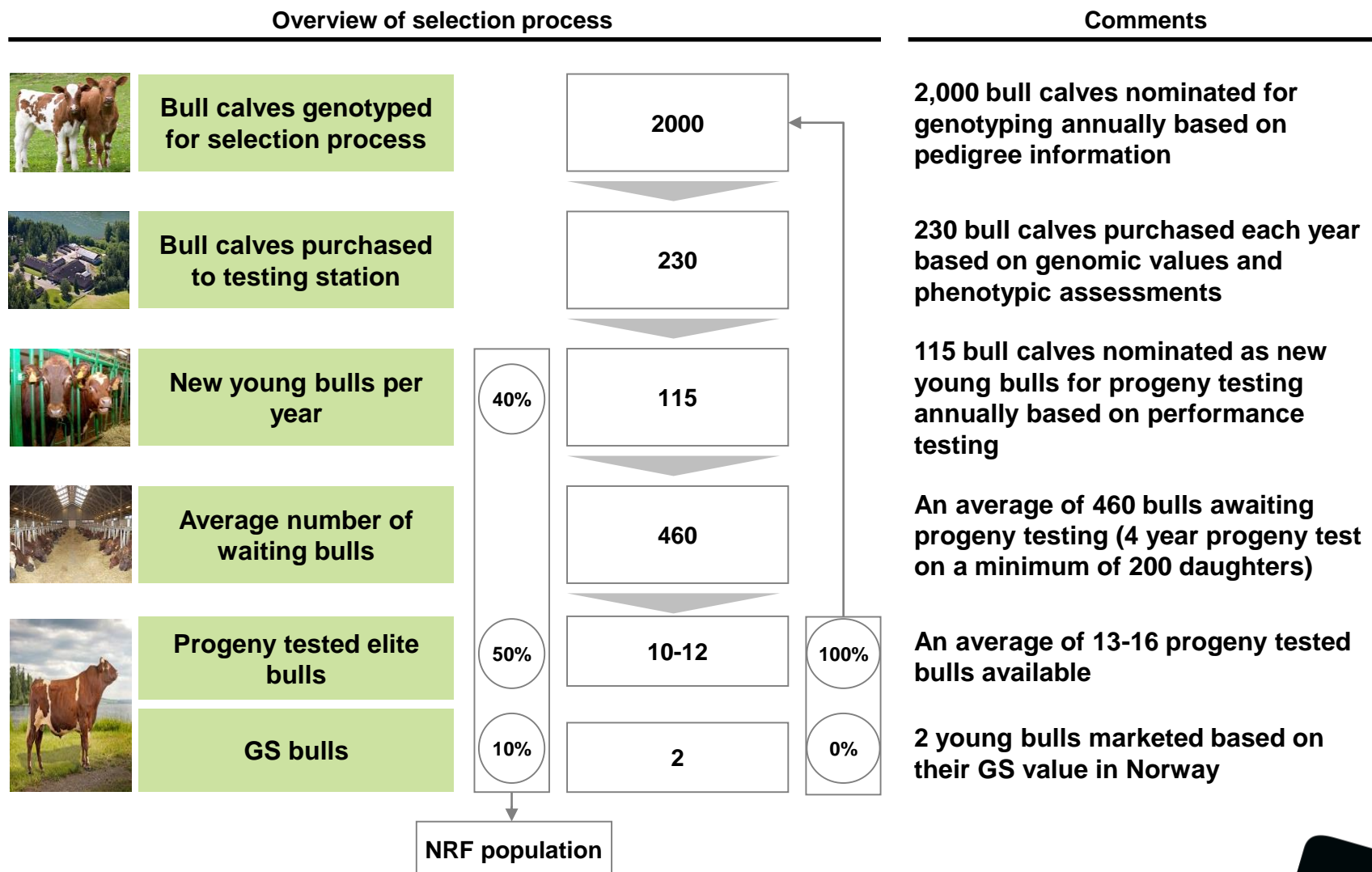
Elite Sires

- Top 10 – 12 per year

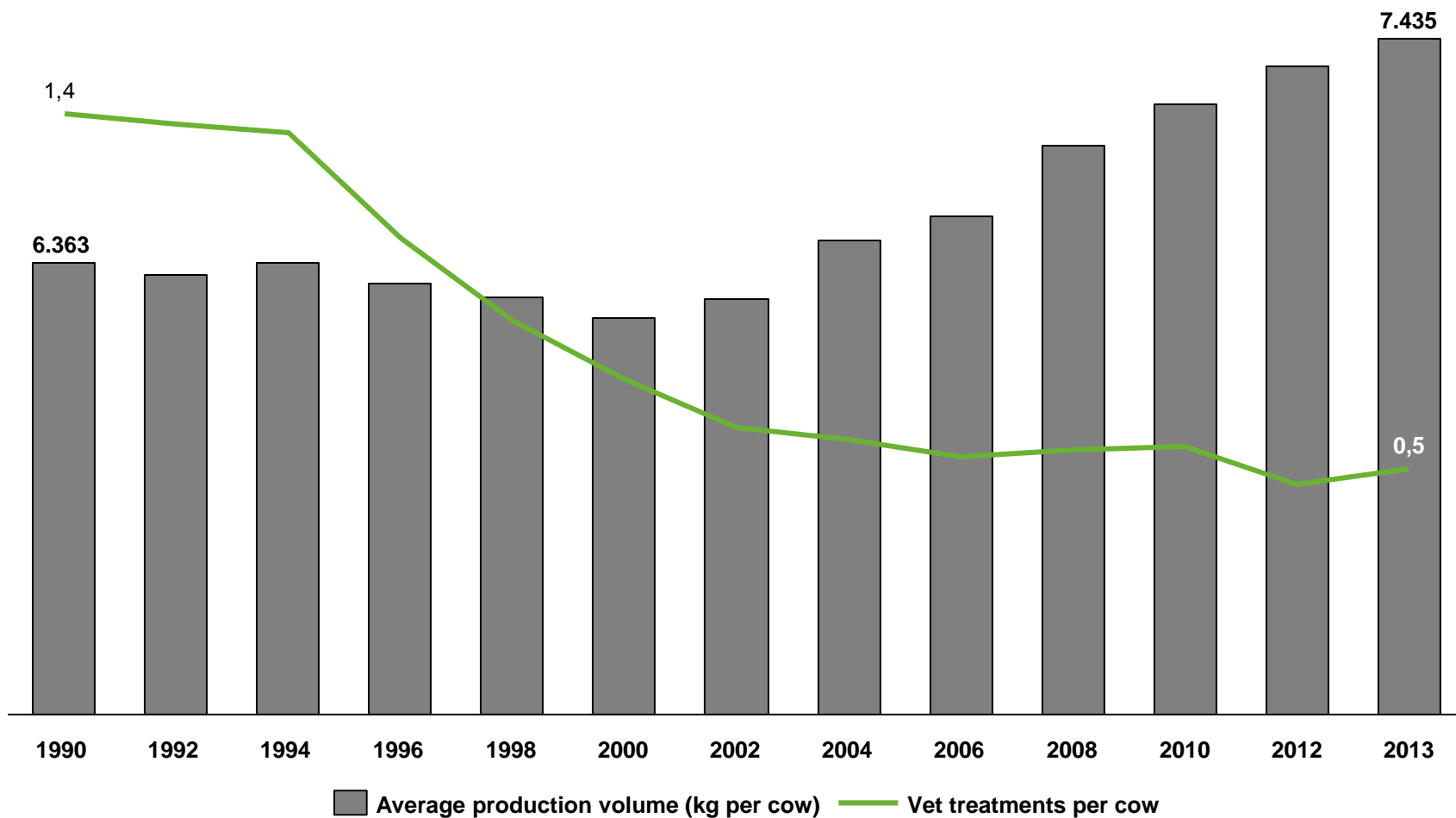


60 % of the population polled

GENO'S ROBUST SELECTION PROCESS ENSURES HIGH RELIABILITY IN BULL PROOFS



30 YEARS OF BREEDING ON HEALTH TRAITS HAS CONTRIBUTED TO A SIGNIFICANT REDUCTION IN NUMBER OF VET TREATMENTS IN NORWAY



BRAUT DAUGHTER FROM HOLLAND



© Elly Geverink

GENO Performance Test Station



230 NRF BULLS TESTED PER YEAR



GENO AI centre



GENO Lay Off Facilities, 500 NRF Sires



CROSSBREEDING – HOT AND GAINING

NEXT LEVEL – 8 % OF THE COWS IN US ARE CROSSBREDS.



- *15 – 20 % more net profit !*
- *Less work and problems*
- *0 inbreeding problem, outcross*
- *Facts: 26 scientific papers*
- *Facts: International studies*
- *Crossing, used a lot in other agricultural areas.*

WE KNOW IT WORKS EVERYWHERE !



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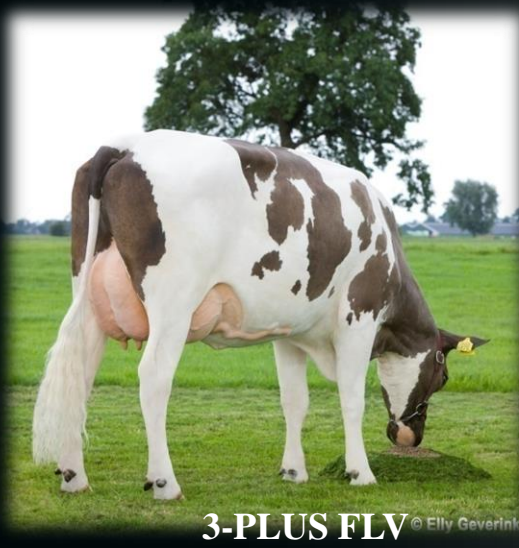
**3 generations Vissers, Holland, milking 275 cows.
Herd average milk yield is 9.328 kgs, 3,98 % fat and 3,50 % protein.**

The NRF crosses are AMAZING !!

geno

GENO - YOUR PARTNER IN CROSSBREEDING

DIFFERENT CROSSBREEDING OPTIONS



CHANGE COSTS FOR THE CUSTOMER

ONLY NRF SEMEN FOR MORE PROFIT.



NORWEGIAN RED FOR CROSSBREEDING

A DAIRYMAN'S DREAM

