

HOLSTEIN / RED HOLSTEIN

PROOF EXPLANATION



April 2024

New Holstein Retained Placenta & Metritis - ISU

Importance of Reproduction traits: Retained Placenta & Metritis

Reproduction is key for dairy production. Retained Placenta & Metritis impact significant number of cows in herds, carrying consistent issues:

- **Technical**: 6,2% to 6,3% of cows are impacted by each pathology.
- Economical: the cost for each impacted cow is 100 €/event.
- Breeder's ease of work & time efficiency: avoid workload and concerns.
- **Consumer**: less treatment, better cow's health is positively perceived.





How Genetically Select for Retained Placenta & Metritis?

Since 2015, SYNETICS **Génosanté R&D program** has developed a farm network committed to register all health events and genotype all cows in order to create indicators, advices and proofs for new health traits.

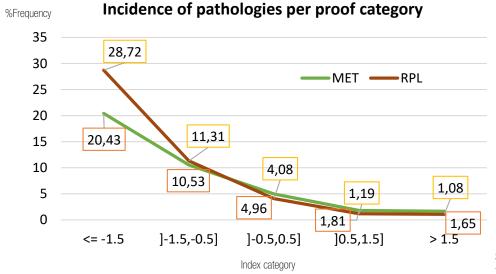
As individual health traits have lower occurrences in farm than other traits, and as reproduction traits have low heritability, many years of rigorous data collection have been required to set-up these 2 new traits.



| | Retained Placenta | Metritis |
|--|--|----------------------|
| Reference Population | 537 513 data in 1762 herds | |
| | 35 853 genotyped females – 2772 bulls with progeny | |
| Heritability | $h^2 = 0.018$ | h ² =0,01 |
| Phenotype +/- genetic standard deviation | 6,2% +/- 3,19% | 6,3% +/- 2,35% |

What are the results and potential of improvement?

Both traits shows important variability in result according to genetic level and index category:



- RPL: +1 point of index : divide by 3 the frequency +5€/lactation on the herd
- MET: +1 point of index : divide by 2 the frequency +4€/lactation on the herd

Source: 19 000 genotyped heifers with results of Genosanté farm network. 2023



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What are the SYNETICS bulls' potential to bring result in my farm?

Daughters of the 25% best bulls are 2 times healthier than the ones out of the 25% lowest bulls.



What concrete improvement with a bull?

Example of Talavenir:

- ❖ RPL +0,9
 - → 0,9 x 67% less RPL x 50% transmitted by the sire
 - → = 30% RPL avoided for his daughters in average
- **♦** MET +1.6
 - → 1,6 x 50% less MET x 50% transmitted by the sire
 - → 40% MET avoided for his daughters in average



Retained placenta and Metritis are integrated in GénoSanté Health synthesis :



HEALTH = 20% > ACETO (ketosis)

30% > REPRO 20% + MET 5% + RPL 5%

20% > HOOF HEALTH SLI 12% SLM 8%

20% > UDDER HEALTH

10% > LONVEVITY

ACETO (ketosis) - SLI (Infectious lesions) - SLM (Mechanical lesions) - STMA (Udder Health) - LGF (Longevity) - REPRO (Fertility) - RPL (Retained placenta) - MET (Metritis)