

A close-up photograph of a black and white cow, likely a Jersey or similar breed, looking over a metal wire fence. The cow has a distinctive white blaze on its face and a white patch on its forehead. The background is slightly blurred, showing other cows and a farm setting.

# DISCOVER YOUR HERD'S GENETIC POTENTIAL

# PREDICT THE FUTURE WITH CONFIDENCE

Genomic testing is changing the way dairy producers make management, selection and breeding decisions on the farm. Using genomics, a heifer's genetic potential is revealed early in life, genetic progress can be accelerated with confidence and profitability is enhanced by capitalizing on higher production potential.

## THE POWER OF CLARIFIDE

CLARIFIDE® delivers reliable predictions on a comprehensive suite of core production, type and health traits; key production indexes; and parentage confirmation to accurately predict genetic merit. Additionally, information on inbreeding, genetic conditions and haplotypes can help dairy producers make better decisions regarding breeding and reproductive strategies.

## CLARIFIDE DELIVERS GREATER RELIABILITY

CLARIFIDE results are significantly more reliable than traditional values (Figure 1) because they reveal more about the genetic potential an animal actually inherited from its parents.

Parent Average is simply that—an average of the parents' estimated genetic makeup with no ability to account for what genetic material was actually inherited.

Traditional reliabilities are considerably lower than those observed with CLARIFIDE predictions. Based on available data from USDA-CDCB, CLARIFIDE-tested heifers had an average traditional NM\$ reliability of 22 percent, whereas CLARIFIDE reliability approaches 70 percent (Figure 2).

FIGURE 1: TRADITIONAL PARENT AVERAGE VS. CLARIFIDE GPA RELIABILITY

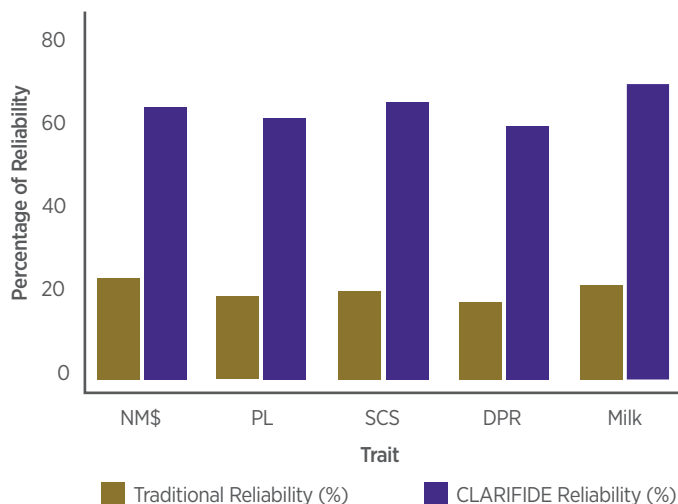
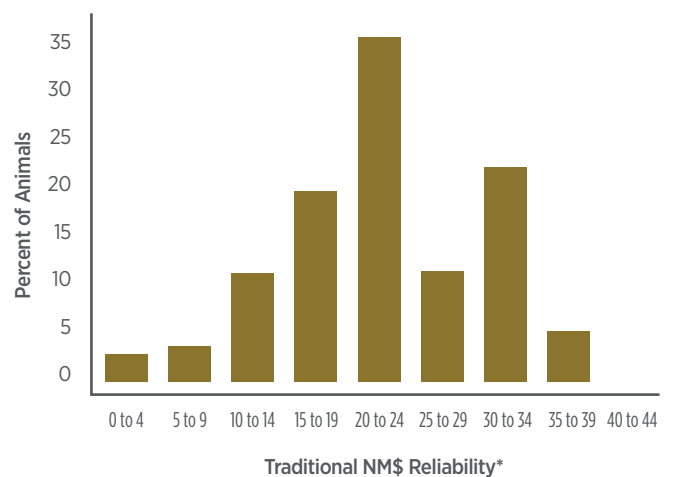


FIGURE 2: TRADITIONAL PARENT AVERAGE VARIABILITY



\* SOURCE: USDA-CDCB EVALUATION FOR CLARIFIDE-TESTED HOLSTEIN FEMALES ≤12 MONTHS OF AGE AS OF APRIL 2014. MEDIAN VALUE FOR NM\$ IN THIS DATA SET = 22%.

FIGURE 3: AVERAGE 305D ME MILK BASED ON GPTA RANK

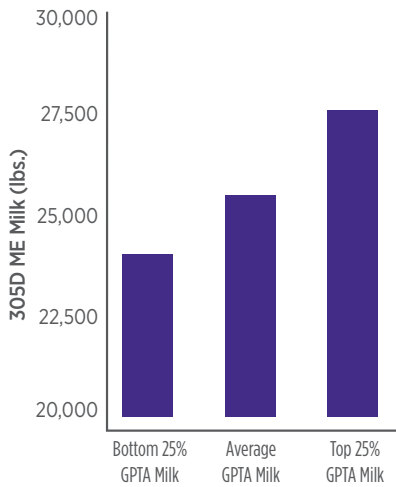
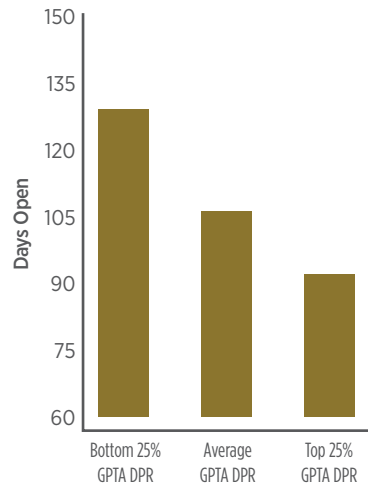


FIGURE 4: AVERAGE DAYS OPEN BASED ON GPTA RANK



## GENOMICS MATCHES UP TO REAL WORLD

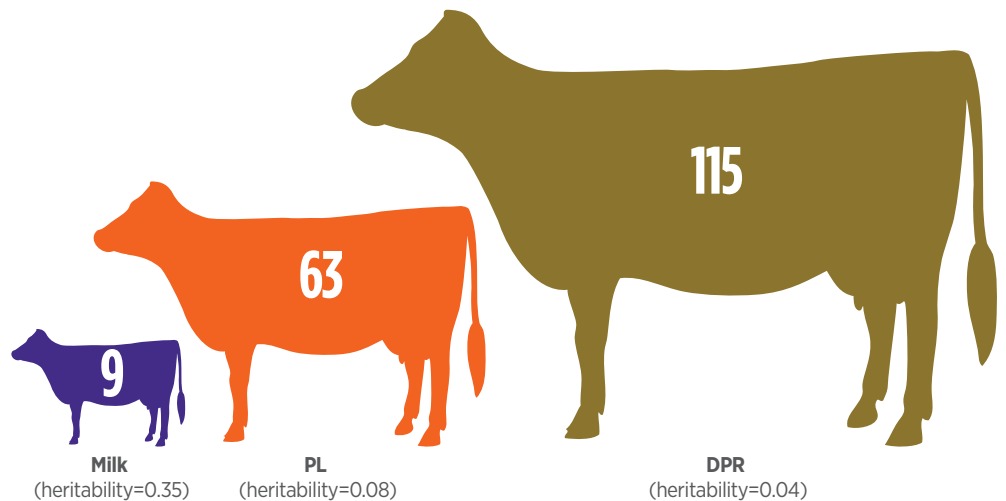
For first calf heifers ranked by GPTA on a Midwest dairy, the top 25 percent produced 3,557 pounds more milk than those in the bottom 25 percent. Likewise, the top 25 percent for Daughter Pregnancy Rate (DPR) averaged 37 fewer days open than those in the bottom 25 percent. CLARIFIDE is an accurate predictor of future performance.

## RELIABLE INFORMATION WITHOUT PROGENY

It takes many daughter records to provide reliability similar to the CLARIFIDE GPTAs provided by USDA-CDCB.

Figure 5 shows the estimated number of progeny required to match CLARIFIDE reliability for milk, productive life and daughter pregnancy rate.

FIGURE 5: PROGENY EQUIVALENTS TO ACHIEVE CLARIFIDE RELIABILITY



Zoetis data shows that parent misidentification can be greater than 15 percent on commercial dairies. CLARIFIDE helps you better manage parentage verification and reduce inbreeding regardless of previous knowledge of the animal's sire and dam.

MISIDENTIFICATION OF PARENTAGE INFORMATION CAN BE

>15%

## PUT CLARIFIDE TO WORK FOR YOU

Use CLARIFIDE® to advance the genetics in your herd.

- Identify high-genetic females and focus advanced reproductive technologies such as sexed semen, embryo transfer, *in vitro* fertilization, etc. to keep your operation on pace with the industry.
- Identify those replacement candidates that might be more appropriate to use as recipients, bred with conventional semen or sold off of the farm.

- Address fertility haplotypes and genetic conditions that can be proactively managed in mating schemes.



Go to [www.youtube.com/ZoetisGenetics](http://www.youtube.com/ZoetisGenetics) to hear how dairy producers have put CLARIFIDE to work on their operations and seen the benefits of faster genetic progress.

## AS EASY AS 1-2-3-4.

1. **Order** your CLARIFIDE test kit. (Note that customers need to first order a DNA collection kit.)

- a. Go to [clarifide.com](http://clarifide.com) to download an order form.
- b. For questions, call Zoetis Genetics Customer Service at 1-877-233-3362 or email us at [genetics.us@zoetis.com](mailto:genetics.us@zoetis.com).

2. **Collect** your cattle samples.

- a. Samples are accepted for Holstein, Jersey and Brown Swiss females.
- b. Tissue Sampling Unit (TSU) DNA collection device by Allflex®
  - Collect a piece of tissue from an animal's ear.
  - Accepted for all ages of animals.
- c. Blood cards or whole blood samples.
  - Accepted for all ages of animals.
  - Not accepted for twins.
  - Recommended for animals younger than four months of age.

d. Hair follicle samples.

- Must consist of 20 to 30 intact hair bulbs.
- Accepted for all ages of animals.
- For animals younger than four months, special care is needed to obtain adequate hair bulbs.

3. **Ship** for testing and analysis.

- a. Follow shipping instructions and adhere to deadlines found on [clarifide.com](http://clarifide.com) or call us at 1-877-233-3362 for more information.

4. **Plan** to capitalize on your new insights.

- a. CLARIFIDE results will be returned in an easily sortable Excel® report. Your Zoetis representative can help you interpret your results and incorporate the information into your overall genetic improvement plan.



**PREDICT THE FUTURE NOW—CALL FOR CLARIFIDE TODAY!**

For more information visit [clarifide.com](http://clarifide.com)