

# Is Predicted Transmitting Ability for Productive Life Associated to Prevalence of Early Postpartum Disorders in Alberta Holstein Cows?

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## BACKGROUND & OBJECTIVES

- Productive life (PL) is the measure in months for how long a cow is predicted to produce milk compared to her herd mates.
- Sire predicted transmitting ability (PTA) for PL is available and could be used as a selection criterion.
- The objective of this study was to investigate the associations among sire PTA for PL and the incidence of postpartum disorders (PD) [i.e. retained fetal membranes (RFM), metritis, milk fever (MF, clinical and subclinical), ketosis (clinical and subclinical), displaced abomasum (DA), fatty liver, and mastitis], and sickness, death and culling rate up to 90 d in milk (DIM).

## MATERIALS & METHODS

- The study included 949 cows from 10 Alberta dairy herds.
- The diagnosis of PD was done by farm personal and veterinarians as well as using blood, nutritional and metabolic profiles.
- The sire PTA data were retrieved from DairyComp 305.

## RESULTS

- Incidence of PD ranged from 29 to 69% among herds.
- The sire PTA for PL ranged from -6.6 to 8.8.
- Sire PTA for PL was not associated to the incidence of MF, ketosis, DA, fatty liver, mastitis, sickness and culling rate.
- Sire PTA for PL was associated to the incidence of RFM and metritis, and death rate up to 90 DIM.

## TAKE HOME MESSAGE

- Selecting for PL might not be good enough to reduce the incidence of MF, ketosis, fatty liver and mastitis.
- Daughters of sires with high PTA for PL are less likely to suffer from RFM, metritis and die in early postpartum.
- Dairy producers should consider PL to improve profitability and cow's longevity and well being.

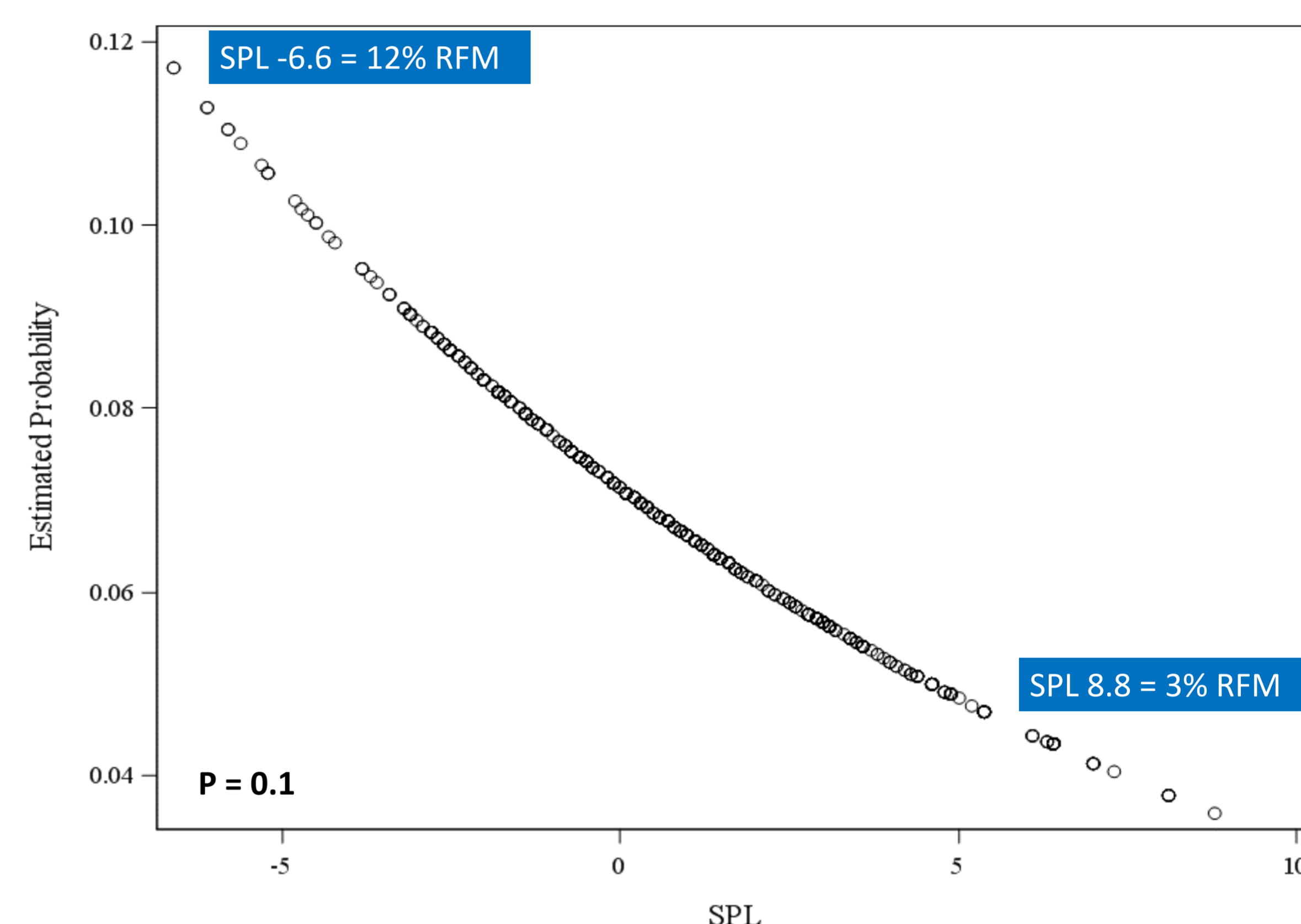


Figure 1. Relationship between sire predicted transmitting ability for productive life (SPL) and incidence of retained fetal membranes (RFM).

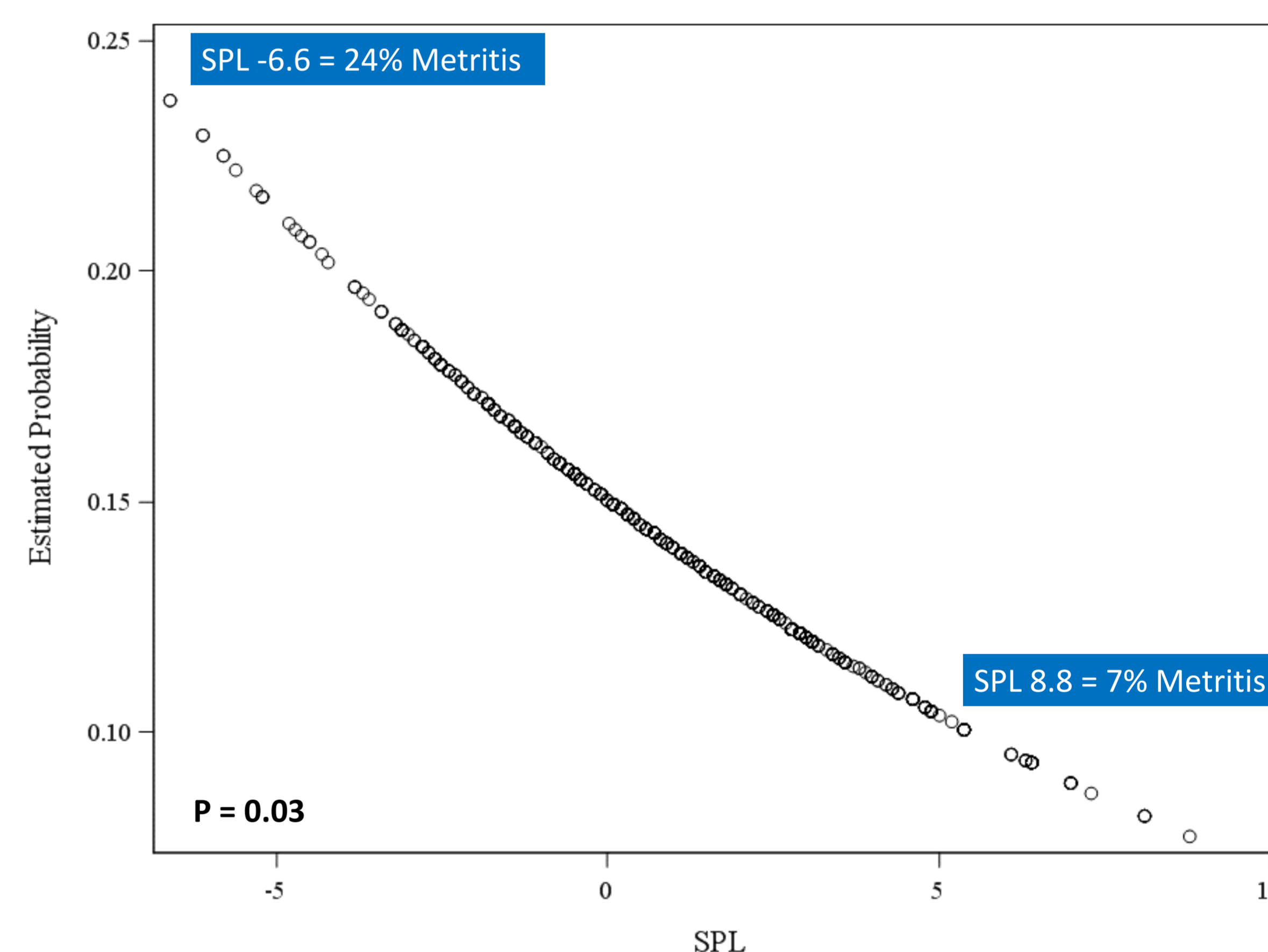


Figure 2. Relationship between sire predicted transmitting ability for productive life (SPL) and incidence of metritis.

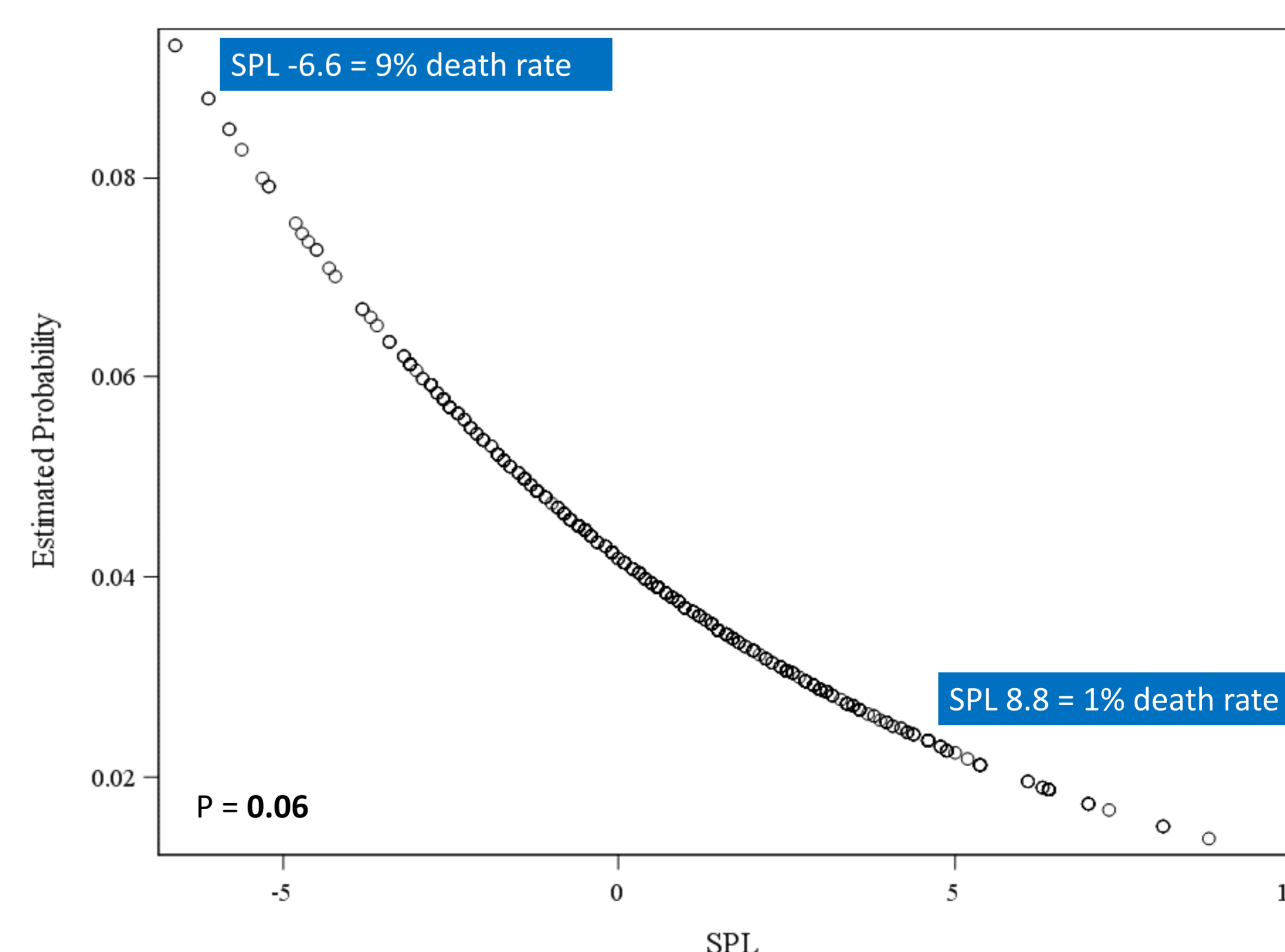


Figure 3. Relationship between sire predicted transmitting ability for productive life (SPL) and death rate up to 90 DIM.