Supplemental Material for: The effect of monopropylene glycol on milk production, uterine health, and reproductive performance in cows diagnosed with hyperketonemia on 3 pasture-based dairy farms

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ABBREVIATIONS

AI = Artificial insemination

PGF2α = Prostaglandin F2alpha

Reproductive Interventions

Cows that received reproductive interventions were not eligible to be included in some reproduction analysis (Figure 2). On Farm A, cows that had not been detected in estrus after the first 42 d of breeding (Group A.1, n = 2; Group A.2, n = 3) were diagnosed anestrus, as indicated with lack of a corpus luteum on the ovaries during transrectal examination. These cows were treated using a progesterone-based protocol and fixed-time AI. On Farm B, 13 cows that had not been submitted for AI by 39 d relative to breeding start were treated following an Ovsynch program (Pursley et al., 1995) and submitted to AI (n = 11) based on detected estrus throughout this treatment protocol or were bull-mated (n = 2). These 18 cows were not eligible for 42 d and final pregnancy rate analysis. On Farm C, 9 cows suspected to be anestrus before the start of breeding were examined by a veterinarian and treated for follicular cysts (n = 3) or persistent corpora lutea (n = 6) on day 1 of the breeding period. Further, one cow that had not been AI by 20 d into the breeding program was treated with PGF2α. These 10 cows were not eligible for all reproduction analyses. Depending on the reproductive intervention received, cows were removed from certain reproduction analyses (Figure 2).

References

Pursley, J. R., M. O. Mee, and M. C. Wiltbank. 1995. Synchronization of ovulation in dairy cows using PGF2α and GnRH. Theriogenology 44:915–923. https://doi.org/10.1016/0093-91X(95)00279-H.