**SUPPLEMENTARY FILE S3**

Study Characteristics Table

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| --- | --- | --- | --- | --- | --- | --- |
| **Author** | **Refid** | **Year of conduct** | **Setting** | **Cow eligibility** | **Who determined the diagnosis** | **Cure definition** |
| Maffey and Uvarov, 1961 | 12407 | NR | One herd | Quarters showing clinical mastitis characterized by a drop in milk secretion, with or without obvious udder reaction at the time. Only cows culturing haemolytic staph were enrolled | Not reported | Quarter remained normal for a period of 30 days after treatment |
| Faull and Ward, 1975 | 2198 | NR | Two commercial herds | Mild cases which the farmer ordinarily dealt with himself, using only intramammary therapy | Farmer | Lack of persistent clinical symptoms at 19 days after last treatment |
| Aungier and Austin, 1987 | 1955 | NR | 7 commercial herds | Cows without previous clinical mastitis events in the current lactation, all cases of clinical mastitis | Not reported | An absence of all clinical signs at examinations at 4, 11, and 25 days relative to last treatment, and in addition where the farmer had no occasion to request additional visits and further treatment within that time |
| Guterbock *et al*., 1993 | 1773 | 1991-1992 | 3 commercial herds in the United States | Cows were excluded if they had systemic signs, were especially valuable, or likely to be culled before the end of the follow-up period | Farmer | Return of the quarter and secretion to normal at or before 3 days after the end of treatment |
| Waage, 1997 | 1634 | 1991-1992 | 276 commercial herds in Norway | Cows without previous clinical mastitis events in the current lactation, in lactations 1-3, within six months of calving, having no visible teat lesions or papillomas on the teat of the affected quarter, without other additional diagnoses, with microorganisms sensitive to penicillin | Farmer | Not reported, assessed 23 days after the end of treatment |
| Deluyker *et al*., 1999 | 1576 | NR | 56 commercial herds in Germany, France, and Belgium | Clinical mastitis in a single quarter without damaged teats, without gangrenous mastitis or systemic illness, at least 48 hours post-calving, without treatment with antibacterial or anti-inflammatory therapy in the past 30 days, without previous enrollment in the study | Farmer | Normal milk in the affected quarter 4-5 days after the first treatment, without other clinical signs of mastitis, and no relapse occurring during the 20 to 22 day observation period |
| Jainping *et al*., 2000 | 12145 | NR | 1 herd in China | Not reported | NR | Not reported, assessed 11 days after the end of treatment |
| Wraight, 2003 | 101 | 1997 | 36 commercial herds in Australia | Cows without previous clinical mastitis events in the current lactation | Farmer | Appearance of normal milk from the treated quarter at 4 days after the end of treatment |
| Roberson *et al*., 2004 | 1320 | NR | 1 research herd | Cows with clinical mastitis and one or fewer abnormal parameters, without concurrent diseases requiring treatment, without evidence of clinical mastitis at the initial examination | Researcher | No clots of flakes in the milk for three consecutive assessments or two consecutive weeks without a relapse; assessed at 6 and 35 days after the end of treatment |
| Wenz *et al*., 2005 | 1231 | 2002-2003 | Canada, United States | Visually abnormal milk or udder swelling, heath, pain or redness without visually abnormal milk but CMT of 2+ or greater | NR | Milk and udder returning to normal 14 days after the last treatment and remaining normal at 21 days post treatment |
| Sérieys *et al*., 2005 | 1282 | NR | 171 commercial herds in France | Clinical mastitis in one quarter only with udder edema and macroscopically abnormal milk with or without clinical signs; less than 4th lactation; less than 6 months in milk; no concurrent diseases; no teat lesions; no clinical mastitis or antiinfectious or anti-inflammatory treatments within the past 14 days; no previous enrollment in the study | Veterinarian | Disappearance of clinical signs of disease, return to normal feed intake, rectal temperature less than 39C, good general condition, absence of udder edema, normal milk appearance, normal milk yield, assessed at 5, 14, and 18 days after the last treatment |
| Hallberg *et al*., 2005 | 17709 | NR | 13 commercial herds in Canada and the United States | Cows with clinical mastitis in one quarter (visually abnormal secretion), with or without quarter swelling, heat, pain, or redness | NR | Return to visually normal milk and udder at 12 and 19 days after the last treatment |
| Pharmacia & Upjohn Co., 2005 | 17724 | NR | Canada and the United States | No history of clinical mastitis, SCC < 200,000 cells/mL, no udder edema, no teat lesions | NR | Milk and udder returning to normal 14 days after the last treatment and remaining normal at 21 days post-treatment |
| McDougall et al., 2011 | 1093 | 2003-2004 | 28 commercial herds in New Zealand | Cows without clinical mastitis events in the past 30 days, cows were eligible for re-enrollment if developing a second events more than 30 days after initial enrollment | Farmer | No additional treatment by the farmer in the first 30 days after treatment |
| Qin and Sun, 2009 | 14440 | 2008 | Commercial herd(s) in China | Cows with acute mastitis – udder and milk changes | NR | Not reported |
| Suojala *et al*., 2010 | 872 | 2003-2006 | 61 commercial herds in Finland | Cows with pre-treatment milk samples yielding *E. coli* with one quarter affected and not vaccine for coliform mastitis | Veterinarian | No systematic signs present, quarter free from clinical signs, normal appearance of milk, acceptability of milk for delivery, assessed at 19 days after the last treatment  |
| Pyörälä *et al*., 2011 | 17701 | 2007-2009 | 4 commercial herds in Estonia | Clinical mastitis (any visible signs) caused by gram positive bacteria with *in vitro* susceptibility to benzylpenicillin; without known chronic cases; without severe clinical signs; without signs likely caused by gram negative infections  | NR | Normal milk appearance and no pathologic changes, assessed at 24 days after the last treatment |
| Schukken *et al*., 2013 | 531 | 2010-2011 | 7 commercial farms in the United States | Without clinical mastitis in the past 30 days, with only one quarter affected, without severe mastitis, more than 25 days from dry-off | NR | Clinically normal milk and gland at assessment 7 and 14 days after the last treatment |
| Kalmus *et al*., 2014 | 477 | 2007-2009 | 4 commercial herds in Estonia | Clinical mastitis in only one quarter, not more than three mastitic episodes before the study start, no teat injuries, no treatments within one week, gram positive organism on culture | Veterinarian | Free from clinical signs, assessed 3-4 weeks after the last treatment |
| Truchetti *et al*., 2014 | 487 | 2009 | 22 commercial herds in Canada | Mild to moderate (score 1-2), no antibiotics or anti-inflammatories in the last 14 days | Farmer | Normal appearance of the milk, assessed 18 days after the last treatment |
| Persson *et al*., 2015 | 374 | NR | Commercial herd(s) in Sweden | Culturing *E. coli* on initial sample | Veterinarian | No fever, normal general appearance, no udder swelling, normal milk, assessed at 3 days after the last treatment |
| Vasquez *et al*., 2016 | 212 | 2014-2015 | 6 commercial herds in the United States | Less than 300 DIM, no antibiotic treatment in the past 30 days, only one quarter affected, no previous enrollment in the study, only mastitis with a clinical score of 1-2 | Farmer | Clinical score becoming and remaining 0 by the end of treatment  |
| Cortinhas *et al*., 2016 | 245 | NR | 11 commercial herds in Brazil | Four functional quarters, no clinical mastitis events in the past 30 days, no treatments with antibiotics in the past 30 days, no lesions of the udder or teat, more than 30 days from dry-off, more than 5 kg/d of milk yield prior to the clinical mastitis event | Farmer | Presence of normal milk and a normal gland, assessed at 4, 14, and 21 days after the last treatment |
| Viveros *et al*., 2018 | 18 | 2016 | 1 commercial herd in Mexico | Nonsevere clinical mastitis, CMT score 2 or greater, parity 1-4, no previous treatment, no teat lesions or injuries, only one quarter affected, no concurrent diseases, more than 30 days prior to dry-off | NR | Absence of inflammatory signs in the affected gland and the lack of milk abnormalities assessed at one day after the last treatment |