

Supplemental File S3  
Study characteristics table

Study	Country	Setting	Year	Breed	Parity	# herds	Eligible outcomes
Bansal et al., NR	NR	Commercial dairy	2002-2004	Cross-bred/multiple breeds	$\geq 1^{\text{st}}$ lactation	3	IMI at calving, CM (30 DIM)
Berry and Hillerton, 2000	NR	Commercial dairy and Research facility	NR	NR	$\geq 1^{\text{st}}$ lactation	4	IMI at calving
Bolourchi et al., 1995	NR	Commercial dairy	1993-1994	Holstein/Friesian	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
Bradley et al., 2010	United Kingdom	Commercial dairy	2007-2008	Cross-bred/multiple breeds	$\geq 1^{\text{st}}$ lactation	6	IMI at calving
Bradley et al., 2011	United Kingdom	Commercial dairy	NR	Holstein/Friesian	$\geq 1^{\text{st}}$ lactation	8	IMI at calving, LS/SCC 1 <sup>st</sup> test, milk production (full lactation)
Buddle and Cooper, 1980	New Zealand	Research facility	1976-1977	Cross-bred/multiple breeds	Heifers and greater	1	IMI at calving

Cengiz et al., 2015	Turkey	Commercial dairy	NR	Holstein/Friesian	$\geq 2^{\text{nd}}$ and $3^{\text{rd}}$ lactation only	3	IMI at calving
Clegg et al., 1975	NR	Commercial dairy	NR	NR	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
Contreras et al., 2013	USA	Commercial dairy	NR	Holstein/Friesian	$\geq 2^{\text{nd}}$ lactation	1	IMI at calving
Cummins and McCaskey, NR	USA	Research facility	NR	Holstein/ Friesian	$\geq 1^{\text{st}}$ lactation	1	CM (30 DIM)
Cummins et al., 1987	USA	Research facility	NR	NR	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
da Fonseca et al., 1998	Brazil	Commercial dairy	NR	NR	$\geq 1^{\text{st}}$ lactation	5	IMI at calving
Dingwell et al., 2002	Canada	Commercial dairy	NR	Cross-bred/multiple breeds	$\geq 1^{\text{st}}$ lactation	24	IMI at calving
Dingwell et al., 2002	NR	Commercial dairy	NR	NR	$\geq 1^{\text{st}}$ lactation	55	IMI at calving
Eberhart et al., 1978	USA	Research facility	NR	NR	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
Hallberg et al., 2006	USA	Commercial dairy	NR	Holstein/Friesian	$\geq 1^{\text{st}}$ lactation	21	IMI at calving
Hanschke et al., NR	Morocco	Commercial dairy	NR	Holstein/Friesian	$\geq 1^{\text{st}}$ lactation	24	IMI at calving

Hernandez et al., 2014	Spain	Commercial dairy	NR	NR	$\geq 1^{\text{st}}$ lactation	6	IMI at calving
Hill and Keefe, 1974	USA	Commercial dairy	NR	NR	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
Huxley et al., 2002	United Kingdom	Commercial dairy	1999-2001	NR	$\geq 1^{\text{st}}$ lactation	16	IMI at calving
Johnson et al., 2016	USA	Commercial dairy	2014-2015	Holstein/Friesian	$\geq 1^{\text{st}}$ lactation	4	IMI at calving
Kirk et al., 1997	USA	Commercial dairy	NR	Holstein/Friesian	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
Malhotra et al., 1980	India	Commercial dairy	NR	Cross-bred/multiple breeds	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
McDougall, 2010	New Zealand	Commercial dairy	NR	Cross-bred/multiple breeds	$\geq 1^{\text{st}}$ lactation	6	IMI at calving
Meaney and Nash, 1977	NR	Research facility	NR	Holstein/Friesian	$\geq 1^{\text{st}}$ lactation	2	IMI at calving
Meaney, 1976	NR	Research facility	NR	NR	$\geq 1^{\text{st}}$ lactation	2	IMI at calving
Meaney, 1986 (trial 5)	NR	NR	NR	NR	$\geq 1^{\text{st}}$ lactation	NR	IMI at calving

Mendoza et al., 2016	Mexico	Commercial dairy	2015	Holstein/Friesian	$\geq 1^{\text{st}}$ lactation	1	IMI at calving, IMI (30 DIM), LS/SCC 1 <sup>st</sup> test
Mohammadsadegh, 2017	Iran	NR	2014	Holstein/Friesian	NR	1	IMI at calving
Mullen et al., 2014 (trial 2)	USA	Commercial dairy and Research facility	2010-2012	NR	$\geq 1^{\text{st}}$ lactation	5	IMI at calving
Ospina et al., 2016	Italy	Commercial dairy	2014	NR	$\geq 1^{\text{st}}$ lactation	8	IMI at calving
Pearson and Wright, 1969 (trial 4)	NR	Commercial dairy	NR	NR	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
Petzer et al., 2009	NR	Commercial dairy	NR	Holstein/Friesian	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
Pinedo et al., 2012	USA	Commercial dairy	NR	NR	$\geq 1^{\text{st}}$ lactation	2	CM (30 DIM)
Sinkevich et al., NR	USA	Research facility	NR	Cross-bred/multiple breeds	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
Smith et al., 1967	NR	Commercial dairy	NR	NR	$\geq 1^{\text{st}}$ lactation	35	IMI at calving

Swenson, 1979	USA	Commercial dairy	NR	NR	$\geq 1^{\text{st}}$ lactation	75	IMI at calving
Tuteja et al., 1994	NR	NR	NR	NR	$\geq 1^{\text{st}}$ lactation	1	IMI at calving
Woolford et al., 1998	New Zealand	Commercial dairy	1996	NR	$\geq 1^{\text{st}}$ lactation	3	IMI at calving
Woolford et al., 2001	New Zealand	Commercial dairy	1997	Cross-bred/multiplebreeds	$\geq 1^{\text{st}}$ lactation	3	IMI at calving