Summary of Studies Supporting USDA Product Licensure

Establishment Name	Zoetis Inc.
USDA Vet Biologics Establishment Number	190
Product Code	7890.00
True Name	Clostridium Perfringens Type C-Escherichia Coli Bacterin-Toxoid
Tradename(s) / Distributor or Subsidiary (if different from manufacturer)	LitterGuard LT-C - No distributor specified LitterGuard LT-C - Zoetis (Shanghai) Animal Health LitterGuard LT-C - Zoetis (Thailand) Limited LitterGuard LT-C - Zoetis Argentina LitterGuard LT-C - Zoetis Colombia S.A.S. LitterGuard LT-C - Zoetis Enterprise Management (Shanghai) Co., Ltd. LitterGuard LT-C - Zoetis Industria Produtos Veterinarios Ltda. LitterGuard LT-C - Zoetis Japan Inc. LitterGuard LT-C - Zoetis Korea LitterGuard LT-C - Zoetis Mexico LitterGuard LT-C - Zoetis Russia LitterGuard LT-C - Zoetis South Africa Ltd
Date of Compilation Summary	May 20, 2024

Disclaimer: Do not use the following studies to compare one product to another. Slight differences in study design and execution can render the comparisons meaningless.

Study Type	Efficacy
Pertaining to	*Clostridium perfringens* Type C
Study Purpose	Demonstrate effectiveness against *C. perfringens* Type C in offspring when administered to dams
Product Administration	
Study Animals	Swine
Challenge Description	
Interval observed after challenge	
Results	Study data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. No data are published because this study was submitted to USDA-APHIS prior to January 1, 2007, and APHIS only requires publication of data submitted after that date.
USDA Approval Date	October 01, 1985

Study Type	Efficacy
Pertaining to	*Escherichia coli*
Study Purpose	Demonstrate effectiveness against neonatal diarrhea due to LTB pilus-expressing *E. coli*
Product Administration	
Study Animals	Pregnant sows and gilts
Challenge Description	
Interval observed after challenge	
Results	Study data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. No data are published because this study was submitted to USDA-APHIS prior to January 1, 2007, and APHIS only requires publication of data submitted after that date.
USDA Approval Date	December 01, 1982

Study Type	Efficacy
Pertaining to	*Escherichia coli* 987P
Study Purpose	Demonstrate effectiveness against neonatal diarrhea due to 987P pilus-expressing *E. coli*
Product Administration	
Study Animals	Pregnant sows and gilts
Challenge Description	
Interval observed after challenge	
Results	Study data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. No data are published because this study was submitted to USDA-APHIS prior to January 1, 2007, and APHIS only requires publication of data submitted after that date.
USDA Approval Date	December 01, 1982

Study Type	Efficacy
Pertaining to	*Escherichia coli* F41
Study Purpose	Demonstrate effectiveness against neonatal diarrhea due to F41 pilus-expressing *E. coli*
Product Administration	
Study Animals	Pregnant sows and gilts
Challenge Description	
Interval observed after challenge	
Results	Study data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. No data are published because this study was submitted to USDA-APHIS prior to January 1, 2007, and APHIS only requires publication of data submitted after that date.
USDA Approval Date	April 12, 1984

Study Type	Efficacy
Pertaining to	*Escherichia coli*
Study Purpose	Demonstrate effectiveness against neonatal diarrhea due to K88 pilus-expressing *E. coli*
Product Administration	
Study Animals	Pregnant sows and gilts
Challenge Description	
Interval observed after challenge	
Results	Study data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. No data are published because this study was submitted to USDA-APHIS prior to January 1, 2007, and APHIS only requires publication of data submitted after that date.
USDA Approval Date	December 01, 1982

Study Type	Efficacy
Pertaining to	*Escherichia coli*
Study Purpose	Demonstrate effectiveness against K99 pilus-expressing *E. coli*
Product Administration	
Study Animals	
Challenge Description	
Interval observed after challenge	
Results	Study data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. No data are published because this study was submitted to USDA-APHIS prior to January 1, 2007, and APHIS only requires publication of data submitted after that date.
USDA Approval Date	May 22, 1985

Study Type	Efficacy
Pertaining to	*Escherichia coli*
Study Purpose	Demonstrate effectiveness against neonatal diarrhea due to K99 pilus-expressing *E. coli*
Product Administration	
Study Animals	Pregnant sows and gilts
Challenge Description	
Interval observed after challenge	
Results	Study data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. No data are published because this study was submitted to USDA-APHIS prior to January 1, 2007, and APHIS only requires publication of data submitted after that date.
USDA Approval Date	December 01, 1982

Study Type	Safety
Pertaining to	ALL
Study Purpose	To demonstrate safety, including safety in pregnant animals, under field conditions
Product Administration	Intramuscular
Study Animals	Swine
Challenge Description	
Interval observed after challenge	
Results	Study data were evaluated by USDA-APHIS prior to product licensure and met regulatory standards for acceptance at the time of submission. No data are published because this study was submitted to USDA-APHIS prior to January 1, 2007, and APHIS only requires publication of data submitted after that date.
USDA Approval Date	June 30, 1986