

8 Literaturverzeichnis

Aarestrup, F. M. und Jensen, N. E. (1997):

Prevalence and duration of intramammary infection in Danish heifers during the peripartum period.

J Dairy Sci 80. 307-312.

Aarestrup, F. M.; Larsen, H. D.; Eriksen, N. H.; Elsberg, C. S. und Jensen, N. E. (1999):

Frequency of alpha- and beta hemolysin in *Staphylococcus aureus* of bovine and human origin. A comparison between pheno- and genotype and variation in phenotypic expression.

APMIS 107. 425-430.

Aarestrup, F. M.; Wegener, H. C. und Rosdahl, V. T. (1995):

Evaluation of phenotypic and genotypic methods for epidemiological typing of *Staphylococcus aureus* isolates from bovine mastitis in Denmark.

Vet Microbiol 45. 139-150.

Adams, D. S.; McDonald, J. S.; Hancock, D. und McGuire, T. (1988):

Staphylococcus aureus antigens reactive with milk immunoglobulin G of naturally infected dairy cows.

J Clin Microbiol 26. 1175-1180.

Almeida, R. A.; Matthews, K. R.; Cifrian, E.; Guidry, A. J. und Oliver, S. P. (1996):

Staphylococcus aureus invasion of bovine mammary epithelial cells.

J Dairy Sci 79. 1021-1026.

Anderson, J. C. (1982):

Progressive pathology of staphylococcal mastitis with a note on control, immunisation and therapy.

Vet Rec 110. 372-376.

Annemüller, C.; Lämmle, C. und Zschönck, M. (1999):

Genotyping of *Staphylococcus aureus* isolated from bovine mastitis.

Vet Microbiol 69. 217-224.

AVID, Arbeitskreis für veterinärmedizinische Infektionsdiagnostik der DVG (1999):

Methoden der Infektionsdiagnostik, Loseblattsammlung.

Barkema, H. W.; Schukken, Y. H.; Lam, T. J.; Beiboer, M. L.; Wilmink, H.; Benedictus, G. und Brand, A. (1998):

Incidence of clinical mastitis in dairy herds grouped in three categories by bulk milk somatic cell counts.

J Dairy Sci 81. 411-419.

- Bartlett, P. C.; Miller, G. Y.; Lance, S. E. und Heider, L. E. (1992):
Managerial determinants of intramammary coliform and environmental streptococci infections in Ohio dairy herds.
J Dairy Sci 75. 1241-1251.
- Baseggio, N.; Mansell, P. D.; Browning, J. W. und Browning, G. F. (1997):
Strain differentiation of isolates of streptococci from bovine mastitis by pulse-field gel electrophoresis.
Mol Cell Probes 11. 349-354.
- Baselga, R.; Albizu, I. und Amorena, B. (1994):
Staphylococcus aureus capsule and slime as virulence factors in ruminant mastitis. A review.
Vet Microbiol 39. 195-204.
- Baumgartner, A.; Nicolet, J. und Eggimann, M. (1984):
Plasmid profiles of *Staphylococcus aureus* causing bovine mastitis.
J Appl Bacteriol 56. 159-163.
- Bayles, K. W.; Wesson, C. A.; Liou, L. E.; Fox, L. K.; Bohach, G. A. und Trumble, W. R. (1998):
Intracellular *Staphylococcus aureus* escapes the endosome and induces apoptosis in epithelial cells.
Infect Immun 66. 336-342.
- Beaudeau, F.; Seegers, H.; Fourichon, C. und Hortet, P. (1998):
Association between milk somatic cell counts up to 400000 cells/ml and clinical mastitis in French Holstein cows.
Vet Rec 143. 685-687.
- Birgersson, A.; Jonsson, P. und Holmberg, O. (1992):
Species identification and some characteristics of coagulase-negative staphylococci isolated from bovine udders.
Vet Microbiol 31. 181-189.
- Black, R. T.; Marshall, R. T. und Bourland, C. T. (1972):
Locus of mammary gland infections of *Corynebacterium bovis*.
J Dairy Sci 55. 413-416.
- Blobel, H. und Schliesser, T. (1994):
Staphylokokken-Infektionen und Enterotoxine.
In: Handbuch der bakteriellen Infektionen bei Tieren II,1 / H. Blobel, Schliesser, T. (Hrsg.).
Gustav Fischer Verlag Jena, Stuttgart, Germany.
- Boddie, R. L. und Nickerson, S. C. (2002):
Reduction of mastitis caused by experimental challenge with *Staphylococcus aureus* and *Streptococcus agalactiae* by use of a quaternary ammonium and halogen-mixture teat dip.
J Dairy Sci 85. 258-262.

Boddie, R. L.; Nickerson, S. C. und Adkinson, R. W. (1997):
Efficacies of teat germicides containing 0,5% chlorhexidine and 1% iodine during experimental challenge with *Staphylococcus aureus* and *Streptococcus agalctiae*.
J Dairy Sci 80. 2809-2814.

Boddie, R. L.; Nickerson, S. C. und Adkinson, R. W. (1998):
Germicidal activity of a chlorous acid-chlorine dioxide teat dip and a sodium chlorite teat dip during experimental challenge with *Staphylococcus aureus* and *Streptococcus agalactiae*.
J Dairy Sci 81. 2293–2298.

Boddie, R. L.; Nickerson, S. C. und Adkinson, R. W. (2000):
Efficacies of chlorine dioxide and iodophor teat dips during experimental challenge with *Staphylococcus aureus* and *Streptococcus agalactiae*.
J Dairy Sci 83. 2975-2979.

Boddie, R. L.; Nickerson, S. C.; Doyle, M. G. und McGuire, H. J. (1995):
Efficacy of a new hypochlorous acid-releasing teat dip against *Staphylococcus aureus* and *Streptococcus agalactiae* under conditions of experimental challenge.
Proc Natl Mastitis Council 34th Annual Meeting. Fort Worth, Texas. 156-157.

Boddie, R. L.; Owens, W. E.; Foret, C. J. und Janowicz, P. (2004):
Efficacy of a 0.1% iodine teat dip against *Staphylococcus aureus* and *Streptococcus agalactiae* during experimental challenge.
J Dairy Sci 87. 3089–3091.

Boerlin, P.; Kuhnert, P.; Hüsey, D. und Schaellibaum, M. (2003):
Methods for identification of *Staphylococcus aureus* isolates in cases of bovine mastitis.
J Clin Microbiol 41. 767-771.

Bradley, A. J. und Green, M. J. (1998):
A prospective investigation of intramammary infections due to enterobacteriaceae during the dry period: A presentation of preliminary findings.
Cattle Practice 6. 91-94.

Bradley, A. J. und Green, M. J. (2000):
A study of the incidence and significance of intramammary enterobacterial infections acquired during the dry period.
J Dairy Sci 83. 1957-1965.

Bramley, A. J. (1978):
The effect of subclinical *Staphylococcus epidermidis* infection of the lactating bovine udder on its susceptibility to infection with *Staphylococcus agalactiae* or *Escherichia coli*.
Br Vet J 134. 146-151.

Bramley, A. J. (1981):
The role of hygiene in preventing intramammary infection.
Techn Bull Natl Inst Res Dairying, Shinfield 4. 53-66.

- Bramley, A. J. (1985):
The sources of mastitis pathogens for a dairy herd and their control.
Kieler Milchwirtschaftliche Forschungsberichte 37. 375-385.
- Bramley, A. J. und Dodd, F. H. (1984):
Reviews of the progress in dairy science: Mastitis control - progress and prospects.
J Dairy Res 51. 481-512.
- Bramley, A. J.; Kingwill, R. G.; Griffin, T. K. und Simpkin, D. L. (1976):
Prevalence of *Corynebacterium bovis* in bovine milk samples.
Vet Rec 99. 275.
- Brooks, B. W. und Barnum, D. A. (1984):
Experimental colonization of the bovine teat duct with *Corynebacterium bovis* and the effect on milk somatic cell counts.
Can Comp Med 48. 141-145.
- Browning, J. W.; Mein, G. A.; Barton, M.; Nicholls, T. J. und Brightling, P. (1990):
Effects of antibiotic therapy at drying off an mastitis in the dry period and early lactation.
Aust Vet J 67. 440-442.
- Browning, J. W.; Mein, G. A.; Brightling, P.; Nicholls, T. J. und Barton, M. (1994):
Strategies for mastitis control: dry cow therapy and culling.
Aust Vet J 71. 179-181.
- Calzolari, A.; Giraud, J. A.; Rampone, H.; Odierno, L.; Giraud, A. T.; Frigererio, C.; Bettera, S.; Raspanti, C.; Hernandez, J.; Wehbe, M.; Mattea, M.; Ferrari, M.; Larriestra, A. und Nagel, R. (1997):
Field trials of a vaccine against bovine mastitis. 2. Evaluation in two commercial dairy herds.
J Dairy Sci 80. 854-858.
- Capurro, A.; Concha, C.; Nilsson, L. und Östensson, K. (1999):
Identification of coagulase-positive staphylococci isolated from bovine milk
Acta vet scand 40. 315-321.
- Chamings, R. J. (1984):
The effect of not treating mild cases of clinical mastitis in a commercial dairy herd.
Vet Rec 115. 499-500.
- Craven, N. (1987):
Efficacy and financial value of antibiotic treatment of bovine clinical mastitis during lactation. A review.
Brit Vet J 80. 410-422.
- Craven, N. und Anderson, J. C. (1984):
Phagocytosis of *Staphylococcus aureus* by bovine mammary gland macrophages and intracellular protection from antibiotic action in vitro and in vivo.
J Dairy Res 51. 513-523.

Deluyker, H. A.; Van Oye, S. N. und Boucher, J. F. (2005):
Factors affecting cure and somatic cell count after Pirlimycin treatment of subclinical mastitis in lactating cows.
J Dairy Sci 88. 604-614.

de Oliveira, A. P.; Watts, J. L.; Salmon, S. A. und Aarestrup, F. M. (2000):
Antimicrobial susceptibility of *Staphylococcus aureus* isolated from bovine mastitis in Europe and the United States.
J Dairy Sci 83. 855-862.

Deutsche Veterinärmedizinische Gesellschaft (2002):
Leitlinien zur Bekämpfung der Mastitis des Rindes als Bestandsproblem.
Fachgruppe Milchhygiene der DVG e.V., 4. Aufl. DVG Gießen.

Devriese, L. A. (1979):
Identification of clumping-factor-negative staphylococci isolated from cows' udders.
Res Vet Sci 27. 313-320.

Devriese, L. A.; Hajék, V.; Oeding, P.; Meyer, S. A. und Schleifer, K. H. (1978):
Staphylococcus hyicus (Sompolinsky 1953) *comb. nov.* and *Staphylococcus hyicus subsp. chromogenes subsp. nov.*
Int J Syst Bacteriol 28. 482-490.

DIN 58940 (1992-1996):
Medizinische Mikrobiologie und Methoden zur Empfindlichkeitsprüfung von bakteriellen Krankheitserregern (außer Mykobakterien) gegen Chemotherapeutika.
Berlin, Beuth-Verlag, Teil 1-20.

Dingwell, R. T.; Leslie, K. E.; Duffield, T. F.; Schukken, Y. H.; DesCoteaux, L.; Keefe, G. P.; Kelton, D. F.; Lissemore, K. D.; Shewfelt, W.; Dick, P. und Bagg, R. (2003):
Efficacy of intramammary tilmicosin and risk factors for cure of *Staphylococcus aureus* infection in the dry period.
J Dairy Sci 86. 159-168.

Djabri, B.; Bareille, N.; Beaudéau, F. und Seegers, H. (2002):
Quater milk somatic cell count in infected dairy cows: a meta-analysis.
Vet Res 33. 335-357.

Döpfer, D.; Barkema, H. W.; Lam, T. J. G. M.; Schukken, Y. H. und Gaastra, W. (1999):
Recurrent clinical mastitis caused by *Escherichia coli* in dairy cows.
J Dairy Sci 82. 80-85.

Döpfer, D.; Schukken, Y. H.; Mezner, R. M. und Petersen, D. (1993):
Betreuungsstrategien zur Sanierung von Milchviehbetrieben mit hohem Zellgehalt in der Tankmilch.
Prakt Tierarzt 74 Coll Vet XXIV. 70-72.

- Doggweiler, R. und Hess, E. (1983):
Zellgehalt in der Milch ungeschädigter Euter.
Milchwissenschaft 38. 5-8.
- Eberhart, R. J. (1986):
Management of dry cows to reduce mastitis.
J Dairy Sci 69. 1721-1732.
- Edinger, D. (2001):
Peripartale Mastitiden bei Erstkalbinnen - Untersuchungen zu Ätiologie und Prophylaxe sowie zu Auswirkungen auf Gesundheit und Leistungsfähigkeit.
Dissertation, Freie Universität Berlin.
- El-Rashidy, A. A.; Fox, L. K. und Gay, J. M. (1992):
Diagnosis of *Staphylococcus aureus* intramammary infection by detection of specific antibody titer in milk.
J Dairy Sci 75. 1430-1435.
- Erskine, R. J.; Bartlett, P. C.; Crawshaw, P. C. und Gombas, D. M. (1994):
Efficacy of intramuscular oxytetracycline as a dry cow treatment for *Staphylococcus aureus* mastitis.
J Dairy Sci 77. 3347-3353.
- Erskine, R. J. und Eberhart, R. J. (1988):
Comparison of duplicate and single quater milk samples for the identification of intramammary infections.
J Dairy Sci 71. 854-856.
- Erskine, R. J.; Eberhart, R. J.; Hutchinson, L. J. und Spencer, S. B. (1987):
Herd management and prevalence of mastitis in dairy herds with high and low somatic cell counts.
J Am Vet Med Assoc 190. 1411-1416.
- Erskine, R. J.; Kirk, J. H.; Tyler, J. W. und DeGraves, F. J. (1993):
Advances in the therapy for mastitis.
Vet Clin North Am Food Anim Pract 9. 499-517.
- Erskine, R. J.; Walker, R. D.; Bolin, C. A.; Bartlett, P. C. und White, D. G. (2002):
Trends in antibacterial susceptibility of mastitis pathogens during a seven-year period.
J Dairy Sci 85. 1111-1118.
- Fetrow, J.; Stewart, S.; Eicker, S.; Farnsworth, R. und Bey, R. (2000):
Mastitis: an economic consideration.
Proc Natl Mastitis Council 39th Annual Meeting. Atlanta, USA. 3-28.

- Fitzgerald, J. R.; Meany, W. J.; Hartigan, P. J.; Smyth, C. J. und Kapur, V. (1997):
Fine-structure molecular epidemiological analysis of *Staphylococcus aureus* recovered from cows.
Epidemiol Infect 119. 261-269.
- Foret, C. J.; Owens, W. E.; Boddie, R. L. und Janowicz, P. (2003):
Efficacy of two iodine teat dips during experimental challenge with *Staphylococcus aureus* and *Streptococcus agalactiae*.
J Dairy Sci 86. 3783-3786.
- Fournier, J. M.; Boutonnier, A. und Bouvet, A. (1989):
Staphylococcus aureus strains which are not identified by rapid agglutination methods are of capsular serotype 5.
J Clin Microbiol 27. 1372-1374.
- Fournier, J. M.; Bouvet, A.; Mathieu, D.; Nato, F.; Boutonnier, A.; Gerbal, R.; Brunengo, P.; Saulnier, C.; Sagot, N.; Slizewicz, B. und Mazie, J. C. (1993):
New latex reagent using monoclonal antibodies to capsular polysaccharide for reliable identification of both oxacillin-susceptible and oxacillin-resistant *Staphylococcus aureus*.
J Clin Microbiol 31. 1342-1344.
- Fox, L. K.; Besser, T. E. und Jackson, S. M. (1996):
Evaluation of coagulase-negative variant *Staphylococcus aureus* as a cause of intramammary infections in a herd of dairy cattle.
J Am Vet Med Assoc 209. 1143-1146.
- Fox, L. K.; Chester, S. T.; Hallberg, J. W.; Nickerson, S. C.; Pankey, J. W. und Weaver, L. D. (1995):
Survey of intramammary Infections in Dairy Heifers at breeding age and first parturition.
J Dairy Sci 78. 1619-1628.
- Fox, L. K. und Gay, J. M. (1993):
Contagious mastitis.
Vet Clin North Am Food Anim Pract 9. 475-487.
- Fox, L. K. und Hancock, D. D. (1989):
Effect of segregation on prevention of intramammary infections by *Staphylococcus aureus*.
J Dairy Sci 72. 540-544.
- Friton, G. M. (1998):
Untersuchung zum Erfolg verschiedener Behandlungsformen bei laktierenden Kühen mit subklinischer Mastitis.
Dissertation, Universität Leipzig.
- Geary, C. und Stevens, M. (1991):
A rapid test to detect the most clinically significant *Staphylococcus* species.
Med Lab Sci 48. 99-105.

- Gillespie, B. E.; Owens, W. E.; Nickerson, S. C. und Oliver, S. P. (1999):
Deoxyribonucleic acid fingerprinting of *Staphylococcus aureus* from heifer mammary secretions and from horn flies.
J Dairy Sci 82. 1581-1585.
- Giraud, J. A.; Calzolari, A.; Rampone, H.; Rampone, A.; Giraud, A. T.; Bogni, C; Larriestra, A. und Nagel, R. (1997):
Field trials of a vaccine against bovine mastitis. 1. Evaluation in heifers.
J Dairy Sci 80. 845-853.
- Godden, S.; Jansen, J. T.; Leslie, K. E.; Smart, N. L. und Kelton, D. F. (2002)
The effect of sampling time and sample handling on the detection of *Staphylococcus aureus* in milk from quaters with subclinical mastitis.
Can Vet J 43. 38-42.
- Gonzalez, R. N.; Jasper, D. E.; Kronlund, N. C.; Farver, T. B.; Cullor, J. S. Bushnell, R. B. und Dellinger, J. D. (1990):
Clinical mastitis in two California dairy herds participating in contagious mastitis control programs.
J Dairy Sci 73. 648-660.
- Gregory, L. (1999):
Die katarrhalische Mastitis des Rindes: Häufigkeit, Ätiologie und Therapie-Statistische Erhebungen an einer Hochschulklinik in den Jahren 1986-1996.
Dissertation, Tierärztliche Hochschule Hannover.
- Griethuysen, A.; Bes, M.; Etienne, J.; Zbinden, R. und Kluytmans, J. (2001):
International multicenter evaluation of latex agglutination tests for identification of *Staphylococcus aureus*.
J Clin Microbiol 39. 86-89.
- Griffin, T. K.; Dodd, F. H. und Bramley, A. J. (1982):
Antibiotic therapy in the control of mastitis.
Proc Brit Cattle Vet Ass 4. 137-152.
- Grommers, F. J.; Van de Geer, D. und in't Veen, C. A. (1985):
Duration of bovine intramammary infections in commercial dairy herds.
Vet Rec 116. 581-584.
- Guidry, A.; Fattom, A.; Patel, A.; O'Brien, C.; Shepherd, S. und Lohuis, J. (1998):
Serotyping scheme for *Staphylococcus aureus* isolated from cows with mastitis.
Am J Vet Res 59. 1537-1539.
- Gupta, H.; McKinnon, N.; Louie, L.; Louie, M. und Simor, A. E. (1998):
Comparison of six rapid agglutination test for the identification of *Staphylococcus aureus*, including methicillin-resistant strains.
Diagn Microbiol Infect Dis 31. 333-336.

- Hallberg, J. W.; Henke, C. L. und Miller, C. C. (1994):
Intramammary antibiotic therapy: to treat or not to treat? Effects of antibiotic therapy on clinical mastitis.
Proc Natl Mastitis Council 33th Annual Meeting. Orlando, Florida. 28-39.
- Hamann, J. (2001):
Interaction between somatic cell count and milk composition.
IDF World Dairy Summit, Auckland, NZ, Kongressbericht auf CD.
- Hamann, J. und Reichmuth, J. (1990):
Exogene Einflüsse auf den Zellgehalt der Milch unter Berücksichtigung des Gesundheitszustandes der Milchdrüse.
Milchwissenschaft 45. 286-290.
- Harmon, R. J. (1994):
Physiology of mastitis and factors affecting somatic cell counts.
J Dairy Sci 77. 2103-2112.
- Harmon, R. J. und Langlois, B. E. (1989):
Mastitis due to coagulase-negative Staphylococcus species.
Agri Practice 10. 29-36.
- Harmon, R. J.; Langlois, B. E. und Akers, K. (1991):
A simple medium for the verification of identity of *Staphylococcus aureus* of bovine origin.
J Dairy Sci 74, Suppl. 1. 202.
- Heeschen, W. (1996):
Einfluß von Eutererkrankungen (Mastitiden) auf die Qualität und hygienische Beschaffenheit von Milch.
Prakt Tierarzt 77. 223-228.
- Heeschen, W. und Hamann, J. (1987):
Die Bedeutung der Zitzendesinfektion im Rahmen der Mastitisbekämpfung.
Tierärztl Umschau 42. 362-369.
- Hillerton, J. E.; Bramley, A. J.; Starker, R. T. und McKinnon, C. H. (1995):
Patterns of intramammary infection and clinical mastitis over a 5 year period in a closely monitored herd applying mastitis control measures.
J Dairy Res 62. 39-50.
- Hoblet, K. H.; Bailey, J. S. und Pritchard, D. E. (1988):
Coagulase-positive staphylococcal mastitis in a herd with low somatic cell counts.
J Am Vet Med Assoc. 192. 777-780.
- Hoedemaker, M. (1995):
Mastitis bei Erstkalbinnen: Ursachen, Therapie und Prophylaxe.
Prakt Tierarzt 76 Coll Vet XXV. 22-25.

- Hoedemaker, M. (2001):
Neuere Aspekte zur Bekämpfung von *Staphylococcus aureus* als Mastitiserreger.
Tierärztl Prax 29. 1-7.
- Hoedemaker, M. und Korff, B. (1999):
Untersuchungen zum Einsatz einer stallspezifischen Vakzine gegen *Staphylococcus aureus* in einem Milchviehbetrieb.
Prakt. Tierarzt 80 Coll Vet XXIX. 68-71.
- Hoedemaker, M.; Korff, B.; Edler, B.; Emmert, M. und Bleckmann, E. (2001):
Dynamics of *Staphylococcus aureus* infections during vaccination with an autogenous bacterin in dairy cattle.
J Vet Med B Infect Dis Vet Public Health 48. 373-383.
- Hogan, J. S.; Cornetta, A. und Pankey, J. W. (1986):
Comparison of four test procedures to identify *Staphylococcus aureus* isolated from bovine intramammary infections.
Am J Vet Res 47. 2017-2019.
- Hogan, J. S.; Smith, K. L.; Hoblet, K. H.; Todhunter, D. A.; Schoenberger, P. S.; Hueston, W. D.; Pritchard, D. E.; Bowman, G. L.; Heider, L. E.; Brocknett, B. L. und Conrad, H. R. (1989b):
Bacterial counts in bedding material used on nine commercial dairies.
J Dairy Sci 72. 1547-1556.
- Hogan, J. S.; Smith, K. L.; Hoblet, K. H.; Todhunter, D. A.; Schoenberger, P. S.; Hueston, W. D.; Pritchard, D. E.; Bowman, G. L.; Heider, L. E.; Brockett, B. L. und Conrad, H. R. (1989a):
Field survey of clinical mastitis in low somatic cell count herds.
J Dairy Sci 72. 1547-1556.
- Hogan, J. S.; Smith, K. L.; Todhunter, D. A. und Schoenberger, P. S. (1988a):
Sensitivity and specificity of latex agglutination tests used to identify *Streptococcus agalactiae* and *Staphylococcus aureus* isolated from bulk tank milk.
Am J Vet Res 49. 1537-1539.
- Hogan, J. S.; Smith, K. L.; Todhunter, D. A. und Schoenberger, P. S. (1988b):
Rate of environmental mastitis in quarters infected with *Corynebacterium bovis* and staphylococcus species.
J Dairy Sci 71. 2520-2525.
- Hogan, J. S.; Smith, K. L.; Todhunter, D. A. und Schoenberger, P. S. (1990):
Bacterial counts associated with recycled newspaper bedding.
J Dairy Sci 73. 1756-1761.

Honkanen-Buzalski, T.; Griffin, T. K. und Dodd, F. H. (1984):
Observations on *Corynebacterium bovis* infection of the bovine mammary gland. I. Natural infection.
J Dairy Res 51. 371-378.

Honkanen-Buzalski, T.; Mylly, V. und Pyörälä, S. (1994):
Bovine clinical mastitis due to coagulase-negative staphylococci and their susceptibility to antimicrobials.
Zentralbl Vet Med B 41. 344-350.

Hutton, C. T.; Fox, L. K. und Hancock, D. D. (1990):
Mastitis control practices: Differences between herds with high and low milk somatic cell counts.
J Dairy Sci 73. 1135-1143.

International Dairy Federation (1967):
Definition of mastitis.
In: International Dairy Federation: Ann Bull Part 3. IDF Bruxelles. 1-5.

International Dairy Federation (1971):
A monograph on bovine mastitis - Part I.
In: International Dairy Federation: Ann Bull Part 2. IDF Bruxelles.

Jain, N. C. (1979):
Common mammary pathogens and factors in infection and mastitis.
J Dairy Sci 62. 128-134.

Janda, W. M.; Ristow, K. und Novak, D. (1994):
Evaluation of RAPIDEC staph for identification of *Staphylococcus aureus*, *Staphylococcus epidermidis* and *Staphylococcus saprophyticus*.
J Clin Microbiol 32. 2056-2059.

Jasper, D. E.; Dellinger, J. D. und Bushnell, R. R. (1974):
Agreement of duplicate samples of milk for the evaluation of quarter infection.
Am J Vet Res 35. 1371-1373.

Jayarao, B. M.; Bassam, B. J.; Caetano-Anolles, G.; Gresshoff, P. M. und Oliver, S. P. (1992):
Subtyping of *Streptococcus uberis* by DNA amplification fingerprinting.
J Clin Microbiol 30. 1347-1350.

Jayarao, B. M.; Schilling, E. E. und Oliver, S. P. (1993):
Genomic deoxyribonucleic acid restriction fragment length polymorphism of *Streptococcus uberis*: evidence of clonal diversity.
J Dairy Sci 76. 468-474.

Jones, M. A. S. und Shannon, A. D. (1972):

The control of the level of staphylococcal contamination of the bovine udder by shed management.

N Z Vet J 20. 179-182.

Joo, Y. S.; Fox, L. K.; Davis, W. C.; Bohach, G. A. und Park, Y. H. (2001):

Staphylococcus aureus associated with mammary glands of cows: genotyping to distinguish different strains among herds.

Vet Microbiol 80. 1381-1388.

Kapur, V.; Sischo, M.; Greer, R. S.; Whittam, T. S. und Musser, J. M. (1995):

Molecular population genetic analysis of *Staphylococcus aureus* recovered from cows.

J Clin Microbiol 33. 376-380.

Kasche, S. (1995):

Pathogenese und Therapie der Staphylokokkenmastitis des Rindes. Eine Literaturstudie.

Dissertation, Tierärztliche Hochschule Hannover.

Khan, I. U.; Hassan, A. A.; Abdulmawjood, A.; Lämmeler, C.; Wolter, W. und Zschöck, M. (2003):

Identification and epidemiological characterization of *Streptococcus uberis* isolated from bovine mastitis using conventional and molecular methods.

J Vet Sci 4. 213-223.

Kirk, J. H. (1991):

Diagnosis and treatment of difficult mastitis cases. Part 1: Staphylococcus and Pseudomonas.

Agri Practice 12. 5-8.

Kitchen, B. J. (1981):

Review of progress of dairy science: bovine mastitis: milk compositional changes and related diagnostic tests.

J Dairy Res 48. 167.

Klaas, I. C. (2000):

Untersuchungen zum Auftreten von Mastitiden und zur Tiergesundheit in 15 Milchviehbetrieben Schleswig-Holsteins.

Dissertation, Christian-Albrechts-Universität zu Kiel.

Klastrup, O. (1963):

Mastitis control in Denmark. Procedures and Experiences.

Bull Off Int Epiz 60. 501-511.

Köster, G. (2004):

Einflüsse auf die Eutergesundheit und Verbreitung von Mastitiserregern sowie deren Resistenzlage in Brandenburger Milchviehbetrieben.

Dissertation, Freie Universität Berlin.

- Krabisch, P.; Gangl, A.; Wittkowski, G. und Fehlings, K. (1999):
Prävalenz der Antibiotika-Resistenz in Milchviehherden bei Infektionserregern mit human-
medizinischer Bedeutung.
Chemotherapie J 6. 210-218.
- Lam, T. J.; Lipman, L. J.; Schukken, Y. H.; Gaastra, W. und Brand, A. (1996):
Epidemiological characteristics of bovine clinical mastitis caused by *Staphylococcus aureus*
and *Escherichia coli* studied by DNA-fingerprinting.
Am J Vet Res 57. 39-42.
- Lam, T. J.; Pengov, A.; Schukken, Y. H.; Smit, J. A. und Brand, A. (1995):
The differentiation of *Staphylococcus aureus* from other Micrococcaceae isolated from bo-
vine mammary glands.
J Appl Bacteriol 79. 69-72.
- Lam, T. J.; Schukken, Y. H.; van Vliet, J. H.; Grommers, F. J.; Tielen, M. J. und Brand, A.
(1997a):
Effect of natural infection with minor pathogens on susceptibility to natural infection with
major pathogens in the bovine mammary gland.
Am J Vet Res 58. 17-22.
- Lam, T. J.; Van Vliet, J. H.; Schukken, Y. H.; Grommers, F. J.; Van Velden-Russcher, A.;
Barkema, H. W. und Brand, A. (1997b):
The effect of discontinuation of postmilking teat disinfection in low somatic cell count herds.
II. Dynamics of intramammary infections.
Vet Q 19. 47-53.
- Lange, C.; Cardoso, M.; Senczek, D. und Schwarz, S. (1999):
Molecular subtyping of *Staphylococcus aureus* isolates from cases of bovine mastitis in Bra-
zil.
Vet Microbiol 67. 127-141.
- Larsen, H. D.; Aarestrup, F. M. und Jensen, N. E. (2002):
Geographical variation in the prevalence of genes encoding superantigenetic exotoxines and
beta-hemolysin among *Staphylococcus aureus* isolated from bovine mastitis in Europe and
USA.
Vet Microbiol 85. 61-67.
- Larsen, H.; Sloth, K. H.; Elsberg, C.; Enevoldsen, C.; Pedersen, L. H.; Eriksen, N. H.; Aar-
strup, F. M. und Jensen, N. E. (2000):
The dynamics of *Staphylococcus aureus* intramammary infection in nine Danish dairy herds.
Vet Microbiol 71. 89-101.
- Lee, C. S.; Wooding, F. B. P. und Kemp, P. (1980):
Identification properties, and differential counts of cell population using electron microscopy
of dry cow secretions, colostrum and milk from normal cows.
J Dairy Res 47. 39-50.

- Lipman, L. J.; de Nijs, A.; Lam, T. J. und Gaastra, W. (1995):
Identification of *Escherichia coli* strains from cows with clinical mastitis by serotyping and DNA polymorphism patterns with REP and ERIC primers.
Vet Microbiol 43. 13-19.
- Lipman, L. J.; de Nijs, A.; Lam, T. J.; Rost, J. A.; van Dijk, L.; Schukken, Y. H. und Gaastra, W. (1996):
Genotyping by PCR, of *Staphylococcus aureus* strains, isolated from mammary glands of cows.
Vet Microbiol 48. 51-55.
- Mackie, D. P.; Pollock, D. A.; Rodgers, S. P. und Logan, E. F. (1987):
Phage typing of *Staphylococcus aureus* associated with subclinical bovine mastitis.
J Dairy Res 54. 1-5.
- Makovec, J. A. und Ruegg, P. L. (2003):
Results of Milk Samples Submitted for Microbiological Examination in Wisconsin from 1994 to 2001.
J Dairy Sci 86. 3466-3472.
- Marcos, J. Y.; Soriano, A. C.; Salazar, M. S.; Moral, C. H.; Ramos, S. S.; Smeltzer, M. S. und Carrasco, G. N. (1999):
Rapid Identification and typing of *Staphylococcus aureus* by PCR-Restriction Fragment Length Polymorphism Analysis of the *aroA* Gene.
J Clin Microbiol 37. 570-574.
- Martin, F.; Failing, K.; Wolter, W.; Kloppert, B. und Zschöck, M. (2002):
Effect of parity and period of lactation on prevalence of mastitis pathogens in quarters with high somatic cell count (SCC>100.000/ml).
Milchwissenschaft 57. 183-187.
- Matos, J. S.; White, D. G.; Harmon, R. J. und Langlois, B. E. (1991):
Isolation of *Staphylococcus aureus* from sites other than the lactating mammary gland.
J Dairy Sci 74. 1544-1549.
- Matthews, K. R.; Harmon, R. J. und Langlois, B. E. (1991):
Effect of naturally occurring coagulase-negative staphylococci infections on new infections by mastitis pathogens in the bovine.
J Dairy Sci 74. 1855-1859.
- Matthews, K. R.; Harmon, R. J. und Langlois, B. E. (1992a):
Prevalence of *Staphylococcus* species during the periparturient period in primiparous and multiparous cows.
J Dairy Sci 75. 1835-1839.

- Matthews, K. R.; Jayarao, B. M. und Oliver, S. P. (1992):
Restriction endonuclease fingerprinting of genomic DNA of *Staphylococcus* species of bovine origin.
Epidemiol Infect 109. 59-68.
- Matthews, K. R.; Kumar, S. J.; O'Connor, S. A.; Harmon, R. J.; Pankey, J. W.; Fox, L. K. und Oliver, S. P. (1994):
Genomic fingerprints of *Staphylococcus aureus* of bovine origin by polymerase chain reaction-based DNA fingerprinting.
Epidemiol Infect 112. 177-186.
- Mellenberger, R. W. und Troyer, B. (1994):
Control of *Staphylococcus aureus* through herd segregation.
Proc Natl Mastitis Council 33th Annual Meeting. Orlando, Florida. 364-365.
- Merl, K.; Abdulmawjood, A.; Lämmler, C. und Zschöck, M. (2003):
Determination of epidemiological relationships of *Streptococcus agalactiae* isolated from bovine mastitis.
FEMS Microbiol Lett 226. 87-92.
- Mielke, H. und Michel, G. (1994):
Schutz und Abwehrmechanismen (Immunologie) des Rindereuters.
In: Euter- und Gesäugekrankheiten. / K. Wendt, Bostedt, H., Mielke, H., Fuchs, H.-W. (Hrsg.). Gustav Fischer Verlag Jena, Stuttgart. 94-105.
- Myllys, V. (1995):
Staphylococci in heifer mastitis before and after parturition.
J Dairy Res 62. 51-60.
- Myllys, V.; Asplund, K.; Brofeldt, E.; Hirvelä-Koski, V.; Honkanen-Buzalski, T.; Junttila, J.; Kulkas, L.; Myllykangas, O.; Niskanen, M.; Saloniemi, M. und Saranpää, T. (1998):
Bovine mastitis in Finland in 1988 and 1995 – Changes in prevalence and antimicrobial resistance.
Acta Vet Scand 39. 119-126.
- Myllys, V.; Ridell, J.; Björkroth, J.; Biese, I. und Pyörälä, S. (1997):
Persistence in bovine mastitis of *Staphylococcus aureus* clones as assessed by random amplified polymorphic DNA analysis, ribotyping and biotyping.
Vet Microbiol 57. 245-51.
- Natzke, R. P.; Everett, R. W. und Postle, D. S. (1972):
Normal milk somatic cell counts.
J Milk Food Techn 35. 261-263.
- Neave, F. K.; Dodd, F. H.; Kingwill, R. G. und Westgarth, D. R. (1969):
Control of mastitis in the dairy herd by hygiene and management.
J Dairy Sci 52. 696-707.

- Nickerson, S. C. und Boddie, R. L. (1994):
Effect of naturally occurring coagulase-negative staphylococcal infections on experimental challenge with major mastitis pathogens.
J Dairy Sci 77. 2526-2536.
- Nickerson, S. C.; Owens, W. E. und Boddie, R. L. (1995):
Mastitis in dairy heifers: initial studies on prevalence and control.
J Dairy Sci 78. 1607-1618.
- Nordhaug, M. L.; Nesse, L. L.; Norcross, N. L. und Gudding, R. (1994):
A field trial with an experimental vaccine against *Staphylococcus aureus* mastitis in cattle. 1. Clinical parameters.
J Dairy Sci 77. 1267-1275.
- Oliver, S. P.; Gillespie, B. E.; Headrick, S. J.; Moorehead, H.; Lunn, P.; Dowlen, H. H.; Johnson, D. L.; Lamar, K. C.; Chester, S. T. und Moseley, W. M. (2004):
Efficacy of extended ceftiofur intramammary therapy for treatment of subclinical mastitis in lactating dairy cows.
J Dairy Sci 87. 2393-2400.
- Oliver, S. P.; Gillespie, B. E. und Jayarao, B. M. (1998):
Detection of new and persistent *Streptococcus uberis* and *Streptococcus dysgalactiae* intramammary infections by polymerase chain reaction-based DNA fingerprinting.
FEMS Microbiol Lett 160. 69-73.
- Oliver, S. P. und Jayarao, B. M. (1997):
Coagulase-negative staphylococcal intramammary infections in cows and heifers during the nonlactating periparturient periods.
J Vet Med B 44. 355-363.
- Oliver, S. P. und Mitchell, B. A. (1983a):
Intramammary infections in primigravid heifers near parturition.
J Dairy Sci 66. 1180-1183.
- Oliver, S. P. und Mitchell, B. A. (1983b):
Susceptibility of bovine mammary gland to infections during the dry period.
J Dairy Sci 66. 1162-1166.
- Ollis, G. W.; Rawluk, S. A.; Schoonderwoerd, M. und Schipper, C. (1995):
Detection of *Staphylococcus aureus* in bulk tank milk using modified Baird-Parker culture media.
Can Vet J 36. 619-623.
- Owens, W. E.; Nickerson, S. C.; Boddie, R. L.; Tomita, G. M. und Ray, C. H. (2001):
Prevalence of mastitis in dairy heifers and effectiveness of antibiotic therapy.
J Dairy Sci 84. 814-817.

Owens, W. E.; Nickerson, S. C.; Boddie, R. L. und Watts, J. L. (1988):
Antibiotic treatment of mastitis: Comparison of intramammary and intramammary plus intramuscular therapies.
J Dairy Sci 71. 3143-3147.

Owens, W. E.; Nickerson, S. C. und Ray, C. H. (1999):
Efficacy of parenterally or intramammarily administered tilmicosin or ceftiofur against *Staphylococcus aureus* mastitis during lactation.
J Dairy Sci 82. 645-647.

Owens, W. E.; Oliver, S. P.; Gillespie, B. E.; Ray, C. H. und Nickerson, S. C. (1998):
Role of horn flies (*Haematobia irritans*) in *Staphylococcus aureus*-induced mastitis in dairy heifers.
Am J Vet Res 59. 1122-1124.

Owens, W. E.; Ray, C. H.; Boddie, R. L. und Nickerson, S. C. (1997):
Efficacy of sequential intramammary antibiotic treatment against chronic *S. aureus* intramammary infections.
Large Animal Practice 18. 10-12.

Pankey, J. W. (1989):
Premilking udder hygiene.
J Dairy Sci 72. 1308-1312.

Pankey, J. W.; Barker, R. M.; Twomey, A. und Duirs, G. (1982):
Comparative efficacy of dry-cow treatment regimes against *Staphylococcus aureus*.
N Z Vet J 30. 13-15.

Pankey, J. W.; Drechsler, P. A. und Wildman, E. E. (1991):
Mastitis prevalence in primigravid heifers at parturition.
J Dairy Sci 74. 1550-1552.

Pankey, J. W.; Nickerson, S. C.; Boddie, R. L. und Hogan, J. S. (1985):
Effects of *Corynebacterium bovis* infection on susceptibility to major mastitis pathogens.
J Dairy Sci 68. 2684-2693.

Patel, J. B. (2001):
16S rRNA gene sequencing for bacterial pathogen identification in the clinical laboratory.
Mol Diagn 6. 313-321.

Personne, P.; Bes, M.; Lina, G.; Vandenesch, F.; Brun, Y. und Etienne, J. (1997):
Comparative performances of six agglutination kits assessed by using typical and atypical strains of *Staphylococcus aureus*.
J Clin Microbiol 35. 1138-1140.

Philpot, W. N. (1979):
Control of mastitis by hygiene and therapy.
J Dairy Sci 62. 168-176.

- Philpot, W. N. (1984):
Economics of mastitis control.
Vet Clin North Am Large Anim Pract 6. 233-245.
- Poutrel, B. (1978):
Study of factors influencing the effectiveness of two treatments, penicillin-streptomycin and rifamycin, against experimentally induced staphylococcal mastitis in lactating cows.
Ann Rech Vet 9. 471-487.
- Poutrel, B. und Lerondelle, C. (1980):
Protective effect in the lactating bovine mammary gland induced by coagulase-negative staphylococci against experimental *Staphylococcus aureus* infections.
Ann Rech Vet 11. 327-332.
- Raimundo, O.; Deighton, M.; Capstick, J. und Gerraty, N. (1999):
Molecular typing of *Staphylococcus aureus* of bovine origin by polymorphisms of the coagulase gene.
Vet Microbiol 66. 275-284.
- Rainard, P. und Poutrel, B. (1982):
Dynamics of nonclinical bovine intramammary infections with major and minor pathogens.
Am J Vet Res 43. 2143-2146.
- Rainard, P. und Poutrel, B. (1988):
Effect of naturally occurring intramammary infections by minor pathogens on new infections by major pathogens in cattle.
Am J Vet Res 49. 327-329.
- Rampone, H.; Bogni, C.; Giraudo, J. und Calzolari, A. (1993):
Identification of staphylococci from milk in Argentina.
Zbl Bakt 279. 537-543.
- Reppel, C.; Falkenberg, U.; Jung, M. und Heuwieser, W. (2005):
Comparison of the strains of *Staphylococcus aureus* between dairy cows and heifers at time of calving.
Proc Natl Mastitis Council 44th Annual Meeting. Orlando, Florida. 283-284.
- Rivas, A. L.; Gonzalez, R. N.; Wiedmann, M.; Bruce, J. L.; Cole, E. M.; Bennett, G. J.; Schulte, H. F.; Wilson, D. J.; Mohammed, H. O. und Batt, C. A. (1997):
Diversity of *Streptococcus agalactiae* and *Staphylococcus aureus* ribotypes recovered from New York dairy herds.
Am J Res 58. 482-487.
- Roberson, J. R.; Fox, L. K.; Hancock, D. D. und Besser, T. E. (1992):
Evaluation of methods for differentiation of coagulase-positive staphylococci
J Clin Microbiol 30. 3217-3219.

- Roberson, J. R.; Fox, L. K.; Hancock, D. D.; Gay, C. C. und Besser, T. E. (1994a):
Coagulase positive *Staphylococcus* intramammary infections in primiparous dairy cows.
J Dairy Sci 77. 958-969.
- Roberson, J. R.; Fox, L. K.; Hancock, D. D.; Gay, J. M. und Besser, T. E. (1994b):
Ecology of *Staphylococcus aureus* isolated from various sites on dairy farms.
J Dairy Sci 77. 3354-3364.
- Roberson, J. R.; Fox, L. K.; Hancock, D. D.; Gay, J. M. und Besser, T. E. (1996):
Prevalence of coagulase-positive staphylococci, other than *Staphylococcus aureus*, in bovine
mastitis.
Am J Vet Res 57. 54-58.
- Roberson, J. R.; Fox, L. K.; Hancock, D. D.; Gay, J. M. und Besser, T. E. (1998):
Sources of intramammary infections from *Staphylococcus aureus* in dairy heifers at first
parturition.
J Dairy Sci. 81. 687-693.
- Röder, R. (1985):
Beziehung zwischen Zellgehalt und bakteriologischem Befund von Viertelgemelksproben
beim Deutschen Fleckvieh.
Dissertation. Ludwig-Maximilians-Universität München.
- Ruloff, U. (1997):
Untersuchungen über Art und Häufigkeit intramammärer Infektionen bei Färsen ante und post
partum in einem norddeutschen Hochzuchtgebiet und die Effizienz präpartaler antibiotischer
Behandlungen.
Dissertation, Tierärztliche Hochschule Hannover.
- Sabour, P. M.; Gill, J. J.; Lepp, D.; Pacan, J. C.; Ahmed, R.; Dingwell, R. und Leslie, K.
(2004):
Molecular typing and distribution of *Staphylococcus aureus* isolates in Eastern Canadian
dairy herds.
J Clin Microbiol 42. 3449-3455.
- Saijonmaa-Koulumies, L. E.; Myllys, V. und Lloyd, D. H. (2003):
Diversity and stability of the *Staphylococcus intermedius* flora in three bitches and their pup-
pies.
Epidemiol Infect 131. 931-937.
- Sandholm, M.; Kaartinen, L. und Pyörälä, S. (1990):
Bovine mastitis – why does antibiotic therapy not always work? An overview.
J Vet Pharm Ther 13. 248-260.

- Schröter, K. (2003):
Epidemiologische Untersuchungen zur minimalen Hemmkonzentration von tierpathogenen Bakterien der Krankheitskomplexe „Mastitis des Milchrindes“ und „respiratorische Erkrankungen des Mastschweines“.
Dissertation, Freie Universität Berlin.
- Schukken, Y. H.; Erb, H. N.; Sears, P. M. und Smith, R. D. (1988):
Ecologic study of the risk factors for environmental mastitis in cows.
Am J Vet Res 49. 766-769.
- Schukken, Y. H.; Van de Geer, D.; Grommers, F. J.; Smith, J. A. H. und Brand, A. (1989a):
Intramammary infections and risk factors for clinical mastitis in herds with low somatic cell counts in bulk milk.
Vet Rec 125. 393-396.
- Schukken, Y. H.; Grommers, F. J.; van de Geer, D. und Brand, A. (1989b):
Incidence of clinical mastitis on farms with low somatic cell counts in bulk milk.
Vet Rec 125. 60-63.
- Schukken, Y. H.; Grommers, F. J.; van de Geer, D.; Erb, H. N. und Brand, A. (1991):
Risk factors for clinical mastitis in herds with a low bulk milk somatic cell count. 2. Risk factors for *Escherichia coli* and *Staphylococcus aureus*.
J Dairy Sci 74. 826-832.
- Schukken, Y. H.; Leslie, K. E.; Barnum, D. A.; Mallard, B. A.; Lumsden, J. H.; Dick, P. C.; Vessie, G. H. und Kehrl, M. E. (1999):
Experimental *Staphylococcus aureus* intramammary challenge in late lactating dairy cows: quarter and cow effects determining the probability of infection.
J Dairy Sci 82. 2393-2401.
- Schukken, Y. H.; Leslie, K. E.; Lam, T. J. G. M. und Sol, J. S. (1993):
Staphylococcus aureus: incidence, prevalence and risk factors for intramammary infection.
Proc Natl Mastitis Council 32th Annual Meeting. 19-26.
- Schultz, L. H.; Brown, R. W.; Jasper, D. E.; Mellenberger, R. W.; Natzke, R. P.; Philpot, W. N.; Smith, J. W. und Thompson, P. D. (1978):
The problem of bovine mastitis. In: Current concepts of bovine mastitis.
Proc Natl Mastitis Council 17th Annual Meeting. Arlington, Va.. 6-9.
- Schulz, J. (1994):
Erkrankungen der Milchdrüse des Rindes. Grundsätze.
In: Euter- und Gesäugekrankheiten. / K. Wendt, Bostedt, H., Mielke, H., Fuchs, H.-W. (Hrsg.). Gustav Fischer Verlag Jena, Stuttgart. 226-238.
- Sears, P. M.; Smith, B. S.; English, P. B.; Herer, P. S. und Gonzalez, R. N. (1990):
Sheeding pattern of *Staphylococcus aureus* from bovine intramammary infections.
J Dairy Sci 73. 2785-2789.

Seffner, W. und Bergmann, A. (1994):

Staphylokokken-Infektionen.

In: Euter- und Gesäugekrankheiten. / K. Wendt, Bostedt, H., Mielke, H., Fuchs, H.-W. (Hrsg.). Gustav Fischer Verlag Jena, Stuttgart. 349-359.

Selbitz, H. J. (2002):

Infektionen und Krankheiten durch grampositive Kokken.

In: Medizinische Mikrobiologie, Infektions- und Seuchenlehre. / M. Rolle, Mayer, A. (Hrsg.). Enke Verlag, Stuttgart. 506-518.

Sheldrake, R. F. und Hoare, R. J. (1980):

Effect of a disinfectant udder wash and a postmilking teat dip on the bacterial population of the teat end and on the rate of new intramammary infection.

J Dairy Res 47. 253-258.

Sheldrake, R. F.; Hoare, R. J. und McGregor, G. D. (1983):

Lactation stage, parity, and infection affecting somatic cells, electrical conductivity, and serum albumin in milk.

J Dairy Sci 66. 542-547.

Shkreta, L.; Talbot, B. G.; Diarra, M. S. und Lacasse, P. (2004):

Immune responses to a DNA/protein vaccination strategy against *Staphylococcus aureus* induced mastitis in dairy cows.

Vaccine 23. 114-126.

Sischo, W. M.; Heider, L. E.; Miller, G. Y. und Moore, D. A. (1993):

Prevalence of contagious pathogens of bovine mastitis and use of mastitis control practices.

J Am Vet Med Assoc 202. 595-600.

Smith, K. L. (1983):

Mastitis control: a discussion.

J Dairy Sci 66. 1790-1794.

Smith, T. H.; Fox, L. K. und Middleton, J. R. (1998):

Outbreak of mastitis cause by one strain of *Staphylococcus aureus* in a closed dairy herd.

J Am Vet Med Ass 212. 553-556.

Smith, E. M.; Green, L. E.; Medley, G. F.; Bird, H. E. und Dowson, C. G. (2005):

Multilocus sequence typing of *Staphylococcus aureus* isolated from high-somatic-cell-count cows and the environment of an organic dairy farm in the United Kingdom.

J Clin Microbiol 43. 4731-4736.

Smith, K. L. und Hogan, J. S. (1993):

Environmental Mastitis.

Vet Clin North Am Food Anim Pract 9. 489-498.

- Smith, K. L. und Hogan, J. S. (1995):
Epidemiology of mastitis.
Proc 3rd IDF International Mastitis Seminar, Tel-Aviv, Israel. 3-13.
- Smith, K. L.; Todhunter, D. A. und Schoenberger, P. S. (1985a):
Environmental mastitis: cause, prevalence, prevention.
J Dairy Sci 68. 1531-1553.
- Smith, K. L.; Todhunter, D. A. und Schoenberger, P. S. (1985b):
Environmental pathogens and intramammary infection during the dry period.
J Dairy Sci 68. 402-417.
- Smole, S. C.; Aronson, E.; Durbin, A.; Brecher, S. M. und Arbeit, R. D. (1998):
Sensitivity and specificity of an improved rapid latex agglutination test for identification of methicillin-sensitive and -resistant *Staphylococcus aureus* isolates.
J Clin Microbiol 36. 1109-1112.
- Soback, S.; Ziv, G.; Winkler, M. und Saran, A. (1990):
Systemic dry cow therapy - a preliminary report.
J Dairy Sci 73. 661-666.
- Sobiraj, A.; Illing, C.; Friebel, H.; Bartel, K. und Richter, A. (2000):
Heilungsrate bei Kühen mit subklinischer und unspezifischer Mastitis durch den Einsatz von antibiotikahaltigen Langzeitpräparaten zum Zeitpunkt des Trockenstellens, gleichzeitig eine Vergleichsstudie.
Tierärztl Umschau 55. 315-320.
- Sobiraj, A.; Kron, A.; Schollmeyer, U. und Failing, K. (1997):
Bundesweite Untersuchung zur Erregerverteilung und In-vitro-Resistenz euterpathogener Bakterien in der Milch von Kühen mit subklinischer Mastitis.
Tierärztl Prax 25. 108-115.
- Sol, J.; Sampimon, O. C.; Barkema, H. W. und Schukken, Y. H. (2000):
Factors associated with cure after therapy of clinical mastitis caused by *Staphylococcus aureus*.
J Dairy Sci 83. 278-284.
- Sol, J.; Sampimon, O. C.; Snoep, J. J. und Schukken, Y. H. (1994):
Factors associated with bacteriological cure after dry cow treatment of subclinical staphylococcal mastitis with antibiotics.
J Dairy Sci 77. 75-79.
- Sol, J.; Sampimon, O. C.; Snoep, J. J. und Schukken, Y. H. (1997):
Factors associated with bacterial cure during lactation after therapy for subclinical mastitis caused by *Staphylococcus aureus*.
J Dairy Sci 80. 2803-2808.

- Sommerhäuser, J. (2001):
Untersuchung mittels Geno- und Phänotypisierung zur Epidemiologie von *Staphylococcus aureus* als Erreger subklinischer Mastitiden in hessischen Milcherzeugerbetrieben im Zuge von Bestandssanierungen.
Dissertation, Universität Leipzig.
- Sommerhäuser, J.; Kloppert, B.; Wolter, W.; Zschöck, M.; Sobiraj, A. und Failing, K. (2003):
The epidemiology of *Staphylococcus aureus* infections from subclinical mastitis in dairy cows during a control programme.
Vet Microbiol 96. 91-102.
- Storper, M. und Ziv, G. (1985):
Multiple and combination dry period antibiotic therapy of *Staphylococcus aureus*.
Kieler Milchwirtsch Forschungsber 37. 533-537.
- Su, C.; Herbelin, C.; Frieze, N.; Skardova, O. und Sordillo, L. M. (1999):
Coagulase gene polymorphism of *Staphylococcus aureus* isolates from dairy cattle in different geographical areas.
Epidemiol Infect 122. 329-336.
- Sutra, L. und Poutrel, B. (1990):
Detection of capsular polysaccharide in milk of cows with intramammary infections caused by *Staphylococcus aureus*.
Am J Vet Res 51. 1857-1859.
- Tenhagen, B.-A.; Köster, G., Wallmann, J. und Heuwieser, W. (2006):
Prevalence of mastitis pathogens and their resistance against antimicrobial agents in dairy cows in Brandenburg, Germany.
J Dairy Sci. In Druck.
- Tenover, F. C.; Arbeit, R. D.; Goering, R. V.; Mickelsen, P. A.; Murray, B. E.; Persing, D. H. und Swaminathan, B. (1995):
Interpreting chromosomal DNA restriction patterns produced by pulsed-field gel electrophoresis: criteria for bacterial strain typing.
J Clin Microbiol 33. 2233-2239.
- Thörne, H. und Wallmark, G. (1960):
Studies on staphylococcal mastitis on an individual herd with special regard to phage Types of isolated staphylococci.
Acta Vet Scand 1. 114-120.
- Timms, L. L. und Schultz, L. H. (1987):
Dynamics and significance of coagulase-negative staphylococcal intramammary infections.
J Dairy Sci. 70. 2648-2657.
- Todhunter, D. A.; Smith, K. L. und Hogan, J. S. (1995):
Environmental streptococcal intramammary infections of the bovine mammary gland.
J Dairy Sci 78. 2366-2374.

- Todhunter, D. A.; Smith, K. L.; Hogan, J. S. und Schoenberger, P. S. (1991):
Gram-negative bacterial infections of mammary gland in cows.
Am J Vet Res 52. 184-188.
- Tolle, A. (1982)
Die subklinische Kokkenmastitis des Rindes.
Zentralbl Vet Med B 29. 329-358.
- Tolle, A.; Heeschen, W. und Hamann, J. (1977):
Grundlagen einer systematischen Bekämpfung der subklinischen Mastitis des Rindes.
Kieler Milchwirtsch Forschungsber 29. 3-103.
- Tollersrud, T.; Kenny, K.; Reitz, A. J. und Lee, J. C. (2000):
Genetic and Serologic Evaluation of Capsule Production by Bovine Mammary Isolates of
Staphylococcus aureus and Other *Staphylococcus* spp. from Europe and the United States.
J Clin Microbiol 38. 2998-3003.
- Tyler, K. D.; Wang, G.; Tyler, S. D. und Johnson, W. M. (1997):
Factors affecting the reliability and reproducibility of amplification-based DNA fingerprint-
ing of representative bacterial pathogens.
J Clin Microbiol 35. 339-346.
- Uehlinger, P. (1999):
Untersuchung über die Effektivität einer zusätzlichen parenteralen Applikation von Antibi-
otika bei der Behandlung von chronischen Mastitiden.
Dissertation, Universität Zürich.
- van Belkum, A. (1995):
DNA fingerprinting of medically important microorganisms by use of PCR.
Clin Microbiol Rev 7. 174-184.
- van Belkum, A.; Bax, R.; van der Straaten, P. J. C.; Quint, W. G. V. und Veringa, E. (1994):
PCR fingerprinting for epidemiological studies of *Staphylococcus aureus*.
J Microbiol Methods 20. 235-247.
- Wallace, R. L.; Queen, W. G.; Hoblet, K. H. und Hogan, J. S. (1998):
Evaluation of an acriflavine disk assay for differentiating *Staphylococcus aureus* from other
staphylococci isolated from bovine milk.
J Am Vet Med Assoc 213. 394-398.
- Wang, S. M.; Deighton, M. A.; Capstick, J. A. und Gerraty, N. (1999):
Epidemiological typing of bovine streptococci by pulsed-field gel electrophoresis.
Epidem Infect 123. 317-324.
- Warn, G. E.; Madl, J. E. und Lyon, R. H. (1981):
Mannitol agar for microbiologic diagnosis of bovine mastitis.
J Am Vet Med Assoc 178. 1061-1064.

- Watson D. L.; McColl, M. L. und Davies, H. I. (1996):
Field trial of al staphylococcal mastitis vaccine in dairy herds: clinical, subclinical and microbiological assessments.
Aust Vet J 74. 447-450.
- Watts, J. L. (1988):
Characterization and identification of streptococci isolated from bovine mammary glands.
J Dairy Sci 71. 1616-1624.
- Watts, J. L. und Owens, W. E. (1988):
Evaluation of the rapid mastitis test for identification of *Staphylococcus aureus* and *Streptococcus agalactiae* isolated from bovine mammary glands.
J Clin Microbiol 26. 672-674.
- Watts, J. L. und Owens, W. E. (1989):
Prevalence of staphylococcal species in four dairy herds.
Res Vet Sci 46. 1-4.
- Watts, J. F.; Pankey, W. und Nickerson, S. C. (1984):
Evaluation of the Staph-Ident and STAPHase Systems for Identification of Staphylococci from bovine intramammary infections.
J Clin Microbiol 20. 448-452.
- Watts, J. L.; Ray, C. H. und Washburn, P. J. (1991):
A convenient method for differentiation of coagulase-negative staphylococci isolated from bovine mammary glands.
J Dairy Sci 74. 426-428.
- Weide-Botjes, M.; Kobe, B. und Schwarz, S. (1998):
Inter- and intra-phage type differentiation of *Salmonella enterica subsp. enterica* serovar Enteritidis isolates using molecular typing methods.
Zentralbl Bakteriologie 288. 181-193.
- Weiss, E. (1999):
Geschlechtsorgane.
In: Grundriss der speziellen pathologischen Anatomie der Haustiere. / E. Dahme, Weiss, E. (Hrsg.). Enke Verlag Stuttgart, 270-313.
- Wichelhaus, T. A.; Schäfer, V. und Brade, V. (2000):
Typisierungsverfahren in der Infektionsepidemiologie.
Chemotherapie J 9. 93-98.
- Wieliczko, R. J.; Williamson, J. H.; Cursons, R. T.; Lacy-Hulbert, S. J. und Woolford, M. W. (2002):
Molecular Typing of *Streptococcus uberis* Strains Isolated from Cases of Bovine Mastitis.
J Dairy Sci 85. 2149-2154.

- Wilson, D. J.; Gonzalez, R. N.; Case, K. L.; Garrison, L. L. und Gröhn, Y. T. (1999):
Comparison of seven antibiotic treatments with no treatment for bacteriological efficacy against bovine mastitis pathogens.
J Dairy Sci 82. 1664-1670.
- Wilson, D. J.; Gonzalez, R. N. und Sears, P. M. (1995):
Segregation or use of separate milking units for cows infected with *Staphylococcus aureus*: effects on prevalence of infection and bulk tank somatic cell count.
J Dairy Sci 78. 2083-2085.
- Zadoks, R. N.; Allore, H. G.; Barkema, H. W.; Sampimon, O. C.; Gröhn, Y. T. und Schukken, Y. H. (2001):
Analysis of an outbreak of *Streptococcus uberis* mastitis.
J Dairy Sci 84. 590-599.
- Zadoks, R. N.; van Leeuwen, W. B.; Kreft, D.; Fox, L. K.; Barkema, H. W.; Schukken, Y. H. und van Belkum, A. (2002):
Comparison of *Staphylococcus aureus* isolates from bovine and human skin, milking equipment, and bovine milk by phage typing, pulsed-field gel electrophoresis, and binary typing.
J Clin Microbiol 40. 3894-3902.
- Zehner, M. M.; Farnsworth, R. J.; Appleman, R. D.; Larntz, K. und Springer, J. A. (1986):
Growth of environmental mastitis pathogens in various bedding material.
J Dairy Sci 69. 1932-1941.
- Zecconi, A. und Piccinini, R. (1998):
Staphylococcus aureus: a problem for Italian dairy herds.
Bulletin of the IDF 330. 25-26.
- Zecconi, A.; Piccinini, R. und Fox, L. K. (2003):
Epidemiologic study of intramammary infections with *Staphylococcus aureus* during a control program in nine commercial dairy herds.
J Am Vet Med Assoc 223. 684-688.
- Ziv, G.; Neriya, A. und Storper, M. (1987):
Efficacy of an intramammary Nifuroquine dry cow product in the elimination and prevention of udder infections.
Isr J Vet Med 43. 51-52.
- Ziv, G. und Storper, M. (1985):
Intramuscular treatment of subclinical staphylococcal mastitis in lactating cows with penicillin G, methicillin, and their esters.
J Vet Pharmacol Ther 8. 276-283.
- Ziv, G.; Storper, M. und Saran, A. (1981):
Comparative efficacy of three antibiotic products for the treatment and prevention of subclinical mastitis during the dry period.
Vet Q 3. 74-79.