

The following content was supplied by the authors as supporting material and has not been copy-edited or verified by JBJS.

Full Article References

Dog

Deysine M, Rosario E, Isenberg HD. Acute hematogenous osteomyelitis: an experimental model. *Surgery* (1976), 79, 97-99.

Deysine M, Isenberg H, Rosario E, Mandell C. Experimental chronic hematogenous osteomyelitis. *Surgical Forum* (1976), 527-528.

Wahlig H, Dingeldein E, Bergmann R, Reuss K. The release of gentamicin from polymethylmethacrylate beads. *The Journal of Bone and Joint Surgery* (1978), 60-B, 270-275.

Daly RC, Fitzgerald RH, Washington II JA. Penetration of cefazolin into normal and osteomyelitic canine cortical bone. *Antimicrobial Agents and Chemotherapy* (1982), 22, 461-469.

Deysine M, Isenberg H, Steiner G. Chronic haematogenous osteomyelitis; studies on an experimental model. *International orthopaedics* (1983), 7, 69-78.

Fitzgerald Jr RH. Moxalactam penetration of normal and osteomyelitic bone. *Arch Orthop Trauma Surg* (1983), 101, 273-281.

Fitzgerald Jr RH. Experimental osteomyelitis: description of a canine model and the role of depot administration of antibiotics in the prevention and treatment of sepsis. *The Journal of Bone and Joint Surgery* (1983), 65-A, 371-380.

Hall BB, Fitzgerald Jr RH. The pharmacokinetics of penicillin in osteomyelitic canine bone. *The Journal of Bone and Joint Surgery* (1983), 65-A, 526-532.

Quinlan WR, Hall BB, Fitzgerald RH. Fluid spaces in normal and osteomyelitic canine bone. *J Lab Clin Med* (1983), 102, 78-87.

Petri III WH, Schaberg SJ. The effects of antibiotic-supplemented bone allografts on contaminated partially avulsive fractures of the canine ulna. *J Oral Maxillofac Surg* (1984), 42, 699-704.

Eitenmüller J, Schmidt KH, Peters G, Gellissen G, Weltin R, Reichmann W. Experimental and preliminary clinical experience with absorbable calcium phosphate granules containing an antibiotic or antiseptic for the local treatment of osteomyelitis. *Jounral of Hospital Infection* (1985), 6, 177-184.

Petty W, Spanier S, Shuster JJ, Silverthorne C. The influence of skeletal implants on incidence of infection. *The Journal of Bone and Joint Surgery* (1985), 67-A, 1236-1244.

Braden TD, Johnson CA, Gabel CL, Lott GA, Caywood DD. Posologic evaluation of clindamycin, using a canine model of posttraumatic osteomyelitis. *Am J Vet Res* (1987), 48, 1101-1105.

Braden TS, Johnson CA, Wakenell P, Tvedten HW, Mostosky UV. Efficacy of clindamycin in the treatment of staphylococcus aureus osteomyelitis in dogs. JAVMA (1988), 192, 1721-1725.

Petty W, Spanier S, Shuster JJ. Prevention of infection after total joint replacement: experiments with a canine model. The Journal of Bone and Joint Surgery (1988), 70-A, 536-539.

Varshney AC, Singh H, Gupta RS, Singh SP. Experimental model of staphylococcal osteomyelitis in dogs. Indian Journal of Experimental Biology (1989), 27, 816-819.

Varshney AC, Singh H, Prakash P. Enriched collagen as coadjuvant therapeutic agent in experimental osteomyelitis in dogs. Indian Journal of Experimental Biology (1991), 29, 35-38.

Hoskinson JJ, Daniel GB, Patton CS. Indium-111-Chloride and Three-phase bone scintigraphy: a comparison for imaging experimental osteomyelitis. J Nucl Med (1991), 32, 67-75.

Schauwecker DS, Carlson KA, Miller GA, Kalasinski LA, Katz P. Comparison of indium-111 nonspecific polyclonal IgG with indium-111-leukocytes in a canine osteomyelitis model. The Journal of Nuclear Medicine (1991), 32, 1394-1398.

Garvin KL, Myano JA, Robinson D, Giger D, Novak J, Radio S. Polylactide/polyglycolide antibiotic implants in the treatment of osteomyelitis. The Journal of Bone and Joint Surgery (1994), 76-A, 1500-1506.

Philipov JP, Pascalev MD, Aminkov BY, Grosec CD. Changes in serum carboxyterminal telopeptide of type I collagen in an experimental model of canine osteomyelitis. Calcif Tissue Int (1995), 57, 152-154.

Khodaparast O, Coberly DM, Mathey J, Rohrich RJ, Levin S, Brown SA. Effect of a transpositional muscle flap on VEGF mRNA expression in a canine fracture model. Plastic and Reconstructive Surgery (2003), 112, 171-176.

Huneault LM, Lussier B, Dubreuil P, Chouinard L, Désévaux C. Prevention and treatment of experimental osteomyelitis in dogs with ciprofloxacin-loaded crosslinked high amylose starch implant. Journal of Orthopaedic research (2004), 22, 1351-1357.

Sheep

Collinge CA, Goll G, Seligson D, Easley KJ (1994) Pin tract infections: silver vs uncoated pins, *Orthopedics*, 17, 445-448.

Kaarsemaker S, Walenkamp GHIM, vd Bogaard AEJ. New model for chronic osteomyelitis with staphylococcus aureus in sheep. *Clinical orthopaedics and related research* (1997), 339, 246-252.

Clasper JC, Parker DJ, Simpson AHRW, Watkins PE (1999) Contamination of the medullary canal following pin-tract infection, *Journal of orthopaedic research*, 17, 947-952.

Clasper JC, Stapley SA, Bowley DMG, Kenward CE, Taylor V, Watkins PE (2001) Spread of infection in an animal model after intramedullary nailing of an infected external fixator pin track, *Journal of orthopaedic research*, 19, 155-159.

Hill PF, Clasper JC, Parker SJ, Watkins PE (2002) Early intramedullary nailing in an animal model of a heavily contaminated fracture of the tibia, *Journal of orthopaedic research*, 20, 648-653.

Schaer TP, Stewert S, Hsu BB, Klibanov AM. Hydrophobic polycationic coatings that inhibit biofilms and support bone healing during infection. *Biomaterials* (2012), 33, 1245-1254.

Stewart S, barr S, Engiles J, Hickok NJ, Shapiro IM, Richardson DW, Parvizi J, Schaer TP. Vancomycin-modified implant surface inhibits biofilm formation and supports bone-healing in an infected osteotomy model in sheep. *The Journal of Bone and Joint Surgery* (2012), 94, 1406-15.

Williams DL, Haymond BS, Beck JP, Savage PB, Chaudhary V, Epperson RT, Kawaguchi B, Bloebaum RD (2012) In vivo efficacy of a silicone-cationic steroid antimicrobial coating to prevent implant-related infection, *Biomaterials*, 33, 8641-8656,

Williams DL, Haymond BS, Woodbury KL, Beck JP, Moore DE, Epperson RT, Bloebaum RD. Experimental model of biofilm implant-related osteomyelitis to test combination biomaterials using biofilms as initial inocula. *J Biomed Mater Res A* (2012), 100, 1888-1900.

Sinclair KD, Pham TX, Williams DL (2013) Model development for determining the efficacy of a combination coating for the prevention of perioperative device related infections: a pilot study, *J Biomed Mater Res Part B*, 101B, 1143-1153.

Gimeno M, Pinczowski P, Vázquez FJ, Pérez M, Santamaría J, Arruebo M, Luján L. Porous orthopedic steel implant as an antibiotic eluting device: prevention of post-surgical infection on an ovine model. *International Journal of Pharmaceutics* (2013), 452, 166-172.

McLaren JS, White LJ, Cox HC, Ashraf W, Rahman CV, Blunn GW. A biodegradable antibiotic-impregnated scaffold to prevent osteomyelitis in a contaminated in vivo bone defect model. *European Cells and Materials* (2014), 27, 332-349.

Goat

Curtis MJ, Brown PR, Dick JD, Jinnah RH. Contaminated fractures of the tibia: a comparison of treatment modalities in an animal model. *Journal of Orthopaedic Research* (1995), 13, 286-295.

Voos K, Rosenberg B, Fagrhi M, Seligson D. Use of tobramycin-impregnated polymethylmethacrylate pin sleeve for the prevention of pin-tract infection in goats. *Journal of Orthopaedic Trauma* (1999), 13, 98-101.

DeJong ES, DeBerardino TM, Brooks DE, Nelson BJ, Campbell AA, Bottoni CR, Pusateri AE, Walton RS, Guymon CH, McManus AT. Antimicrobial efficacy of external fixator pins coated with a lipid stabilized hydroxyapatite/chlorhexidine complex to prevent pin tract infection in a goat model. *The Journal of Trauma Injury, Infection and Critical care* (2001), 50, 1008-1014.

Beardmore AA, Brooks DE, Wenke JC, Thomas DB. Effectiveness of local antibiotic delivery with an osteoinductive and osteoconductive bone-graft substitute. *The Journal of Bone and Joint Surgery* (2005), 87-A, 107-112.

Thomas DB, Brooks DE, Bice TG, DeJong ES, Lonergan KT, Wenke JC. Tobramycin-impregnated calcium sulfate prevents infection in contaminated wounds. *Clinical Orthopaedics and related research* (2005), 441, 366-371.

Salgado CJ, Jamali AA, Mardini S, Buchanan K, Veit B. A model for chronic osteomyelitis using staphylococcus aureus in goats. *Clinical Orthopaedics and Related Research* (2005), 436, 246-250.

Salgado CJ, Mardini S, Jamali A, Ortiz J, Gonzales R, Chen H-C. Muscle versus nonmuscle flaps in the reconstruction of chronic osteomyelitis defects. *Plastic and Reconstructive Surgery* (2006), 118, 1401-1411.

Wenke JC, Owens BD, Svoboda SJ, Brooks DE. Effectiveness of commercially-available antibiotic-impregnated implants. *The journal of Bone and Joint Surgery* (2006), 88-B, 1102-1104.

van der Borden AJ, Maathuis PGM, Engels E, Rakhorst G, van der Mei HC, Busscher HJ, Sharma PK. Prevention of pin tract infection in external stainless steel fixator frames using electric current in a goat model. *Biomaterials* (2007), 28, 2122-2126.

Lalliss SJ, Stinner DJ, Waterman SM, Branstetter JG, Masini BD, Wenke JC. Negative pressure wound therapy reduces pseudomonas wound contamination more than staphylococcus aureus. *J Orthop Trauma* (2010), 24, 598-602.

Tran N, Tran PA, Jarrell JD, Engiles JB, Thomas NP, Young MD, Hayda RA, Born CT. In vivo caprine model for osteomyelitis and evaluation of biofilm-resistant intramedullary nails. Hindawi Publishing Corporation (2013), 1-11, DOI: 10.1155/2013/674378

Pig

Wood RL, Cutlip RC, Shuman RD. Osteomyelitis and arthritis induced in swine by lancefield's group A streptococci (*streptococcus pyogenes*). *Cornel vet* (1971), 61, 457-470.

Patterson AL, Galloway RH, Baumgartner JC, Barsoum IS. Development of chronic mandibular osteomyelitis in a miniswine model. *J Oral Maxillofac Surg* (1993), 51, 1358-1362.

Rink A, Santschi EM, Beattie CW. Normalized cDNA libraries from a porcine model of orthopedic implant-associated infection. *Mammalian Genome* (2002), 13, 198-205.

Jensen HE, Nielsen OL, Agerholm JS, Iburg T, Johansen LK, Johannesson E, Møller M, Jahn L, Munk L, Aalbæk B, Leifsson PS. A non-traumatic *Staphylococcus aureus* osteomyelitis model in pigs. *In vivo* (2010), 24, 257-264.

Johansen LK, Frees D, Aalbæk B, Koch J, Iburg T, Nielsen OL, Leifsson PS, Jensen HE. A porcine model of acute, haematogenous, localized osteomyelitis due to *Staphylococcus aureus*: a pathomorphological study. *APMIS* (2010), 119, 111-118.

Johansen LK, Svalastoga EL, Frees D, Aalbæk B, Koch J, Iburg TM, Nielsen OL, Leifsson PS, Jensen HE. A new technique for modeling of hematogenous osteomyelitis in pigs: inoculation into femoral artery. *Journal of Investigative surgery* (2012), 26, 149-153.

Johansen LK, Koch J, Frees D, Aalbæk B, Nielsen OL, Leifsson PS, Iburg TM, Svalastoga E, Buelund LE, Bjarnsholt T, Høiby N, Jensen HE. Pathology and biofilm formation in a porcine model of staphylococcal osteomyelitis. *J Comp Path* (2012), 147, 343-353.

Johansen LK, Koch J, Kirketerp-Møller K, Wamsler OJ, Nielsen OL, Leifsson PS, Frees D, Aalbæk B, Jensen HE. Therapy of haematogenous osteomyelitis - a comparative study in a porcine model and angolan children. *In vivo* (2013), 27, 305-312.

Alstrup AKO, Nielsen KM, Schønheyder HC, Jensen SB, Afzelius P, Leifsson PS, Nielsen OL. Refinement of a hematogenous localized osteomyelitis model in pigs. *Scandinavian Journal of Laboratory Animal Science* (2015), 41, 1-4.

Nielsen OL, Afzelius P, Bender D, Schønheyder HC, Leifsson PS, Nielsen KM, Larsen JO, Jensen SB, Alstrup AKO. Comparison of autologous ¹¹¹In-leukocytes, ¹⁸F-FDG, ¹¹C-methionine, ¹¹C-PK11195 and ⁶⁸Ga-citrate for diagnostic nuclear imaging in a juvenile porcine haematogenous *staphylococcus aureus* osteomyelitis model. *Am J Nucl Med Mol Imaging* (2015), 5, 169-182.

Afzelius P, Alstrup AKO, Schønheyder HC, Borghammer P, Jensen SB, Bender D, Nielsen OL. Utility of ¹¹C-methionine and ¹¹C-donepezil for imaging of *Staphylococcus aureus* induced osteomyelitis in a juvenile porcine model: comparison to autologous ¹¹¹In-labelled leukocytes, ⁹⁹mTc-DPD and ¹⁸F-FDG. *Am J Nucl Med Mol Imaging* (2016), 6, 286-300.

Afzelius P, Nielsen OL, Alstrup AKO, Bender D, Leifsson PS, Jensen SB, Schønheyder HC. Biodistribution of the radionuclides ¹⁸F-FDG, ¹¹C-methionine, ¹¹C-PK11195 and ⁶⁸Ga-citrate in domestic juvenile female

pigs and morphological and molecular imaging of the tracers in hematogenously disseminated *staphylococcus aureus* lesions. Am J Nucl Med Mol Imaging (2016), 6, 42-58.

Jensen LK, Koch J, Aalbæk B, Moodley A, Bjarnsholt T, Kragh KN, Petersen A, Jensen HE. Early implant-associated osteomyelitis results in a peri-implanted bacterial reservoir. APMIS (2016), 125, 38-45.

Jensen LK, Koch J, Dich-Jorgensen K, Aalbæk B, Petersen A, Fuersted K, Bjarnsholt T, Kragh KN, Tøtterup M, Bue M, Hanberg P, Søballe K, Heegaard PMH, Jensen HE. Novel porcine model of implant-associated osteomyelitis: a comprehensive analysis of local, regional and systemic response. Journal of Orthopaedic Research (2016), DOI:10.1002/jor.23505, 1-11.

Tøttrup M, Bue M, Koch J, Jensen LK, Hanberg P, Aalbæk B, Fuersted K, Jensen HE, Søballe K. Effects of implant-associated osteomyelitis on cefuroxime bone pharmacokinetics. The Journal of Bone and Joint Surgery (2016), 98, 363-369.

Afzelius P, Nielsen OL, Jensen SB, Alstrup AKO. Post mortem leukocytes scintigraphy in juvenile pigs with experimentally induced osteomyelitis. Contrast Media & Molecular Imaging (2017), DOI:10.1155/2017/3603929, 1-6.

Rabbit

Thompson HS, Dubos RJ. Production of experimental osteomyelitis in rabbits by intravenous injection of *Staphylococcus aureus*. *J Exp Med* (1938), 68, 191–206.

Scheman L, Janota M, Lewin P. The production of experimental osteomyelitis. *Jour. A. M. A.* (1941), 117, 1525-1529.

Weaver JB, Tyler MW. Experimental staphylococcaemia and hemogenous osteomyelitis. *The Journal of Bone and Joint Surgery* (1943), 25, 791-802.

Nagler FPO. Penicillin treatment of experimental osteomyelitis in rabbits. *The Australian and New Zealand Journal of Surgery* (1946), 206-211.

Stevens DB. Experimental osteomyelitis. *Surgical Forum* (1963), 14, 450-452.

Mitra RN. Experimental osteomyelitis in rabbits. *Journal of the International College of Surgeons* (1964), 41, 171-181.

Bernat M, Bielawski J. Experimental osteomyelitis. *Polish Medical Journal* (1966), 5, 1330-1334.

Stevens DB. The value of prophylactic penicillin in experimental osteomyelitis. *Journal of Surgical Research* (1966), 6, 446-450.

Lewin-epstein J, Goldin S. Production of osteomyelitis in the jaws of rabbits. *Trans Int Conf Oral Surg* (1967), 241-245.

Nickerson DS, Kazmierowski JA, Dossett JH, Williams RC, Quie PG. Studies of immune and normal opsonins during experimental staphylococcal infection in rabbits. *The Journal of Immunology* (1969), 102, 1235-1241.

Finsterbusch A, Argaman M, Sacks T, Path MRC. Bone and joint perfusion with antibiotics in treatment of experimental staphylococcal infection in rabbits. *The Journal of Bone and Joint Surgery* (1970), 52-A, 1424-1432.

Norden CW, Kennedy E. Experimental osteomyelitis I. A description of the model. *The Journal of Infectious Diseases* (1970), 122, 410-418.

Norden CW, Kennedy E. Experimental osteomyelitis II. Therapeutic trials and measurement of antibiotic levels in bone. *The Journal of Infectious Diseases* (1971), 124, 565-571.

Andriole VT, Nagel DA, Southwick WO. A paradigm for human chronic osteomyelitis. *The Journal of Bone and Joint Surgery* (1973), 55-A, 1511-1515.

Norden CW, Dickens DR. Experimental osteomyelitis III. Treatment with cephaloridine. *The Journal of Infectious Diseases* (1973), 127, 525-528.

Andriole VT, Nagel DA, Southwick WO. Chronic staphylococcal osteomyelitis: an experimental model. *Yale Journal of Biology and Medicine* (1974), 1, 33-39.

Rafkin H, Deysine M, Teicher I, Russel R, Aufses AH. Detection of experimental osteomyelitis with gallium-67 citrate. *Surgical Forum* (1974), 25, 485-487

Deysine M, Rafkin H, Russel R, Teicher I, Aufses AH. The detection of acute experimental osteomyelitis with 67Ga citrate scannings. *Surgery, Gynecology & Obstetrics* (1975), 141, 40-42.

Norden CW. Experimental osteomyelitis IV. Therapeutic trials with rifampicin alone and in combination with gentamicin, sisomicin and cephalothin. *The Journal of Infectious Diseases* (1975), 132, 493-499.

Crane LR, Kapdi CC, Wolfe JN, Silberberg BK, Lerner AM. Xeroradiographic, bacteriologic and pathologic studies in experimental staphylococcus osteomyelitis. *Proceeding of the Society for Experimental Biology and Medicine* (1977), 156, 303-314.

Kurek M, Pryjma K, Bartkowski S, Heczko PB. Anti-staphylococcal gamma hemolysin antibodies in rabbits with staphylococcal osteomyelitis. *Med Microbiol Immunol* (1977), 163, 61-65.

Rinsky L, Goris ML, Schurman DJ, Nagel DA. 99Technetium bone scanning in experimental osteomyelitis. *Clinical Orthopaedics and Related Research* (1977), 128, 361-366.

Mader JT, Guckian JC, Glass DL, Reinarz JA. Therapy with hyperbaric oxygen for experimental osteomyelitis due to staphylococcus aureus in rabbits. *The Journal of Infectious Diseases* (1978), 138, 312-318.

Norden CW. Experimental osteomyelitis V. Therapeutic trials with oxacillin and sisomicin alone and in combination. *The Journal of Infectious Diseases* (1978), 137, 155-160.

Corbett M, Dekel S, Puddle B, Dickson RA, Francis MJO. The production of prostaglandins in response to experimentally induced osteomyelitis in rabbits. *Prostaglandins and Medicine* (1979), 2, 403-412.

Mader JT, Brown GL, Guckian JC, Wells CH, Reinarz JA. A mechanism for the amelioration by hyperbaric oxygen of experimental staphylococcal osteomyelitis in rabbits. *The Journal of Infectious Diseases* (1980), 142, 915-922.

Norden CW, Myreowitz RL, Keleti E. Experimental osteomyelitis due to staphylococcus aureus or pseudomonas aeruginosa: a radiographic-pathological correlative analysis. *Br J exp Path* (1980), 61, 451-460.

Norden CW, Keleti E. Treatment of experimental staphylococcal osteomyelitis with rifampicin and trimethoprim, alone and in combination. *Antimicrobial Agents and Chemotherapy* (1980), 17, 591-594.

Blomgren G. Hematogenous infection of total joint replacement: an experimental study in the rabbit. *Acta Orthopaedica Scandinavia* (1981), 52, suppl 187, 1-64.

Dekel S, Francis MJO. The treatment of osteomyelitis of the tibia with sodium salicylate. An experimental study in rabbits. *The Journal of Bone and Joint Surgery* (1981), 63-B, 178-184.

Norris SH, Watt I. Radionuclide uptake during the evolution of experimental acute osteomyelitis. *British Journal of Radiology* (1981), 54, 207-211.

Triplett RG, Branham GB. Treatment of experimental mandibular osteomyelitis with hyperbaric oxygen and antibiotics. *Int J Oral Surg* (1981), suppl. 1, 178-182

Dueland R, Spadaro JA, Rahn BA. Silver antibacterial bone cement. Comparison with gentamicin in experimental osteomyelitis. *Clinical Orthopaedics and Related Research* (1982), 169, 264-268.

Norden CW, Shaffer MA. Activities of tobramycin and azlocillin alone and in combination against experimental osteomyelitis caused by *pseudomonas aeruginosa*. *Antimicrobial Agents and Chemotherapy* (1982), 21, 62-65.

Triplett RG, Branham GB. Experimental mandibular osteomyelitis: therapeutic trials with hyperbaric oxygen. *Int Oral maxillofac surg* (1982), 40, 640-646.

Graham GD, Lundy MM, Frederick RJ, Berger DE, O'Brien AW, Brown TJ. Predicting the cure of osteomyelitis under treatment: concise communication. *The Journal of Nuclear Medicine* (1983), 24, 110-113.

Graham GD, Lundy MM, Frederick RJ, Hartshorne MF, Berger DE. Scintigraphic detection of osteomyelitis with Tc-99m MDP and Ga-67 citrate: concise communication. *The Journal of Nuclear Medicine* (1983), 24, 1019-1022.

Graham GD, Lundy MM, Moreno AJ, Frederick RJ. The Role of Tc-99m MDP and Ga-67 citrate in predicting the cure of osteomyelitis. *Clinical Nuclear Medicine* (1983), 8, 344-346.

Mader JT, Wilson KJ. Comparative evaluation of cefamandole and cephalothin in the treatment of experimental *staphylococcus aureus* osteomyelitis in rabbits. *The Journal of Bone and Joint Surgery* (1983), 65-A, 507-513.

Norden CW, Shaffer M. Treatment of experimental chronic osteomyelitis due to *staphylococcus aureus* with vancomycin and rifampicin. *The Journal of Infectious Diseases* (1983), 147, 352-357.

Norden CW. Experimental chronic staphylococcal osteomyelitis in rabbits: treatment with rifampicin alone or in combination with other antimicrobials. *Review of Infectious Diseases* (1983), 5, S491-S494

Rodeheaver GT, Rukstalis D, Bono M, Bellamy W. A new model of bone infection used to evaluate the efficacy of antibiotic-impregnated polymethylmethacrylate. *Clinical Orthopaedics and Related Research* (1983), 178, 303-311.

Wang Y-Z, Xu J-C, Xue D-M, Zhung P-Y. Experimental study of acute suppurative bone and joint infection. *Chinese Medical Journal* (1983), 6, 813-820.

Mayberry-carson KJ, Tober-Meyer B, Smith JK, Lambe Jr DW, Costerton JW. Bacterial adherence and glycocalyx formation in osteomyelitis experimentally induced with *staphylococcus aureus*. *Infection and Immunity* (1984), 43, 825-833.

Norden CW, Shaffer M. Treatment of experimental chronic osteomyelitis caused by *Morganella morganii* with mazlocillin and cloxacillin. *Chemotherapy* (1984), 30, 188-193.

Jacob E, Arendt DM, Brook I, Burham LC, Falk MC, Schaberg SJ. Enzyme-linked immunosorbent assay for detection of antibodies to *Staphylococcus aureus* cell walls in experimental osteomyelitis. *Journal of Clinical Microbiology* (1985), 22, 547-552.

Norden CW, Shinners E. Ciprofloxacin as therapy for experimental osteomyelitis caused by *pseudomonas aeruginosa*. *The Journal of Infectious Diseases* (1985), 151, 291-294.

Southwood RT, Rice JL, McDonald PJ, Hakendorf PH, Rozenblds MA. Infection in experimental hip arthroplasties. *The Journal og Bone and Joint Surgery* (1985), 67-B, 229-231.

Esterhai JL, Clark JM, Morton HE, Smith DW, Steinbach A, Richter SD. Effect of hyperbaric oxygen exposure on oxygen tension within the medullary canal in the rabbit tibial osteomyelitis model. *Journal of Orthopaedic Research* (1986), 4, 330-336.

Köndell PÅ, Granström M, Heimdahl A, Möllby R, Nord CE. Experimental mandibular staphylococcus aureus osteomyelitis; antibody response and treatment with dicloxacillin. *Int J Oral Maxillofac Surg* (1986), 15, 620-628.

Mayberry-carson KJ, Tober-Meyer B, Lambe Jr DW, Costerton JW. An electron microscopic study of the effect of clindamycin therapy on bacterial adherence and glycocalyx formation in experimental staphylococcus aureus osteomyelitis. *Microbios* (1986), 48, 189-206.

Norden CW, Niederreiter K, Shinner EM. Treatment of experimental chronic osteomyelitis due to staphylococcus aureus with teicoplanin. *Infection* (1986), 14, 136-138.

Norden CW, Shinners E, Niederritter K. Clindamycin treatment of experimental osteomyelitis due to staphylococcus aureus. *The Journal of Infectious Diseases* (1986), 153, 956-959.

Costerton JW, Lambe DW, Mayberry-Carson K-J, Tober-Meyer B. Cell wall alterations in staphylococci growing in situ in experimental osteomyelitis. *Can J Microbiol* (1987), 33, 142-150.

Dahmers LE, Funderburk CH. Gentamicin-loaded plaster of paris as a treatment of experimental osteomyelitis. *Clinical Orthopaedics and Related Research* (1987), 219, 278-282.

Jacob E, Durham LC, Falk MC, Williams TJ, Wheat LJ. Antibody response to teichoic acid and peptidoglycan in *Staphylococcus aureus* osteomyelitis. *Journal of Clinical Microbiology* (1987), 25, 122-127.

Mader JT, Morrison LT, Adams KR. Comparative evaluation of A-56619, A-56620 and Nafcillin in the treatment of experimental staphylococcus aureus osteomyelitis. *Antimicrobial Agents an Chemotherapy* (1987), 31, 259-263.

Norden CW, Niederritter K. Ofloxacin therapy for experimental osteomyelitis caused by *pseudomonas aeruginosa*. *The Journal of Infectious Diseases* (1987), 155, 823-825.

Beltran J, McGhee RB, Shaffer PB, Olsen JO, Bennett WF, Foster TR, McCalla MS, Iskra LA, Blagg RL, Biller DS. Experimental infections of the musculoskeletal system: evaluation with MR imaging and Tc-99m MDP and Ga-67 Scintigraphy. *Radiology* (1988), 167, 167-172.

Whalen JL, Fitzgerald RH, Morrissey RT. A histological study of acute hematogenous osteomyelitis following physeal injuries in rabbits. *The Journal of Bone and Joint Surgery* (1988), 70-A, 1383-1392.

Worlock P, Slack R, Harvey L, Mawhinney R. An experimental model of post-traumatic osteomyelitis in rabbits. *B J exp Path* (1988), 69, 235-244.

Worlock P, Slack R, Harvey L, Mawhinney R. The prevention of infection in open fractures. *The Journal of Bone and Joint Surgery* (1988), 70-A, 1341-1347.

Keogh BS, Triplett RG, Aufdemorte TB, Boyan BD. The effect of local antibiotics in treating chronic osseous staphylococcus aureus infection. *J Oral Maxillofac Surg* (1989), 47, 940-945.

Mader JT, Adams K. Comparative evaluation of daptomycin (LY146032) and vancomycin in the treatment of experimental methicillin-resistant staphylococcus aureus osteomyelitis in rabbits. *Antimicrobial Agents and Chemotherapy* (1989), 33, 689-692.

Mader JT, Adams K, Morrison L. Comparative evaluation of cefazolin and clindamycin in the treatment of experimental staphylococcus aureus osteomyelitis in rabbits. *Antimicrobial Agents and Chemotherapy* (1989), 33, 1760-1764.

Morrissey RT, Haynes DW. Acute hematogenous osteomyelitis: a model with trauma as an etiology. *Journal of Pediatric Orthopaedics* (1989), 9, 447-456.

Reznick JB, Gilmore WC. Host response to infection of a subperiosteal hydroxyapatite implant. *Oral Surg Oral Med Oral Pathol* (1989), 67, 665-672.

Thomas VL, Sanford BA, Keogh BS, Triplett RG. Antibody response to Staphylococcus aureus surface proteins in rabbits with persistent osteomyelitis after treatment with demineralized bone implants. *Infection and Immunity* (1989), 57, 404-412.

Tomczak RL, Dowdy N, Storm T. Use of ceftazidime-impregnated polymethyl methacrylate beads in the treatment of pseudomonas osteomyelitis. *The Journal of Foot Surgery* (1989), 28, 542-548.

Chandnani VP, Beltran J, Morris CS, Khalil SN, Mueller CF, Burk JM, Bennett WF, Shaffer PB, Vasila MS, Reese J, Ridgeway JA. Acute experimental osteomyelitis and abscesses: detection with MR imaging versus CT. *Radiology* (1990), 174, 233-236.

Mayberry-carson KJ, Tober-Meyer B, Gill LR, Lambe Jr DW, Hossler FE. Effect of ciprofloxacin on experimental osteomyelitis in the rabbit tibia, induced with a mixed infection of staphylococcus epidermidis and bacteroides thetaiotaomicron. *Microbios* (1990), 64, 49-66.

Norden CW, Budinsky A. Treatment of experimental chronic osteomyelitis due to Staphylococcus aureus with ampicillin/sulbactam. *The Journal of Infectious Diseases* (1990), 161, 52-53

Abbas HL. Excretion of urinary hydroxyproline in correlation with severity of induced osteomyelitis in rabbits. *Acta Physiologica Hungarica* (1991), 78, 235-239.

Jacob E, Setterstrom JA, Bach DE, Heath JR, McNiesh LM, Cierny III G. Evaluation of biodegradable ampicillin anhydride microcapsules for local treatment of experimental Staphylococcal osteomyelitis. *Clinical Orthopaedics and Related Research* (1991), 267, 237-244.

Johansson Å, Eliasson G, Svensson O, Nord CE. Anaerobic osteomyelitis - treatment with metronidazole in an experimental rabbit model. *Drugs Exptl Clin Res* (1991), 17, 299-304.

Johansson Å, Svensson O, Blomgren G, Eliasson G, Nord CE. Anaerobic Osteomyelitis. A new experimental rabbit model. *Clinical Orthopaedics and Related Research* (1991), 265, 297-301.

Lambe DW, Ferguson KP, Mayberry-Carson KJ, Tober-Meyer B, Costerton JW. Foreign-body-associated experimental osteomyelitis induced with *Bacteroides fragilis* and *Staphylococcus epidermidis* in rabbits. *Clinical Orthopaedics and Related Research* (1991), 266, 285-294.

Petri III WH. Evaluation of antibiotic-supplemented bone allograft in a rabbit model. *J Oral Maxillofac Surg* (1991), 49, 392-396.

Spaeth HJ, Chandnani VP, Beltran J, Lucas JG, Ortiz I, King MA, Bennett WF, Bova JG, Mueller CF, Shaffer PB. Magnetic resonance imaging detection of early experimental periostitis. *Investigative Radiology* (1991), 26, 304-308.

Abiri MM, Deangelis GA, Kirpek M, Abou A-N A, Ablow RC. Ultrasonic detection of osteomyelitis. Pathologic correlation in an animal model. *Investigatory radiology* (1992), 27, 111-113.

Mayberry-carson KJ, Tober-Meyer B, Lambe DW, Costerton JW. Osteomyelitis experimentally induced with *Bacteroides thetaiotaomicron* and *Staphylococcus epidermidis*. *Clinical Orthopaedics and Related Research* (1992), 280, 289-299.

Cornell CN, Tyndall D, Waller S, Lane JM, Brause BD. Treatment of experimental osteomyelitis with antibiotic-impregnated bone graft substitute. *Journal of Orthopaedic Research* (1993), 11, 619-626.

Evans RP, Nelson CL. Gentamicin-impregnated polymethylmethacrylate beads compared with systemic antibiotic therapy in the treatment of chronic osteomyelitis. *Clinical orthopaedics and Related Research* (1993), 295, 37-42.

Cordero J, Munuera L, Fogueira MD. Influence of metal implants on infection. *The Journal of Bone and Joint Surgery* (1994), 76-B, 717-720.

Erenberg JP, Patka P, Haarman HJThM, Dwars BJ. A New model for posttraumatic osteomyelitis in rabbits. *Journal of investigative surgery* (2009), 7, 453-465.

Lalikos JF, Mooney MP, Janosky J, Losken A, Losken HW. Bacterial exposure required to induce rabbit calvarial bone graft infection by superficial contamination. *The Journal of Craniofacial Surgery* (1994), 5, 247-252.

Melcher GA, Claudi B, Schlegel U, Perren SM, Printzen G, Munzinger J. Influence of type of medullary nail on the development of local infection. *Journal of Bone and Joint Surgery* (1994), 76-B, 955-959.

Volk A, Crémieux A-C, Balmatou N, Vallois J-M, Pocidalo J-J, Carbon C. Evaluation of a rabbit model for osteomyelitis by high field, high resolution imaging using the chemical-shift-specific-slice-selection technique. *Magnetic Resonance Imaging* (1994), 12, 1039-1046.

Worlock P, Slack R, Harvey L, Mawhinney R. The prevention of infection in open fractures. An experimental study of the effect of fracture stability. *Injury* (1994), 25, 31-38.

Gillaspy AF, Hickmon SG, Skinner RA, Thomas JR, Nelson CL, Smeltzer MS. Role of the accessory gene regulator (agr) in pathogenesis of staphylococcal osteomyelitis. *Infection and Immunity* (1995), 63, 3373-3380.

Riegels-Nielsen P, Espersen F, Hölmich LR, Frimodt-Møller N. Collagen with gentamicin for prophylaxis of postoperative infection: *Staphylococcus aureus* osteomyelitis studies in rabbits. *Acta Orthopaedica Scandinavia* (1995), 66, 69-72.

Sanzén L, Linder L. Infection adjacent to titanium and bone cement implants: an experimental study in rabbits. *Biomaterials* (1995), 16, 15273-1277.

Winckler S, Overbeck JP, Meffert R, Törmälä P, Spiegel HU. Resorbable ciprofloxacin/polyglycol acid carrier in the local therapy of chronic osteitis. *Eur J Orthop Surg Traumatol* (1995), 5, 133-137.

Arens S, Schlegel U, Printzen G, Ziegler WJ, Perren SM, Hansis M. Influence of materials for fixation implant on local infection. An experimental study of steel versus titanium DCP in rabbits. *The Journal of Bone and Joint Surgery* (1996), 78-B, 647-651.

Cordero J, Munuera L, Fogueira MD. Influence of bacterial strains on bone infection. *Journal of Orthopaedic Research* (1996), 14, 663-667.

Isiklar ZY, Darouiche RO, Landon GC, Beck T. Efficacy of antibiotics alone for orthopaedic device related infections. *Clinical Orthopaedics and Related Research* (1996), 332, 184-189.

Nielsen NHS, Renneberg J, Nürnberg BM, Tørholm C. Experimental implant-related osteomyelitis induced with *Staphylococcus aureus*. *Eur J Orthop Surg Traumatol* (1996), 6, 97-100.

Ali SA, Cesani F, Nusynowitz ML, Briscoe EG, Shirtliff ME, Mader JT. Skeletal scintigraphy with technetium-99-m-tetrphenyl porphyrin sulfonate for the detection and determination of osteomyelitis in an animal model. *The Journal of Nuclear Medicine* (1997), 38, 1999-2002.

An YH, Bradley J, Powers DJ, Friedman RJ. The prevention of prosthetic infection using a cross-linked albumin coating in a rabbit model. *The Journal of Bone and Joint Surgery* (1997), 79-B, 816-819.

Awasthi V, Goins B, Klipper R, Loredo R, Korvick D, Phillips WT. Imaging experimental osteomyelitis using radiolabeled liposomes. *The Journal of Nuclear Medicine* (1997), 39, 1089-1094.

Calhoun JH, Mader JT. Treatment of osteomyelitis with a biodegradable antibiotic implant. Clinical Orthopaedics and Related Research (1997), 341, 206-214.

Darouiche RO, Landon GC, Patti JM, Nguyen LL, Fernau RC, McDevitt D, Greene C, Foster T, Klima M. Role of *Staphylococcus aureus* surface adhesins in orthopaedic device infections: are results model-dependent? J Med Microbiol (1997), 46, 75-79.

Jacob E, Cierny III G, Zorn K, McNiell JF, Fallon MT. Delayed local treatment of rabbit tibial fractures with biodegradable cefazolin microspheres. Clinical Orthopaedics and Related Research (1997), 336, 278-285.

Heard GS, Oloff LM, Wolfe DA, Little MD, Prins DD. PMMA bead versus parenteral treatment of *Staphylococcus aureus* osteomyelitis. Journal of the American Podiatric Medical Association (1997), 87, 153-164.

Smeltzer MS, Thomas JR, Hickmon SG, Skinner RA, Nelson CL, Griffith D, Parr Jr TR, Evans RP. Characterization of a rabbit model of staphylococcal osteomyelitis. Journal of Orthopaedic Research (1997), 15, 414-421.

Nelson CL, Hickmon SG, Skinner RA. Treatment of experimental osteomyelitis by surgical debridement and the implantation of bioerodable, polyanhydride-gentamicin beads. Journal of Orthopaedic Research (1997), 15, 249-255.

Strelkov NS, Sharaev PN, Vol'khina IV. Exchange of sialic acid-containing compounds in chronic osteomyelitis. Bulletin of Experimental Biology (1997), 6, 607-608.

Darouiche RO, Farmer J, Chaput C, Mansouri M, Saleh G, Landon GC. Anti-infective efficacy of antiseptic-coated intramedullary nails. The Journal of Bone and Joint Surgery (1998), 80-A, 1336-1340.

Nicolau DP, Nie L, Tessier PR, Kourea HP, Nightingale CH. Prophylaxis of acute osteomyelitis with absorbable ofloxacin-impregnated beads. Antimicrobial Agents and Chemotherapy (1998), 42, 840-842.

Nie L, Nicolau DP, Tessier PR, Kourea HP, Browner BD, Nightingale CH. Use of a bioabsorbable polymer for the delivery of ofloxacin during experimental osteomyelitis treatment. Journal of Orthopaedic Research (1998), 16, 76-79.

Arens S, Kraft C, Schlegel U, Printzen G, Perren SM, Hansis M. Susceptibility to local infection in biological internal fixation. Experimental study of open vs minimally invasive plate osteosynthesis in rabbits. Arch Orthop Trauma Surg (1999), 119, 82-85.

Johansson Å, Lindgren JU, Nord CE, Svensson O. Material and design in haematogenous implant-associated infections in a rabbit model. Injury (1999), 30, 651-657.

Sasaki S, Ishii Y. Apatite cement containing antibiotics: efficacy in treating experimental osteomyelitis. J Orthop Sci (1999), 4, 361-369.

Shirtliff ME, Mader JT, Calhoun J. Oral rifampicin plus Azithromycin or clarithromycin to treat osteomyelitis in rabbits. Clinical Orthopaedics and Related Research (1999), 359, 229-236.

Steinhart H, Schulz D, Mutters R. Evaluation of ozonated oxygen in an experimental animal model of osteomyelitis as a further treatment option for skull-base osteomyelitis. *Eur Arch Otorhinolaryngol* (1999), 256, 153-157.

Yagmurlu MF, Korkusuz F, Gürsel I, Korkusuz P, Örs Ü, Hasirci V. Sulbactam-cefoperazone polyhydroxybutyrate-co-hydroxyvalerate (PHBV) local antibiotic delivery system: in vivo effectiveness and biocompatibility in the treatment of implant-related experimental osteomyelitis. *J Biomed Mater Res* (1999), 46, 494-503.

Dams EThM, Nijhof MW, Boerman OC, Laverman P, Storm G, Buma P, Lemmens JAM, van der Meer JWM, Corstens FHM, Oyen WJG. Scintigraphic evaluation of experimental chronic osteomyelitis. *The journal of nuclear medicine* (2000), 41, 896-902.

Kanellakopoulou K, Galanakis N, Giannakos Bourboulis EJ, Rifiotis C, Papakostas K, Andreopoulos A, Dounis E, Karagianakos P, Giannakos H. Treatment of experimental osteomyelitis caused by methicillin-resistant *Staphylococcus aureus* with a biodegradable system of lactic acid polymer releasing pefloxacin. *Journal of Antimicrobial Chemotherapy* (2000), 46, 311-314.

Nijhof MW, Stallmann HP, Vogely HC, Fleer A, Schouls LM, Dhert WJA, Verbout AJ. Prevention of infection with tobramycin-containing bone cement or systemic cefazolin in an animal model. *J Biomed Mater Res* (2000), 52, 709-715.

Nijhof MW, Dhert WJA, Fleer A, Vogely HC, Verbout AJ. Prophylaxis of implant-related staphylococcal infections using tobramycin-containing bone cement. *J Biomed Mater Res* (2000), 52, 754-761.

Poelstra KA, Barekzi NA, Grainger DW, Gristina AG, Schuler TC. A novel spinal implant infection model in rabbits. *SPINE* (2000), 25, 406-410.

Cheon J-E, Chung HW, Hong SH, Lee W, Lee KH, Kim JK, Yeon KM, Kang HS. Sonography of acute osteomyelitis in rabbits with pathologic correlation. *Acad Radiol* (2001), 8, 243-249.

Gratz S, Rennen HJJM, Boerman OC, Oyen WJG, Burma P, Corstens FHM. ^{99m}Tc -interleukin-8 for imaging acute osteomyelitis. *J Nucl Med* (2001), 42, 1257-1264.

Gürsel I, Korkusuz F, Türesin F, Alaeddinoglu NG, Hasirci V. In vivo application of biodegradable controlled antibiotic release systems for the treatment of implant-related osteomyelitis. *Biomaterials* (2001), 22, 73-80.

Korkusuz F, Korkusuz P, Eksioglu F, Gürsel I, Hasirci V. In vivo response to biodegradable controlled antibiotic release systems. *J Biomed Mater Res* (2001), 55, 217-228.

Kraft CN, Schlegel U, Pfluger D, Eijer H, Tetor J, Hansis M, Arens S. Radiological signs of osteitis around extramedullary metal implants. A radiographic-microbiological correlative analysis in rabbit tibiae after local inoculation of *Staphylococcus aureus*. *Arch Orthop Trauma Surg* (2001), 121, 338-342.

Nijhof MW, Fleer A, Hardus K, Vogely HC, Schouls ML, Verbout AJ, Dhert WJA. Tobramycin-containing bone cement and systemic cefazolin in a one-stage revision. Treatment of infection in a rabbit model. *J Biomed Mater Res* (2001), 58, 747-753.

Schulz S, Steinhart H, Mutters R. Chronic osteomyelitis in a new rabbit model. *Journal of Investigative Surgery* (2001), 14, 121-131.

Shirtliff ME, Calhoun JH, Mader JT. Comparative evaluation of oral levofloxacin and parenteral nafcillin in the treatment of experimental methicillin-susceptible *Staphylococcus aureus* osteomyelitis in rabbits. *Journal of Antimicrobial Chemotherapy* (2001), 48, 253-258.

Mader JT, Stevens CM, Stevens JH, Ruble R, Lathrop JT, Calhoun JH. Treatment of experimental osteomyelitis with a fibrin sealant antibiotic implant. *Clinical Orthopaedics and Related Research* (2002), 403, 58-72.

Nelson CL, McLaren SG, Skinner RA, Smeltzer MS, Thomas JR, Olsen KM. The treatment of experimental osteomyelitis by surgical debridement and the implantation of calcium sulfate tobramycin pellets. *Journal of Orthopaedic Research* (2002), 20, 643-647.

Oosterbos CJM, Vogely HCh, Nijhof MW, Fleer A, Verbout AJ, Tonino AJ, Dhert WJA. Osseointegration of hydroxyapatite-coated and noncoated Ti6Al4V implants in the presence of local infection: A comparative histomorphometrical study in rabbits. *J Biomed Mater Res* (2002), 60, 339-347.

Shirtliff ME, Calhoun JH, Mader JT. Experimental osteomyelitis treatment with antibiotic-impregnated hydroxyapatite. *Clinical Orthopaedics and related research* (2002), 401, 239-247.

Shirtliff ME, Calhoun JH, Mader JT. Gatifloxacin efficacy in treatment of experimental methicillin-sensitive *staphylococcus aureus*-induced osteomyelitis in rabbits. *Antimicrobial Agents and Chemotherapy* (2003), 46, 231-233.

Rutledge B, Huyette D, Day D, Anglen J. Treatment of osteomyelitis with local antibiotics delivered via bioabsorbable polymer. *Clinical Orthopaedics and related Research* (2003), 411, 280-287.

Southwood LL, Frisbie DD, Kawcak CE, McIlwraith CW. Evaluation of serum biochemical markers of bone metabolism for early diagnosis of nonunion fractures in rabbits. *AJVR* (2003), 64, 727-735.

Ambrose CG, Clyburn TA, Louden K, Joseph J, Wright J, Gulati P, Gogola GR, Mikos AG. Effective treatment of osteomyelitis with biodegradable microspheres in a rabbit model. *Clinical Orthopaedics and Related Research* (2004), 421, 293-299.

Faber C, Hoogendoorn RJW, Stallmann HP, Lyaruu DM, Amerongen AvN, Wuismans PIJM. In vivo comparison of dhvar-5 and gentamicin in an MRSA osteomyelitis prevention model. *Journal of Antimicrobial Chemotherapy* (2004), 54, 1078-1084.

Joosten U, Joist A, Frebel T, Brandt B, Diederichs S, von Eiff C. Evaluation of an in situ setting injectable calcium phosphate as a new carrier material for gentamicin in the treatment of chronic osteomyelitis: studies in vitro and in vivo. *Biomaterials* (2004), 25, 4287-4295.

Koort JK, Mäkinen TJ, Knuuti J, Jalava J, Aro HT. Comparative 18F-FDG PET of experimental *Staphylococcus aureus* osteomyelitis and normal bone healing. *The Journal of Nuclear Medicine* (2004), 45, 1406-1411.

Lazarettos J, Efstatopoulos N, Papagelopoulos PJ, Savvidou OD, Kanellakopoulou K, Giannarellou H, Giannarelos-Bourboulis EJ, Nikolaou V, Kapranou A, Papalois A, Papachristou G. A bioresorbable calcium phosphate delivery system with teicoplanin for treating MRSA osteomyelitis. *Clinical Orthopaedics and Related Research* (2004), 423, 253-258.

Shehan E, McKenna J, Mulhull KJ, Marks P, McCormack D. Adhesion of *Staphylococcus* to orthopaedic metals, an in vivo study. *Journal of Orthopaedic Research* (2004), 22, 39-43.

Southwood LL, Frisbie DD, Kawcak CE, Ghivizzani SC, Evans CH, McIlwraith CW. Evaluation of Ad-BMP-2 for enhancing fracture healing in an infected defect fracture rabbit model. *Journal of Orthopaedic Research* (2004), 22, 66-72.

Stallmann HP, Faber C, Bronckers ALJJ, Amerongen AVN, Wuisman PIJM. Osteomyelitis prevention in rabbits using antimicrobial peptide hLF1-11- or gentamicin-containing calcium phosphate cement. *Journal of Antimicrobial Chemotherapy* (2004), 54, 472-476.

Faber C, Stallmann HP, Lyaruu DM, Joosten U, von Eiff C, Amerongen AvN, Wuisman PIJM. Comparable efficacies of the antimicrobial peptide human lactoferrin 1-11 and gentamicin in a chronic methicillin-resistant *Staphylococcus aureus* osteomyelitis model. *Antimicrobial Agents and Chemotherapy* (2005), 49, 2438-2444.

Horn J, Schlegel U, Krettek C, Ito K. Infection resistance of unreamed solid, hollow slotted and cannulated intramedullary nails: an in-vivo experimental comparison. *Journal of Orthopaedic Research* (2005), 23, 810-815.

Jones-Jackson L, Walker R, Purnell G, McLaren SG, Skinner RA, Thomas JR, Suva LJ, Anaissie E, Miceli M, Nelson CI, Ferris EJ, Smeltzer MS. Early detection of bone infection and differentiation from post-surgical inflammation using 2-deoxy-2-[18F]-fluoro-D-glucose positron emission tomography (FDG-PET) in an animal model. *Journal of Orthopaedic Research* (2005), 23, 1484-1489.

Joosten U, Joist A, Gosheger G, Liljenqvist U, Brandt B, von Eiff C. Effectiveness of hydroxyapatite-vancomycin bone cement in the treatment of *Staphylococcus aureus* induced chronic osteomyelitis. *Biomaterials* (2005), 26, 5251-5258.

Koort JK, Mäkinen TJ, Suokas E, Veiranto M, Jalava J, Knuuti J, Törmälä P, Aro HT. Efficacy of ciprofloxacin-releasing bioabsorbable osteoconductive bone defect filler for treatment of experimental osteomyelitis due to *staphylococcus aureus*. *Antimicrobial Agents and Chemotherapy* (2005), 49, 1502-1508.

Le Ray A-M, Gautier H, Laty M-K, Daculsi G, Merle C, Jacqueline C, Hamel A, Caillon J. In vitro and in vivo bactericidal activities of vancomycin dispersed in porous biodegradable poly(ϵ -caprolactone) microparticles. *Antimicrobial Agents and Chemotherapy* (2005), 49, 3025-3027.

Yin L-Y, Lazzarini L, Li F, Stevens M, Calhoun JH. Comparative evaluation of tigecycline and vancomycin with and without rifampicin in the treatment of methicillin-resistant *staphylococcus aureus* experimental osteomyelitis in a rabbit model. *Journal of Antimicrobial Chemotherapy* (2005), 55, 995-1002.

Börzsei L, Mintál T, Koós Z, Kocsis B, Helyes Z, Kereskai L, Nyárády J. Examination of a novel, specified local antibiotic therapy through polymethylmethacrylate capsules in a rabbit osteomyelitis model. *Chemotherapy* (2006), 52, 73-79.

Brady RA, Leid JG, Camper AK, Costerton JW, Shirtliff ME. Identification of *Staphylococcus aureus* proteins recognized by the antibody-mediated immune response to a biofilm infection. *Infection and Immunity* (2006), 74, 3415-3426.

Sun X, Zhao L, Hu Y, Yuan Z, Ji Q, Li M. Preparation of massive anti-infective reconstituted bone xenograft and related studies. *J Pediatr Orthop B* (2006), 15, 113-119.

Darouiche RO, Mansouri MD, Zakarevicz D, Alsharif A, Landon GC. In vivo efficacy of antimicrobial-coated devices. *The Journal of Bone and Joint Surgery* (2007), 89, 792-797.

El-Kamel AH, Baddour MM. Gatifloacin biodegradable implant for the treatment of experimental osteomyelitis: in vitro and in vivo evaluation. *Drug Delivery* (2007), 14, 349-356.

Alvarez H, Castro C, Moujir L, Perera A, Delgado A, Soriano I, Évora C, Sánchez E. Efficacy of Ciprofloxacin implants in treating experimental osteomyelitis. *Journal of Biomedical Materials Research Part B: Applied Biomaterials* (2008), 85B, 93-104

Efstathopoulos N, Giamarellos-Bourboulis E, Kanellakopoulou K, Lazarettos I, Giannoudis P, Frangia K, Magnissalis E, Papadaki M, Nikolaou VS. Treatment of experimental osteomyelitis bu methicillin resistant *staphylococcus aureus* with bone cement system releasing grepafloxacin. *Injury* (2008), 39, 1384-1390.

Giavaresi G, Borsari V, Fini M, Giardino R, Sambri V, Gaibani P, Sofiatti R. Preliminary investigations on a new gentamicin and vancomycin-coated PMMA nail for the treatment of bone and intramedullary infections: an experimental study in the rabbit. *Journal of orthopaedic research* (2008), 26, 785-792.

Hamel A, Caillon J, Jacqueline C, Rogez J-M, Potel G. Internal device decreases antibiotic's efficacy on experimental osteomyelitis. *J Child Orthop* (2008), 2, 239-243.

Kanellakopoulou K, Thivaios GC, Kolia M, Dontas I, Nakopoulou L, Dounis E, Giamarellos-Bourboulis EJ, Andreopoulos A, Karagiannakos P, Giamarellou H. Local treatment of experimental *Pseudomonas aeruginosa* osteomyelitis with biodegradable dilactide polymer releasing ciprofloxacin. *Antimicrobial Agents and Chemotherapy* (2008), 52, 2335-2339.

Miyai T, Ito A, Tamazawa G, Matsuno T, Sogo Y, Nakamura C, Yamazaki A, Satoh T. Antibiotic-loaded poly-ε-caprolactone and porous β-tricalcium phosphate composite for treating osteomyelitis. *Biomaterials* (2008), 29, 350-358.

Poultsides LA, Papatheodorou LK, Karachalios TS, Khaldi L, Maniatis A, Petinaki E, Malizos KN. Novel model for studying hematogenous infection in an experimental setting of implant-related infection by community-acquired methicillin-resistant *S.aureus* strain. *Journal of Orthopaedic Research* (2008), 26, 1355-1362.

Secinti KD, Ayten M, Kahilogullari G, Kaygusuz G, Ugur HC, Attar A. Antibacterial effects of electrically activated vertebral implants. *Journal of Clinical Neuroscience* (2008), 15, 434-439.

Wellisz T, An YH, Wen X, Kang Q, Hill CM, Armstrong JK. Infection rates and healing using bone wax and a soluble polymer material. *Clin Orthop Relat Res* (2008), 466, 481-486.

Yin L-Y, Calhoun JH, Thomas JK, Shapiro S, Schmitt-Hoffmann A. Efficacies of ceftobiprole medocaril and comparators in a rabbit model of osteomyelitis due to methicillin-resistant *staphylococcus aureus*. *Antimicrobial Agents and Chemotherapy* (2008), 52, 1618-1622.

Shi P, Zuo Y, Li X, Zou Q, Liu H, Zhang L, Li Y, Morsi YS. Gentamicin-impregnated chitosan/nanohydroxyapatite/ethyl cellulose microspheres granules for chronic osteomyelitis therapy. *Journal of Biomedical Materials Research* (2009), 93A, 1020-1031.

Crémieux A-C, Dumitrescu O, Lina G, Vallee C, Côte J-F, Muffat-Joly M, Lilin T, Etienne J, Vandenesh F, Saleh-Mghir A. Panton-valentine leukocidin enhances the severity of community-associated methicillin-resistant *staphylococcus aureus* rabbit osteomyelitis. *PLOS ONE* (2009), 4, e7204, doi: 10.1371/journal.pone.0007204., 1-8.

Del Pozo JL, Rouse MS, Euba G, Kang C-I, Mandrekar JN, Steckelberg JM, Patel R. The electricidal effect is active in an experimental model of *Staphylococcus epidermidis* chronic foreign body osteomyelitis. *Antimicrobial agents and Chemotherapy* (2009), 53, 4064-4068.

Gollwitzer H, Roessner M, Langer R, Gloeck T, Diehl P, Horn C, Stemberger A, Von Eiff C, Gerdesmeyer L. Safety and effectiveness of extracorporeal shockwave therapy: results of a rabbit model of chronic osteomyelitis. *Ultrasound in Med & Biol* (2009), 35, 595-602.

Hui T, Yongqing X, Tiane Z, Gang L, Yonggang You, Muyao J, Jin L, Jing D. Treatment of osteomyelitis by liposomal gentamicin-impregnated calcium sulfate. *Arch Orthop Trauma Surg* (2009), 129, 1301-1308.

Kanellakopoulou K, Galanopoulos I, Soranoglou V, Tsaganos T, Tziortziotis V, Maris I, Paplois A, Giannarellou H, Giannarellos-Bouirboulis EJ. Treatment of experimental osteomyelitis caused by methicillin-resistant *staphylococcus aureus* with a synthetic carrier of calcium sulphate (Stimulan) releasing moxifloxacin. *International Journal of Antimicrobial Agents*. (2009), 33, 354-359.

Moriarty TF, Bebefve L, Boure L, Campoccia D, Schlegel U, Richards RG. Influence of material and microtopography on the development of local infection *in vivo*: experimental investigation in rabbits. *The international Journal of Artificial Organs* (2009), 32, 663-670.

Nandi SK, Kundu B, Ghosh SK, Mandal TK, Datta S, De DK, Basu D. Cefuroxime-impregnated calcium phosphates as an implantable delivery system in experimental osteomyelitis. *Ceramics International* (2009), 35, 1367-1376.

Nandi SK, Kundu B, Mukherjee P, Mandal TK, Datta S, De DK, Basu D. In vitro and in vivo release of cefuroxime axetil from bioactive glass as an implantable delivery system in experimental osteomyelitis. *Ceramics International* (2009), 35, 3207-3216.

Xie Z, Liu X, Jia W, Zhang C, Huang W, Wang J. Treatment of osteomyelitis and repair of bone defect by degradable bioactive borate glass releasing vancomycin. *Journal of Controlled Release* (2009), 139, 118-126.

Yin L-Y, Calhoun JH, Thomas TS, Wirtz ED. Efficacy of telavancin in the treatment of methicillin-resistant staphylococcus aureus osteomyelitis: studies with a rabbit model. *Journal of Antimicrobial Chemotherapy* (2009), 63, 357-360.

Jia W-T, Zhang X, Luo S-H, Liu X, Huang W-H, Rahaman MN, Day DE, Zhang C-Q, Xie Z-P, Wang J-Q. Novel borate glass/chitosan composite as a delivery vehicle for teicoplanin in the treatment of chronic osteomyelitis. *Acta Biomaterialia* (2010), 6, 812-819.

Jia W-T, Luo S-H, Zhang C-Q, Wang J-Q. In vitro and in vivo efficacies of teicoplanin-loaded calcium sulfate for treatment of chronic methicillin-resistant staphylococcus aureus osteomyelitis. *Antimicrobial Agents and Chemotherapy* (2010), 54, 170-176.

Jia W-T, Zhang C-Q, Wang J-Q, Feng Y, Ai Z-S. The prophylactic effects of platelet-leucocyte gel in osteomyelitis. An experimental study in a rabbit model. *The Journal of Bone and Joint Surgery* (2010), 92-B, 304-310.

Kundu B, Soundrapandian C, Nandi SK, Mukherjee P, Dandapat N, Roy S, Datta BK, Mandal TK, Basu D, Bhattacharya RN. Development of new localized drug delivery system based on ceftriaone-sulbactam composite drug impregnated porous hydroxyapatite: a systematic approach for in vitro and in vivo animal trial. *Pharm Res* (2010), 27, 1659-1676.

Liu X, Xie Z, Zhang C, Pan H, Rahaman MN, Zhang X, Fu Q, Huang W. Bioactive borate glass scaffolds: in vitro and in vivo evaluation for use as drug delivery system in the treatment of bone infection. *J Mater Sci: Mater Med* (2010), 21, 575-582.

Moriarty TF, Campoccia D, Nees SK, Boure LP, Richards RG. In vivo evaluation of the effect of intramedullary nail microtopography on the development of local infections in rabbits. *Int J Artif Organs* (2010), 33, 667-675.

Moskowitz JS, Blaisse MR, Samuel RE, Hsu H-P, Harris MB, Martin SD, Lee JC, Spector M, Hammond PT. The effectiveness of the controlled release of gentamicin from polyelectrolyte multilayers in the treatment of Staphylococcus aureus infection in a rabbit bone model. *Biomaterials* (2010), 31, 6019-6030.

Saraf SK, Yadav A, Nagwani S, Sen MR. Decal bone matrix as a local antibiotic delivery vehicle in a MRSA-infected bone model: An experimental study. Inidan J Orthop (2010), 44, 246-251.

Zhang X, Jia W, Xiao W, Liu X, Wang D, Zhang C, Huang W, Rahaman MN, Day DE, Zhou N. Teicoplanin-loaded borate bioactive glass implants for treating chronic bone infection in a rabbit tibia osteomyelitis model. Biomaterials (2010), 31, 5865-5874.

Kundu B, Nandi SK, Dasgupta S, Datta S, Mukherjee P, Roy S, Singh AK, Mandal TK, Das P, Bhattacharya R, Basu D. Macro-to-micro porous special bioactive glass and ceftriaxone-sulbactam composite drug delivery system for treatment of chronic osteomyelitis: an investigation through in vitro and in vivo animal trial. J Mater Sci: Mater Med (2011), 22, 705-720.

Saleh-Mghir A, Muller-Serieys C, Ding A, Massias L, Crémieux A-C. Adjunctive rifampicin is crucial to optimizing daptomycin efficacy against rabbit prosthetic joint infection due to methicillin-resistant *Staphylococcus aureus*. Antimicrobial Agents and Chemotherapy (2011), 55, 4589-4593.

Schroeder K, Simank H-G, Lorenz H, Swoboda S, Geiss HK, Helbig L. Implant stability in the treatment of MRSA bone implant infections with linezolid versus vancomycin in a rabbit model. J Orthop Res (2011), 30, 190-195.

Tamazawa G, Ito A, Miyai T, Matsuno T, Kitahara K, Sogo Y, Kimishima K, Satoh T. Gatifloxacin-loaded PLGA and β-tricalcium phosphate composite for treating osteomyelitis. Dental Materials Journal (2011), 30, 264-273.

Tsiolis P, Giamerellos-Bourboulis EJ, Mavrogenis AF, Savvidou O, Lallos SN, Frangia K, Lazarettos I, Nikolaou V, Efstatopoulos NE. Experimental osteomyelitis caused by methicillin-resistant *staphylococcus aureus* treated with a polylactide carrier releasing linezolid. Surgical Infections (2011), 12, 131-135.

Azi ML, Junior MK, Martinez R, Salata LA, Paccola CAJ. Development of an experimental model of infected bone void in the ulna of rabbits. Acta Orthop Bras (2012), 20, 136-138.

Beenken KE, Bradney L, Bellamy W, Skinner RA, McLaren SG, Gruenwald MJ, Spencer HJ, Smith JK, Haggard WO, Smeltzer MS. Use of xylitol to enhance the therapeutic efficacy of polymethylmethacrylate-based antibiotic therapy in treatment of chronic osteomyelitis. Antimicrobial Agents and Chemotherapy (2012), 56, 5839-5844.

Brown TLY, Spencer HJ, Beenken KE, Alpe TL, Bartel TB, Bellamy W, Gruenwald JM, Skinner RA, McLaren SG, Smeltzer MS. Evaluation of dynamic 18F-FDG-PET imaging for the detection of acute post-surgical bone infection. PLOS ONE (2012), 7, e41863, doi: 10.1371/journal.pone.0041863, 1-8.

Emanuel N, Rosenfeld Y, Cohen O, Applbaum YH, Segal D, Barenholz Y. A lipid-and-polymer-based novel local drug delivery system-BonyPid from physicochemical aspects to therapy of bacterially infected bones. Journal of controlled release (2012), 160, 353-361.

Giavaresi G, Minelli EB, Sartori M, Benini A, Parrilli A, Maltarello MC, Salamanna F, Torricelli P, Giardino R, Fini M. New PMMA-based composites for preparing spacer devices in prosthetic infections. *J Mater Sci: Mater Med* (2012), 23, 1247-1257.

Giavaresi G, Minelli EB, Sartori M, Benini A, Della Bora T, Sambri V, Gaibani P, Borsari V, Salamanna F, Martini L, Aldini NN, Fini M. Microbiological and pharmacological tests on new antibiotic-loaded PMMA-based composites for the treatment of osteomyelitis. *Int J Orthop Res* (2012), 30, 348-355.

Jiang J-L, Li Y-F, Fang T-L, Zhou J, Li X-L, Wang Y-C, Dong J. Vancomycin-loaded nano-hydroxyapatite pellets to treat MRSA-induced chronic osteomyelitis with bone defect in rabbits. *Inflammation Research* (2012), 61, 207-215.

Kundu B, Nandi SK, Roy S, Dandapat N, Soundrapandian C, Datta S, Mukherjee P, Mandal TK, Dasgupta S, Basu D. Systematic approach to treat chronic osteomyelitis through ceftriazone-sulbactam impregnated porous β-tri calcium phosphate localized delivery system. *Ceramics International* (2012), 38, 1533-1548.

Lankinen P, Lehtimäki K, Hakanen AJ, Roivainen A, Aro HT. A comparative 18F-FDG PET/CT imaging of experimental staphylococcus aureus osteomyelitis and staphylococcus epidermidis foreign-body-associated infection in the rabbit tibia. *EJNMMI Research* (2012), 2, 1-10.

Saleh-Mghir A, Dumitrescu O, Dinh A, Boutrad Y, Massias L, Martin É, Vandenesch F, Etienne J, Lina G, Crémieux AC. Ceftobiprole efficacy in vitro against panton-valentine leukocidin production and in vivo against community-associated methicillin-resistant Staphylococcus aureus osteomyelitis in rabbits. *Antimicrobial Agents and Chemotherapy* (2012), 56, 6291-6297.

Xiao W, Luo S-H, Wei X-J, Zhang C-Q, Huang W-H, Chen J-K, Cai Y, Rui Y, Rahaman M. Evaluation of Ti implants coated with Ag-containing borate bioactive glass for simultaneous eradication of infection and fracture fixation in a rabbit tibial model. *J Mater Res* (2012), 27, 3147-3156.

Bhattacharya R, Kundu B, Nandi SK, Basu D. Systematic approach to treat chronic osteomyelitis through localized drug delivery system: bench to bed side. *Materials Science and Engineering C* (2013), 33, 3986-3993.

Li G-Y, Yin J-M, Ding H, Jia W-T, Zhang C-Q. Efficacy of leukocyte- and platelet-rich plasma gel (L-PRP gel) in treating osteomyelitis in a rabbit model. *Journal of Orthopaedic Research* 2013, 31, 949-956.

Odekerken JCE, Arts JJC, Surtel DAM, Alenkamp GHIM, Welting TJM. A rabbit osteomyelitis model for the longitudinal assessment of early post-operative implant infections. *Journal of Orthopaedic Surgery and Research* (2013), 8, 1-13.

Strelkov NS, Kiryanov NA, Shklyaev PO, Iryanov YM. Pathologic morphology of acute experimental osteomyelitis. *Bosn J Basic Med Sci* (2013), 13, 153-157.

Yang C-C, Lin C-C, Liao J-W, Yen S-K. Vancomycin-chitosan composite deposited on post porous hydroxyapatite coated Ti6A14V implant for drug controlled release. *Material Science and Engineering C* (2013), 33, 2203-2212.

Yaprakci V, Erdemli O, Kayabolen A, Tezcaner A, Bozkurt F, Keskin D. In vitro/in vivo comparison of cefuroxime release from poly(ϵ -caprolactone)-calcium sulfate implants for osteomyelitis treatment. International Union of Biochemistry and Molecular Biology (2013), 60, 603-616.

Xie Z, Ciu X, Zhao C, Huang W, Wang J, Zhang C. Gentamicin-loaded borate bioactive glass eradicates osteomyelitis due to escherichia coli in a rabbit model. Antimicrobial Agents and Chemotherapy (2013), 57, 3293-3298.

Xing J, Hou T, Luobo B, Luo F, Chen Q, Li Z, Jin H, Xu J. Anti-infection tissue engineering construct treating osteomyelitis in rabbit tibia. Tissue Engineering Part A (2013), 19, 255-263.

Yin L-Y, Manring MM, Calhoun JH. A rabbit osteomyelitis model to simulate multibacterial war wound infections. Military Medicine (2013), 178, 696-700.

Zeng J, Ren L, Yuan Y, Wang Y, Zhao J, Zeng R, Yang K, Mei X. Short-term effect of magnesium implantation on the osteomyelitis modeled animals induced by *Staphylococcus aureus*. J Mater Sci: Mater Med (2013), 24, 2405-2416.

Beenken KE, Smith JK, Skinner RA, McLaren SG, Bellamy W, Gruenwald MJ, Spencer HJ, Jennings JA, Haggard WO, Smeltzer MS. Chitosan coating to enhance the therapeutic efficacy of calcium sulfate-based antibiotic therapy in the treatment of chronic osteomyelitis. Journal of Biomaterials Applications (2014), 29, 514-523.

Chung M-F, Chia W-T, Liu H-Y, Hsiao C-W, Hsiao H-C, Yang C-M, Sung H-W. Inflammation-induced drug release by using a pH-responsive gas-generating hollow-microsphere system for the treatment of osteomyelitis. Adv Healthcare Mater (2014), 3, 1854-1861.

Crémieux A-C, Saleh-Mghir A, Danel C, Couzon F, Dumitrescu O, Lilin T, Perronne C, Etienne J, Lina G, Vandenesch F. α -hemolysin, not panton-valentine leukocidin, impacts rabbit mortality from severe sepsis with methicillin-resistant *staphylococcus aureus* osteomyelitis. The Journal of Infectious Diseases (2014), 209, 1773-1780.

Cui X, Zhao C, Gu Y, Li L, Wang H, Huang W, Zhou N, Wang D, Zhu J, Luo S, Zhang C, Rahaman MN. A novel injectable borate bioactive glass cement for local delivery of vancomycin to cure osteomyelitis and regenerate bone. J Mater Sci: Mater Med (2014), 25, 733-745.

Ding H, Zhao C-J, Cui X, Gu Y-F, Jia W-T, Rahaman MN, Wang Y, Huang W-H, Zhang C-Q. A novel injectable borate bioactive glass cement as an antibiotic delivery vehicle for treating osteomyelitis. PLOS ONE (2014), 9, e85472, doi: 10.1371/journal.pone.0085472, 1-9.

Freiberg JA, McIver KS, Shirtliff ME. In vivo expression of streptococcus pyogenes immunogenic proteins during tibial foreign body infection. Infection and Immunity (2014), 82, 3891-3899.

Gahukamble AD, McDowell A, Post V, Varela JS, Rochford ETJ, Richards RG, Patrick S, Moriarty TF. Propionibacterium acnes and *Staphylococcus lugdunensis* cause pyogenic osteomyelitis in an intramedullary nail model in rabbits. Journal of Clinical Microbiology (2014), 52, 1595-1606.

Giavaresi G, Meani E, Sartori M, Ferrari A, Bellini D, Sacchetta AC, Meraner J, Sambri A, Vocale C, Sambri V, Fini M, Romanó CL. Efficacy of antibacterial-loaded coating in an in vivo model of acutely highly contaminated implant. International Orthopaedics (2014), 38, 1505-1512.

Helbig L, Simank HG, Lorenz H, Putz C, Wölfl C, Suda AJ, Moghaddam A, Schidmaier G, Guehring T. Establishment of a new methicillin resistant *Staphylococcus aureus* animal model of osteomyelitis. International Orthopaedics (2014), 38, 891-897.

Mariani BD, Martin DS, Chen AF, Yagi H, Lin SS, Tuan RS. Polymerase chain reaction molecular diagnostic technology for monitoring chronic osteomyelitis. Journal of Experimental Orthopaedics (2014), 1, 1-10.

Odekerken JCE, Walenkamp GHIM, Brans BT, Welting TJM, Arts JJC. The longitudinal assessment of osteomyelitis development by molecular imaging in a rabbit model. Biomed Research International (2014), 424652, 1-10.

Odekerken JCE, Brand BT, Welting TJM, Walenkamp GHIM. 18F-FDG microPET imaging differentiates between septic and aseptic wound healing after orthopedic implant placement. Acta Orthopaedica (2014), 85, 305-313.

Qu H, Knabe C, Burke M, Radin S, Garino J, Schaer T, Ducheyne P. Bactericidal micron-thin sol-gel films prevent pin tract and periprosthetic infection. Military Medicine (2014), 179, 29-33.

Tan H-I, Ao H-Y, Ma R, Lin W-T, Tang T-T. In vivo effect of quaternized chitosan-loaded polymethylmethacrylate bone cement on methicillin-resistant *Staphylococcus epidermidis* infection of the tibial metaphysis in a rabbit model. Antimicrobial Agents and Chemotherapy (2014), 58, 6016-6022.

Achermann Y, Tran B, Kang M, Harro JM, Shirtliff ME. Immunoproteomic identification of in vivo-produced *proionibacterium acnes* proteins in a rabbit biofilm infection model. Clinical and Vaccine Immunology (2015), 22, 467-476.

Chatzioannou S, Papamichos O, Gamaletsou MN, Georgakopoulos A, Kostomitsopoulos NG, Tseleni-Balafouta S, Papaparaskevas J, Walsh TJ, Pneumaticos SG, Sipsas NV. 18-Fluoro-2-deoxy-D-glucose positron emission tomography/computed tomography scan for monitoring the therapeutic response in experimental *Staphylococcus aureus* foreign-body osteomyelitis. Journal of Orthopaedic Surgery and Research (2015), doi: 10.1186/s13018-015-0274-9, 1-10.

Jia W-T, Fu Q, Huang W-H, Zhang C-Q, Rahaman MN. Comparison of borate bioactive glass and calcium sulfate as implants for the local delivery of teicoplanin in the treatment of methicillin-resistant *Staphylococcus aureus*-induced osteomyelitis in a rabbit model. Antimicrobial Agents and Chemotherapy (2015), 59, 7571-7580.

Mao K, Liu J, Lian X, Wang Q, Wang X, Mei W, Mao K. Controlled release of rhBMP-2 and Vancomycin from nHAC/alfa-CSH scaffold for treatment of chronic osteomyelitis. Journal of Biomaterials and Tissue Engineering (2015), 5, 294-300.

Lian X, Mao K, Liu X, Wang X, Ciu F. In vivo osteogenesis of vancomycin loaded nanohydroxyapatite/collagen/calcium sulfate composite for treating infectious bone defect induced by chronic osteomyelitis. *Journal of Nanomaterials* (2015), 261492, 1-8

Yan L, Jiang D-M, Cao Z-D, Wu J, Wang X, Wang Z-L, Li Y-J, Yi Y-F. Treatment of *Staphylococcus aureus*-induced chronic osteomyelitis with bone-like hydroxyapatite/poly amino acid loaded with rifapentine microspheres. *Drug Design, Development and Therapy* (2015), 9, 3665-3676.

Davido B, Saleh-Mghir A, Laurent F, Danel C, Couzon F, Gatin L, Vandenesch F, Rasigade J-P, Crémieux C. Phenol-soluble modulins contribute to early sepsis dissemination not late local USA300-osteomyelitis severity in rabbits. *PLOS ONE* (2016), 11, e0157133, doi: 10.1371/journal.pone.0157133, 1-12.

Croes M, Boot W, Kruyt MC, Weinans H, Pouran B, van der Helm YJM, Gawlitta D, Vogely HC, Alblas J, Dhert WJA, Öner FC. Inflammation-induced osteogenesis in a rabbit tibia model. *Tissue Engineering: Part C* (2017), 0, 1-13.

Jennings JA, Beenken KE, Skinner RA, Meeker DG, Smeltzer MS, Haggard WO, Troel KS. Antibiotic-loaded phosphatidylcholine inhibits staphylococcal bone infection. *World Journal of Orthopedics* (2016), 7, 467-474.

Kimishima K, Matsuno T, Makiishi J, Tamazawa G, Sogo Y, Ito A, Satoh T. Effects of gatifloxine content in gatifloxacin-loaded PLGA and β -tricalcium phosphate composites on efficacy in treating osteomyelitis. *Odontology* (2016), 104, 105-113.

Kishor C, Mishra RR, Saraf SK, Kumar M, Srivastav AK, Nath G. Phage therapy of staphylococcal chronic osteomyelitis in experimental animal model. *Indian J Med Res* (2016), 143, 87-94.

Kose N, Caylak R, Peksen C, Kiremitci A, Burukoglu D, Koparal S, Dogan A. Silver ion doped ceramic nanopowder coated nails prevent infection in open fractures: in vivo study. *Injury* (2016), 47, 320-324

Li Y, Liu L, Wan P, Zhai Z, Mao Z, Ouyang Z, Yu D, Sun Q, Tan L, Ren L, Zhu Z, Hao Y, Qu X, Yang K, Dai K. Biodegradable Mg-Cu alloy implants with antibacterial activity for the treatment of osteomyelitis: in vitro and in vivo evaluations. *Biomaterials* (2016), 106, 250-263.

Lu M, Liao J, Dong J, Wu J, Qiu H, Zhou X, Li J, Jiang D, He T-C, Quan Z. An effective treatment of experimental osteomyelitis using the antimicrobial titanium/silver-containing nHP66 (nano-hydroxyapatite/polyamide-66) nanoscaffold biomaterials. *Scientific Reports* (2016), 6:39174, doi: 10.1038/srep39174, 1-14.

Mistry S, Roy S, Maitra NJ Kundu B, Chanda A, Datta S, Joy M. A novel, multi-barrier, drug eluting calcium sulfate/biphasic calcium phosphate biodegradable composite bone cement for treatment of experimental MRSA osteomyelitis in a rabbit model. *Journal of Controlled Release* (2016), 239, 169-181.

Rai A, Senapati S, Saraf SK, Maiti P. Biodegradable poly(ϵ -caprolactone) as a controlled drug delivery vehicle of vancomycin for the treatment of MRSA infection. *Journal of Materials Chemistry B* (2016), 4, 5151-5160.

Shah SR, Tatara AM, Lam J, Lu S, Scott DW, Bennett GN, van den Beucken JJJP, Jansen JA, Wong ME, Mikos AG. Polymer-based local antibiotic delivery for prevention of polymicrobial infection in contaminated mandibular implants. *ACS Biomater Sci Eng* (2016), 2, 558-566.

Surdu-bob CC, Coman C, Barbuceanu F, Turcu D, Bercaru N, Badulescu M. The influence of foreign body surface area on the outcome of chronic osteomyelitis. *Medical Engineering and Physics* (2016), 38, 870-876.

Ueng SWN, Lin S-S, Wang I-C, Yang C-Y, Cheng R-C, Liu S-J, Chan E-C, Lai C-F, Yuan L-J, Chan S-C. Efficacy of vancomycin-releasing biodegradable poly (lactide-co-glycolide) antibiotics beads for treatment of experimental bone infection due to *Staphylococcus aureus*. *Journal of Orthopaedic Surgery and Research* (2016), 11, doi: 10.1186/s13018-016-0386-x, 1-9

Wu W, Ye C, Zheng Q, Wu G, Cheng Z. A therapeutic delivery system for chronic osteomyelitis via a multi-drug implant based on three-dimensional printing technology. *Journal of Biomaterials Applications* (2016), 31, 250-260.

Elgazzar AH, Dannoos S, Sarikaya I, Farghali M, Junaid TA. Scintigraphic patterns of indium-111 oxine-labeled white blood cell imaging of gram-negative versus gram-positive vertebral osteomyelitis. *Med Princ Pract* (2017), doi: 10.1159/000480083, 1-6.

Li D, Lv P, Fan L, Huang Y, Yang F, Mei X, Wu D. The immobilization of antibiotic-loaded polymeric coatings on osteoarticular Ti implants for the prevention of bone infections. *Biomaterials Science* (2017), 5, 2337-2346.

Liu D, He C, Liu Z, Xu W. Gentamicin coating of nanotubular anodized titantium implant reduces implant-related osteomyelitis and enhances bone biocompatibility in rabbits. *International Journal of Nanomedicine* (2017), 12, 5461-5471.

Makiishi J, Matsuno T, Ito A, Sogo Y, Satoh T. In vitro /in vivo evaluation of the efficacy of gatifloxacin-loaded PLGA and hydroxyapatite composite for treating osteomyelitis. *Dental Materials Journal* (2017), doi:10.4012/dmj.2016-338, 1-10.

Mauerer A, Stenglein S, Schulz-Drost S, Schoerner C, Taylor D, Krinner S, Heidenau F, Adler W, Forst R. Antibacterial effect of a 4x Cu-TiO₂ coating simulating acute periprosthetic infection - an animal model. *Molecules* (2017), 22, doi:10.3390/molecules22071042, 1-14.

Soranoglou V, Galanopoulos I, Giannitsioti E, Poultides LA, Chorefaki T, Kanellakopoulou K. Efficacy of intramuscular moxifloxacin in the treatment of experimental osteomyelitis caused by methicillin-resistant *Staphylococcus aureus*. *International Journal of Antimicrobial Agents* (2017), 50, 186-190.

Wang Q, Chen C, Liu W, He X, Zhou N, Zhang D, Gu H, Li J, Jiang J, Huang W. Levofloxacin loaded mesoporous silica microspheres/nanohydroxyapatite/polyurethane composite scaffold for the treatment of chronic osteomyelitis with bone defects. *Scientific Reports* (2017), 7, 41808, 1-13.

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED
JENSEN ET AL.
GUIDELINE FOR PRECLINICAL STUDIES OF BONE INFECTIONS IN LARGE ANIMALS BASED ON A SYSTEMATIC REVIEW OF 316 NON-
RODENT MODELS
<http://dx.doi.org/10.2106/jbjs.18.01369>
Page 27

Zhou L, Liu Q, Zhou Z, Li W, Tao J. Efficacy of tobramycin-loaded coating K-wire in an open-fracture rabbit model contaminated by staphylococcus aureus. *Int J Clin Exp Med* (2017), 10, 6004-6016.