

Recent References Describing Use of LACTEL® PLGA (2015-2019)

L00393: C. C. Yu, Y. W. Chen, P. Y. Yeh, Y. S. Hsiao, W. T. Lin, C. W. Kuo, D. Y. Chueh, Y. W. You, J. J. Shyue and Y. C. Chang. Random and aligned electrospun PLGA nanofibers embedded in microfluidic chips for cancer cell isolation and integration with air foam technology for cell release. *Journal of nanobiotechnology* 2019;17(1):31

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.55-0.75 dL/g; Device; electrospinning.

L00396: S. C. Park, M. J. Kim, S. K. Baek, J. H. Park and S. O. Choi. Spray-Formed Layered Polymer Microneedles for Controlled Biphasic Drug Delivery. *POLYMERS* 2019;11(2):369

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.26-0.54 dL/g; Drug delivery (bovine serum albumin);

L00407: G. Moku, B. Layek, L. Trautman, S. Putnam, J. Panyam and S. Prabha. Improving Payload Capacity and Anti-Tumor Efficacy of Mesenchymal Stem Cells Using TAT Peptide Functionalized Polymeric Nanoparticles. *Cancers* 2019;11(4):491

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated - IV 0.55-0.75 dL/g; Drug delivery (nanoparticles, paclitaxel); mice; drug loading: 15-16 % w/w.

L00406: M. Y. Mahmoud, J. M. Steinbach-Rankins and D. R. Demuth. Functional assessment of peptide-modified PLGA nanoparticles against oral biofilms in a murine model of periodontitis. *Journal of Controlled Release* 2019;297(3-13)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) - IV 0.55-0.75 dL/g; Drug delivery (nanoparticles: BAR peptide); mice (BALB/cByJ);

L00404: S. Golan-Paz, H. Frizzell and K. A. Woodrow. Cross-Platform Comparison of Therapeutic Delivery from Multilamellar Lipid-Coated Polymer Nanoparticles. *Macromolecular bioscience* 2019;19(4):1800362

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated - MW 52-54 kDa, IV 0.55-0.75 dL/g; Drug delivery (nanoparticles: etravirine, azidothymidine, BSA, GFP plasmid); encapsulation efficiencies explored for each agent.

L00405: Y. Gao, S. Vijayaraghavalu, M. Stees, B. K. Kwon and V. Labhassetwar. Evaluating accessibility of intravenously administered nanoparticles at the lesion site in rat and pig contusion models of spinal cord injury. *Journal of Controlled Release* 2019;302(160-168)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide), IV 0.76-0.94 dL/g; Drug delivery (nanoparticles); rat (Sprague-Dawley), pig (Yucatan mini);

L00399: A. H. Yusop, M. N. Sarian, F. S. Januddi, Q. U. Ahmed, M. R. Kadir, D. Hartanto, H. Hermawan and H. Nur. Structure, degradation, drug release and mechanical properties relationships of iron-based drug eluting scaffolds: The effects of PLGA. *Materials & Design* 2018;160(203-217)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); Tissue engineering (scaffold, curcumin); curcumin-loaded PLGA particles (CP) were fabricated using single emulsion-solvent evaporation method. "A dipping method was used to coat the CP particles on the porous iron".

L00394: A. S. Ricciardi, R. Bahal, J. S. Farrelly, E. Quijano, A. H. Bianchi, V. L. Luks, R. Putman, F. Lopez-Giraldez, S. Coskun and E. Song. In utero nanoparticle delivery for site-specific genome editing. *Nature communications* 2018;9(1):2481

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester; IV 0.55-0.75 dL/g; Drug delivery (nucleic acids, DNA, C6 dye, DiD dye); mice; targeted delivery (intrauterine); biocompatibility: "...we observed no significant differences in the long-term survival between untreated mice and those that received NP treatment in utero."

L00409: G. Nakazawa and T. Nakamura-Hirota. Evaluation of safety and efficacy of biodegradable polymer-based sirolimus-eluting stent in a porcine coronary artery model. *Journal of Biorheology* 2018;32(2):71-77

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); Drug delivery (stent coating, sirolimus); 10.17106/jbr.32.71;

L00397: G. M. Nabar, K. D. Mahajan, M. A. Calhoun, A. D. Duong, M. S. Souva, J. Xu, C. Czeisler, V. K. Puduvalli, J. J. Otero and B. E. Wyslouzil. Micelle-templated, poly (lactic-co-glycolic acid) nanoparticles for hydrophobic drug delivery. *International Journal of Nanomedicine* 2018;13(351)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; MW 50-70 kDa; Drug delivery (dexamethasone); electrospraying.

L00398: M. Kovarova, S. R. Benhabbour, I. Massud, R. A. Spagnuolo, B. Skinner, C. E. Baker, C. Sykes, K. R. Mollan, A. D. Kashuba and J. G. Garcia-Lerma. Ultra-long-acting removable drug delivery system for HIV treatment and prevention. *Nature communications* 2018;9(DOI: 10.1038/s41467-018-06490-w):

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; MW 27 kDa; Drug delivery (SC, dolutegravir); mice (BLT humanized), primate (rhesus macaque); antiretroviral; biocompatibility (mice): "The formulation was well tolerated by the mice and no injection site reactions or other signs of overt toxicity, changes in behavior, movement, water consumption or weight loss were noted."

biocompatibility (primate): "The implants were well tolerated with little or no sign of toxicity for 5 months."

L00395: P. Angsantikul, S. Thamphiwatana, Q. Zhang, K. Spiekermann, J. Zhuang, R. H. Fang, W. Gao, M. Obonyo and L. Zhang. Coating nanoparticles with gastric epithelial cell membrane for targeted antibiotic delivery against helicobacter pylori infection. *Advanced therapeutics* 2018;1(2):1800016

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) acid terminated; IV 0.67 dL/g, MW approx 44 kDa; Drug delivery (clarithromycin, PO); mice; polymer was mixed with human gastric adenocarcinoma membrane vesicles, polymer polydispersity approx 2.

L00360: M. Thomas, A. Arora and D. Katti. Surface hydrophilicity of PLGA fibers governs in vitro mineralization and osteogenic differentiation. *Materials Science & Engineering C-Materials for Biological Applications* 2017;45(320-332)

LACTEL Comments: 85:15 Poly(DL-lactide-co-glycolide); Tissue engineering (microfibers, orthopedic, bone regeneration); electrospinning; in vitro mineralization of microfiber meshes; control of surface hydrophobicity to improve performance.

L00389: B. Patel, J. Rashid and F. Ahsan. Aerosolizable modified-release particles of montelukast improve retention and availability of the drug in the lungs. *European Journal of Pharmaceutical Sciences* 2017;96(560-570)

LACTEL Comments: Poly(DL-lactide) - IV 0.55-0.75 dL/g, 85:15 Poly(DL-lactide-co-glycolide) - IV 0.55-0.75 dL/g, MW 85.2 kDa, 50:50 Poly(DL-lactide-co-glycolide) - IV 0.15-0.25 dL/g, MW 10.6 kDa; Drug delivery (montelukast, large respirable porous particles);

L00338: O. Karaman, A. Kumar, S. Moeinzadeh, X. He, T. Cui and E. Jabbari. Effect of surface modification of nanofibres with glutamic acid peptide on calcium phosphate nucleation and osteogenic differentiation of marrow stromal cells. *Journal of tissue engineering and regenerative medicine* 2017;10(E132-E146)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 1.1 dL/g - MW 105 kDa; Tissue engineering (nanofibers); rat; formation of microsheets; effects on osteogenic differentiation of rat marrow stromal cells; "potentially useful as a biomimetic matrix in the regeneration of skeletal tissues" (pg. E144).

L00386: S. E. Aniagyei, L. B. Sims, D. A. Malik, K. M. Tyo, K. C. Curry, W. Kim, D. A. Hodge, J. Duan and J. M. Steinbach. Evaluation of poly(lactic-co-glycolic acid) and poly(DL-lactide-co-E-caprolactone) electrospun fibers for the treatment of HSV-2 infection. *Materials Science and Engineering C* 2017;72(238-251)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) acid terminated; IV 0.55-0.75 dL/g, MW 31-57 kDa; Drug Delivery (acyclovir); electrospinning.

L00385: T. Ahmed and B. Aljaeid. A potential in situ gel formulation loaded with novel fabricated poly(lactide-co-glycolide) nanoparticles for enhancing and sustaining the ophthalmic delivery of ketoconazole. *International Journal of Nanomedicine* 2017;12(1863-1875)

LACTEL Comments: Poly(DL-lactide-co-glycolide) ester terminated; IV 0.55-0.75 dL/g; Drug delivery (ketoconazole); targeted delivery (eye).

L00349: K. Wanawananona, S. Moulton, G. Wallaceban and S. Liawruangrath. Fabrication of novel core-shell PLGA and alginate fiber for dual-drug delivery system. *Polym. Adv. Technol* 2016;27(1014-1019)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); Drug delivery (biodegradable fibers, dexamethasone); degradation profile available (pg 1018); filament processed by wet-spinning procedure.

L00391: A. Stankovic, M. Sezen, M. Milenkovic, S. Kaisarevic, N. Andric and M. Stevanovic. **PLGA/Nano-ZnO Composite Particles for Use in Biomedical Applications: Preparation, Characterization, and Antimicrobial Activity.** *Journal of Nanomaterials* 2016;2016(Article ID 942528):

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) - MW 40-50 kDa; Drug delivery (zinc composite nanoparticles);

L00390: N. Rescignano, L. Tarpani, A. Romani, I. Bicchi, S. Mattioli, C. Emiliani, L. Torre, J. M. Kenny, S. Martino, L. Latterini and I. Armentano. In-vitro degradation of PLGA nanoparticles in aqueous medium and in stem cell cultures by monitoring the cargo fluorescence spectrum. *Polymer Degradation and Stability* 2016;134(296-304)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated - IV 0.95-1.20 dL/g, MW 91-120 kDa; Drug delivery (bovine serum albumin, nanoparticles);

L00352: S. Rahman, C. Mahoney, J. Sankar, K. Marra and N. Bhattarai. Synthesis and characterization of magnesium gluconate contained poly(lactic-co-glycolic acid)/chitosan microspheres. *Materials Science and Engineering B* 2016;203(59-66)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) acid terminated; IV 0.15-0.25 dL/g; Drug delivery (nanoparticles, magnesium gluconate dihydrate); microspheres were fabricated by utilizing the double emulsion solvent evaporation technique with some modifications; "Cytotoxicity levels did not surpass the 15% cytotoxicity marker...which indicates sufficient biocompatibility" (pg. 64).

L00332: M. Petro, H. Jaffer, J. Yang, S. Kabu, V. B. Morris and V. Labhasetwar. Tissue plasminogen activator followed by antioxidant-loaded nanoparticle delivery promotes activation/mobilization of progenitor cells in infarcted rat brain. *Biomaterials* 2016;81(169-180

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.76-0.94 dL/g; Drug delivery (nanoparticles, superoxide dismutase, catalase); rat (male Sprague-Dawley); double-emulsion solvent-evaporation method used for nanoparticle production; "delivery of nano-CAT/SOD at the time of reperfusion effectively protects neuronal cells" (pg. 178).

L00392: F. M. Nadal-Nicolas, E. Rodriguez-Villagra, I. Bravo-Osuna, P. Sobrado-Calvo, I. Molina-Martinez, M. P. Villegas-Perez, M. Vidal-Sanz, M. Agudo-Barriuso and R. Herrero-Vanrell. Ketorolac Administration Attenuates Retinal Ganglion Cell Death After Axonal Injury. *Investigative ophthalmology & visual science* 2016;57(1183-1192

LACTEL Comments: 85:15 Poly(DL-lactide-co-glycolide) - IV 0.62 dL/g, MW 87 kDa; Drug delivery (ketorolac, microspheres); targeted delivery (eye, vitreous).

L00379: Y. Mi, C. Mu, J. Wolfram, Z. Deng, T. Y. Hu, X. Liu, E. Blanco, H. Shen and M. Ferrari. **A Micro/Nano Composite for Combination Treatment of Melanoma Lung Metastasis.** *Advanced healthcare materials* 2016;5(936-946

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) acid terminated; IV 0.20 dL/g; Drug delivery (nanoparticles, docetaxel); mice;

L00378: B. T. Luk, R. H. Fang, C. M. J. Hu, J. A. Copp, S. Thamphiwatana, D. Dehaini, W. Gao, K. Zhang, S. Li and L. Zhang. Safe and Immunocompatible Nanocarriers Cloaked in RBC Membranes for Drug Delivery to Treat Solid Tumors. *Theranostics* 2016;6(7):1004-1011

LACTEL Comments: Poly(DL-lactide-co-glycolide) acid terminated; Drug delivery (nanoparticles, doxorubicin); mice; nanoparticles prepared by double emulsion method.

L00377: W. Lee and J. Park. **3D patterned stem cell differentiation using thermoresponsive methylcellulose hydrogel molds.** *SCIENTIFIC REPORTS* 2016;6(29408):doi: 10.1038/srep29408

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) - MW 85 kDa, 65:35 Poly(DL-lactide-co-glycolide) - MW 95 kDa; Drug delivery (microparticles; microspheres were prepared through the double emulsion process (water-in-oil-in-water (w/o/w))).

L00376: B. Layek, T. Sadhukha and S. Prabha. Glycoengineered mesenchymal stem cells as an enabling platform for two-step targeting of solid tumors. *Biomaterials* 2016;88(97-109

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.95-1.2 dL/g; Drug delivery (nanoparticles, paclitaxel, near-infrared dye SDB 5491); mice; nanoparticles prepared by emulsion-solvent evaporation.

L00375: J. E. Kobes, I. Daryaei, C. M. Howison, J. G. Bontrager, R. W. Sirianni, E. J. Meuillet and M. D. Pagel. Improved Treatment of Pancreatic Cancer With Drug Delivery Nanoparticles Loaded With a Novel AKT/PDK1 Inhibitor. *Pancreas* 2016;45(8):1158-1166

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.55-0.75 dL/g; Drug delivery (nanoparticles, chemotherapeutic PHT-427); PHT-427 is an AKT/PDK1 inhibitor.

L00374: J. R. Kim and A. N. Netravali. **Self-Healing Properties of Protein Resin with Soy Protein Isolate-Loaded Poly(D,L-lactide-co-glycolide) Microcapsules.** *Advanced Functional Materials* 2016;26(4786-4796

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); MW 50-75 kDa; Biomaterial (microcapsules; microcapsules were prepared by w/o/w emulsification solvent evaporation method.

L00373: D. Y. Kim, Y. D. Kwon, J. S. Kwon, J. H. Park, S. H. Park, H. J. Oh, J. H. Kim, B. H. Min, K. Park and M. S. Kim. Synergistic anti-tumor activity through combinational intratumoral injection of an in-situ injectable drug depot. *Biomaterials* 2016;85(232-245

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); MW 33 kDa; Drug delivery (microcapsules, doxorubicin); mice; Microcapsules were generated using a mono-axial nozzle ultrasonic atomizer; targeted delivery (tumor).

L00361: M. Keeney, M. T. Chung, E. R. Zielins, K. J. Paik, A. M. McArdle, S.D., R. C. B. Ransom, N., D. Atashroo, G. Jacobson, R. N. Zare, M. T. Longaker, D. C. Wan and F. Yang. Scaffold-mediated BMP-2 minicircle DNA delivery accelerated bone repair in a mouse critical-size calvarial defect model. *Journal of Biomedical Materials Research A* 2016;104A(8):2099-2107

LACTEL Comments: 85:15 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.55-0.75 dL/g; Tissue engineering (scaffold containing DNA); mice (CD-1 nude); DNA encoded for BMP-2, luciferase or green fluorescent protein; targeted delivery (bone defect); scaffold prepared using a supercritical CO₂ method; achieved sustained delivery over 2 months.

L00356: K. A. Hlavaty, D. P. McCarthy, E. Saito, W. T. Yap, S. D. Miller and L. D. Shea. Tolerance induction using nanoparticles bearing HY peptides in bone marrow transplantation. *Biomaterials* 2016;76(1-10

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); Drug delivery (particles, CD4 and CD8 peptide antigens); mice (C57/BL6); particles were prepared using a single emulsion technique.

L00387: C. Hernandez, N. Gawlik, M. Goss, H. Zhou, S. Jeganathan, D. Gilbert and A. Exner. Macroporous acrylamide phantoms improve prediction of in vivo performance of in situ forming implants. *Journal of Controlled Release* 2016;243(225-231

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide), acid terminated; MW 13.8 kDa; Drug delivery; rat;

L00355: S. J. Gwak, Y. Yun, D. H. Yoon, K. N. Kim and Y. Ha. Therapeutic Use of 3B-[N-(N',N'-Dimethylaminoethane) Carbamoyl] Cholesterol-Modified PLGA Nanospheres as Gene Delivery Vehicles for Spinal Cord Injury. *PloS one* 2016;11(1):1-14

LACTEL Comments: Poly(DL-lactide-co-glycolide); MW 66 kDa; Drug delivery (nanoparticles, pDNA); Rat; prepared using a double emulsion-solvent evaporation method; spinal cord injury; testing done on drug release, cytotoxicity, cellular uptake, and transfection.

L00353: A. Gupta, D. Sharma, J. Meena, S. Pandya, M. Sachan, S. Kumar, K. Singh, K. Mitra, S. Sharma, A. K. Panda, P. Gupta, U. D. Gupta and A. Misra. Preparation and Preclinical Evaluation of Inhalable Particles Containing Rapamycin and Anti-Tuberculosis Agents for Induction of Autophagy. *Pharm Res* 2016;33(1899-1912

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide), IV 0.55-0.75 dL/g; Poly(L-lactide) IV 0.90-1.20 dL/g; Drug delivery (particles, rapamycin, isoniazid, rifabutin); mice (BALB/c); particles prepared by spray-drying; targeted delivery (lung).

L00347: D. Dutta, M. Salifu, R. W. Sirianni and S. E. Stabenfeldt. Tailoring sub-micron PLGA particle release profiles via centrifugal fractioning. *Journal of Biomedical Materials Research Part A* 2016;104A(3):688-696

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.55-0.75 dL/g; Drug delivery (sub-micron particles, bovine serum albumin); particles synthesized via a W/O/W technique.

L00354: Dutta, D, M. Salifu, R. Sirianni and S. Stabenfeldt. Tailoring sub-micron PLGA particle release profiles via centrifugal fractioning. *J Biomed Mater Res Part A* 2016;104(A):688-696

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.55-0.75 dL/g; Drug delivery (nanoparticles, in vitro, protein); particles were synthesized via a W/O/W emulsion technique; centrifugal fractioning used to control population distribution of particles.

L00346: R. D'Apolito, F. Taraballi, S. Minardi, X. Liu, S. Caserta, A. Cevenini, E. Tasciotti, G. Tomaiuolo and S. Guido. Microfluidic interactions between red blood cells and drug carriers by image analysis techniques. *Medical Engineering and Physics* 2016;38(17-23)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.95-1.20 dL/g; Drug delivery (microspheres); microspheres were prepared by a modified S/O/W emulsion method.

L00345: M. Caminal, D. Peris, C. Fonseca, J. Barrachina, D. Codina, R. M. Rabanal, X. Moll, A. Morist, F. Garcia, J. J. Cairo, F. Godia, A. Pla and J. Vives. Cartilage resurfacing potential of PLGA scaffolds loaded with autologous cells from cartilage, fat, and bone marrow in an ovine model of osteochondral focal defect. *Cytotechnology* 2016;68(907-919)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); 75:25 Poly(DL-lactide-co-glycolide); IV 0.55-0.75 dL/g; Tissue engineering (scaffold); scaffolds prepared using a solution-casting/salt-leaching technique.

L00342: I. M. Adjei, B. Sharma, C. Peetla and V. Labhasetwar. Inhibition of bone loss with surface-modulated, drug-loaded nanoparticles in an intraosseous model of prostate cancer. *Journal of Controlled Release* 2016;232(83-92)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.26–0.54 dL/g; Drug delivery (nanoparticles, paclitaxel, NIR dye SDB5700); mice (male, athymic, nude); Nanoparticles were prepared by a single oil-in-water emulsion solvent evaporation method.

L00382: X. Zhan, K. K. Tran, L. Wang and H. Shen. Controlled Endolysosomal Release of Agents of pH-responsive Polymer Blend Particles. *Pharm Res* 2015;32(2280-2291)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.55-0.75 dL/g; Drug delivery (nanoparticles, in vivo testing); using blend particles to model composition of carrier affects endosomal/lysosomal escape of cargos and endosomal/lysosomal enzymes with different sizes.

L00318: X. Zhan and H. Shen. Programming the composition of polymer blend particles for controlled immunity towards individual protein antigens. *Vaccine* 2015;33(2719-2726)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.55-0.75 dL/g; Drug delivery (nanoparticles, ovalbumin, Type 2 Herpes Simplex Virus glycoprotein D); C57BL/6 mice;

L00319: M. Zamani, M. P. Prabhakaran, E. S. Thian and S. Ramakrishna. Controlled delivery of stromal derived factor-1alpha from poly lactic-co-glycolic acid core-shell particles to recruit mesenchymal stem cells for cardiac regeneration. *Journal of Colloid and Interface Science* 2015;451(144-152)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); MW 31.3-57.6 kDa; Drug delivery (nanoparticles, stromal derived factor-1a); Coaxial electrospaying; sterilized using UV radiation.

L00321: J. O. You, M. Rafat, D. Almeda, N. Maldonado, P. Guo, C. S. Nabzdyk, M. Chun, F. W. LoGerfo, J. W. Hutchinson, L. K. Pradhan-Nabzdyk and D. T. Auguste. pH-responsive scaffolds generate a pro-healing response. *Biomaterials* 2015;57(22-32)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); Tissue engineering (scaffold); Scaffolds created by dissolving PLG in chloroform, mixing with sieved sucrose particles and drying until all solvent evaporated.

L00323: X. P. Wang, K. Lian and T. N. Chen. Experiment Research on Bonding Effect of Poly(lactic-co-glycolic acid) Device by Surface Treatment Method. *INTERNATIONAL JOURNAL OF POLYMER SCIENCE* 2015;U1-U7

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.55-0.75 dL/g; Drug delivery (film production); "excellent biocompatibility, biodegradability, lack of toxicity, and good thermoplasticity" (pg. 1); sterilization by UV radiation.

L00325: X. P. Wang, W. Li and T. N. Chen. Simulation and Experimental Validation of the Hot Embossing Process of Poly(lactic-co-glycolic acid) Microstructures. *INTERNATIONAL JOURNAL OF POLYMER SCIENCE* 2015;U1-U9

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); Drug delivery (mesh microstructure); microstructures were fabricated by hot embossing method; Elastic modulus testing at different temperatures.

L00324: F. Wang, W. W. Gao, S. Thamphiwatana, B. T. Luk, P. Angsantikul, Q. Z. Zhang, C. M. J. Hu, R. H. Fang, J. A. Copp, D. Pornpattananangkul, W. Y. Lu and L. F. Zhang. Hydrogel Retaining Toxin-Absorbing Nanosponges for Local Treatment of Methicillin-Resistant Staphylococcus aureus Infection. *Advanced Materials* 2015;27(3437-3443)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.67 dL/g; Drug delivery (nanoparticles, nanosponge, a-toxin); mice; produced through nanoprecipitation in acetone.

L00326: C. Vilos, L. A. Velasquez, P. I. Rodas, K. Zepeda, S. J. Bong, N. Herrera, M. Cantin, F. Simon and L. Constandil. Preclinical Development and In Vivo Efficacy of Ceftiofur-PLGA Microparticles. *PloS one* 2015;10(4):U325-U343

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) acid-terminated; IV 0.26-0.54 dL/g; Drug delivery (nanoparticles, ceftiofur); Rat (Sprague-Dawley); Nanoparticles were prepared by double-emulsion method; sustained release profile of drug for 20 days.

L00328: M. Stevanovic, N. Filipovic, J. Djurdjevic, M. Lukic, M. Milenkovic and A. Boccaccini. 45S5 Bioglass(R)-based scaffolds coated with selenium nanoparticles or with poly(lactide-co-glycolide)/selenium particles: Processing, evaluation and antibacterial activity. *COLLOIDS AND SURFACES B-BIOINTERFACES* 2015;132(208-215)

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); MW 40-50 kDa in acetone; Tissue engineering (scaffold); PLGA/SeNp microspheres were produced using a physicochemical solvent/nonsolvent method.

L00383: D. C. Snow-Lisy, E. S. Sabanegh Jr, M. K. Samplaski and V. Labhasetwar. Anatomical Targeting Improves Delivery of Unconjugated Nanoparticles to the Testicle. *The Journal of Urology* 2015;194(1155-1161

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.87 dL/g; Drug delivery (nanoparticles, follicle stimulating hormone); Rat (Sprague Dawley); Targeted delivery (testicles); anatomical and/or ligand targeting; intra-arterial vs. intra-venous injection; nanoparticles formulated via multiple emulsion solvent evaporation technique.

L00366: N. Rescignano, A. Perez, J. Kenny, R. Hernandez and C. Mijangos. Preparation and characterization of nickel chelating functionalized poly (lactic-co-glycolic acid) microspheres. *Colloids and Surfaces A: physicochemical and Engineering Aspects* 2015;468(122-128

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.95-1.2 dL/g - MW 91.6-120 kDa; Biomaterial (composite, nickel); particles prepared by W/O/W double emulsion process employing modified polyacrylic acid as stabilizing agent; particles can chelate nickel.

L00384: N. Rescignano, E. Fortunati, I. Armentano, R. Hernandez, C. Mijangos, R. Pasquino and J. M. Kenny. Use of alginate, chitosan, and cellulose nanocrystals as emulsion stabilizers in the synthesis of biodegradable polymeric nanoparticles. *Journal of Colloid and Interface Science* 2015;445(31-39

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ether terminated; IV 0.95-1.20 dL/g - MW 91.6-120 kDa; Drug delivery (nanoparticles); nanoparticles synthesized by double emulsion method; emulsion stabilizers; positive properties of PLGA (pg. 33, Results).

L00367: R. Phongpradist, W. Chaiyana and S. Anuchapreeda. Curcumin-loaded multi-valent ligands conjugated-nanoparticles for anti-inflammatory activity. *International Journal of Pharmacy and Pharmaceutical Sciences* 2015;7(4):203-208

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) acid terminated; IV 0.67 dL/g - MW 90 kDa; Drug delivery (nanoparticles, curcumin); formulated by solvent displacement method; cIBR, cLABEL peptides conjugated on surface of PLGA nanoparticles using carbodiimide reaction; in vitro cytotoxicity testing (pg. 206).

L00334: C. G. Madsen, A. Skov, S. Baldursdottir, T. Rades, L. Jorgensen and N. J. Medicott. Simple measurements for prediction of drug release from polymer matrices - Solubility parameters and intrinsic viscosity. *EUROPEAN JOURNAL OF PHARMACEUTICS AND BIOPHARMACEUTICS* 2015;92(1-7

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) acid terminated; MW 57.6 kDa; Drug delivery; Solubility parameters and intrinsic viscosity of PLGA in various solvents (pg. 4); cast with bovine serum albumin (BSA) as a model drug.

L00370: A. Lopalco, H. Ali, N. Denora and E. Rytting. Oxcarbazepine-loaded polymeric nanoparticles: development and permeability studies across in vitro models of the blood-brain barrier and human placental trophoblast. *International Journal of Nanomedicine* 2015;10(1985-1996

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.15-0.25 dL/g; Drug delivery (nanoparticles, oxcarbazepine); prepared at room temperature (22°C-23°C) by a modified solvent displacement method; particle size, size distribution, and zeta potential measurements (in vitro); drug release profile (pg. 1994).

L00335: K. Liu, Z. Sun, M. Nie and Y. Wu. Electrospraying in carbon dioxide-expanded antisolvent. *JOURNAL OF SUPERCRITICAL FLUIDS* 2015;103(122-129

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 1.15 dL/g; In vitro (morphology research); electrospraying in different atmospheres to study effects on product morphology and morphological control (pg. 123).

L00372: Y. Jiang, S. Cao, D. K. Bright, A. M. Bever, A. K. Blakney, I. T. Suydam and K. A. Woodrow. Nanoparticle-Based ARV Drug Combinations for Synergistic Inhibition of Cell-Free and Cell-Cell HIV Transmission. *Molecular Pharmaceutics* 2015;12(4363-4374

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.55-0.75 dL/g - MW 52-54 kDa; Drug delivery (nanoparticles, maraviroc, etravirine, raltegravir);

L00371: S. T. Jahan and A. Haddadi. Investigation and optimization of formulation parameters on preparation of targeted anti-CD205 tailored PLGA nanoparticles. *International Journal of Nanomedicine* 2015;10(7371-7384

LACTEL Comments: Poly(DL-lactide-co-glycolide) ester terminated - IVs 0.15 dL/g, 0.55 dL/g, Poly(DL-lactide-co-glycolide) acid terminated - IVs 0.18 dL/g, 0.55 dL/g; Drug delivery (nanoparticles, anti-CD205 antibodies); nanoparticles prepared by double solvent emulsification and single oil in water emulsification solvent evaporation methods.

L00358: Y. Hu, Z. M. Zhao, M. Ehrich, K. Fuhrman and C. M. Zhang. In vitro controlled release of antigen in dendritic cells using pH-sensitive liposome-polymeric hybrid nanoparticles. *Polymer* 2015;80(171-179

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); Drug delivery (nanoparticles, antigen); nanoparticles prepared using a double emulsion solvent evaporation method with modifications.

L00359: Y. Hu, R. Hoerle, M. Ehrich and C. M. Zhang. Engineering the lipid layer of lipid-PLGA hybrid nanoparticles for enhanced in vitro cellular uptake and improved stability. *Acta Biomaterialia* 2015;28(149-159

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); Drug delivery (nanoparticles, bovine serum albumin); nanoparticles prepared by double emulsion solvent evaporation method with modifications.

L00357: C. M. J. Hu, R. H. Fang, K. C. Wang, B. T. Luk, S. Thamphiwatana, D. Dehaini, P. Nguyen, P. Angsantikul, C. H. Wen, A. V. Kroll, C. Carpenter, M. Ramesh, V. Qu, S. H. Patel, J. Zhu, W. Shi, F. M. Hofman, T. C. Chen, W. W. Gao, K. Zhang, S. Chien and L. F. Zhang. Nanoparticle biointerfacing by platelet membrane cloaking. *NATURE* 2015;526(118-121

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) acid terminated; IV 0.67 dL/g; Drug delivery (nanoparticles, docetaxel); rat (male, Sprague-Dawley); particles prepared in a nanoprecipitation process.

L00350: P. P. G. Guimaraes, M. F. Oliveira, A. D. M. Gomes, S. M. L. Gontijo, M. E. Cortes, P. P. Campos, C. Viana, S. P. Andrade and R. D. Sinisterra. PLGA nanofibers improves the antitumoral effect of daunorubicin. *COLLOIDS AND SURFACES B-BIOINTERFACES* 2015;136(248-255

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.82 dL/g in HFIP; Drug delivery (nanofibers, daunorubicin); mice (male, Swiss); electrospinning.

L00348: K. Gavrilov, Y. E. Seo, G. T. Tietjen, J. J. Cui, C. J. Cheng and W. M. Saltzman. Enhancing potency of siRNA targeting fusion genes by optimization outside of target sequence. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA* 2015;112(E6597-E6605

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.55-0.75 dL/g; Drug delivery (nanoparticles, siRNA); nanoparticles were prepared using a modified water-in-oil-in-water double-emulsion solvent evaporation technique.

L00339: J. Ferdous, V. B. Kolachalama, K. Kolandaivelu and T. Shazly. Degree of bioresorbable vascular scaffold expansion modulates loss of essential function. *Acta Biomaterialia* 2015;26(195-204

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide) ester terminated; IV 0.82 dL/g; Tissue engineering (scaffold, vascular graft); pg. 198; treatment of obstructive artery disease; degradation, mechanical, and in vitro drug release testing.

L00285: H. N. Chia and B. M. Wu. High-resolution direct 3D printed PLGA scaffolds: print and shrink. *Biofabrication* 2015;7(1):1-11

LACTEL Comments: 85:15 Poly(DL-lactide-co-glycolide); IV 0.63 dL/g; Tissue engineering (scaffold); microparticles formed by emulsion solvent evaporation; 3D printing.

L00313: N. J. Castro, J. O'Brien and L. G. Zhang. Integrating biologically inspired nanomaterials and table-top stereolithography for 3D printed biomimetic osteochondral scaffolds. *Nanoscale* 2015;7(14010-14022

LACTEL Comments: Poly(DL-lactide-co-glycolide); Drug delivery (nanospheres, TGF-B1); Tissue engineering (scaffold); nanospheres fabricated by coaxial electrospraying; 3D printing of PLGA.

L00340: N. J. Castro, C. O'Brien and L. G. Zhang. Integrating biologically inspired nanomaterials and table-top stereolithography for 3D printed biomimetic osteochondral scaffolds. *Nanoscale* 2015;7(14010-14022

LACTEL Comments: Poly(DL-lactide-co-glycolide); Tissue engineering (scaffold, 3D printing); "3D printer and the nano-ink (i.e., nHA + nanosphere + hydrogel) were employed to fabricate a porous and highly interconnected osteochondral scaffold with hierarchical nano-to-micro structure and spatiotemporal bioactive factor gradients" (pg. 14010); 3D scaffold design and printing (pg. 14012).

L00343: A. M. Behrens, N. G. Lee, B. J. Casey, P. Srinivasan, M. J. Sikorski, J. L. Daristotle, A. D. Sandler and P. Kofinas. Biodegradable-Polymer-Blend-Based Surgical Sealant with Body-Temperature-Mediated Adhesion. *Advanced Materials* 2015;27(8056-8061

LACTEL Comments: 50:50 Poly(DL-lactide-co-glycolide); IV 0.86 dL/g in HFIP; Device (mat, sealant for wound repair); mice; Polymer fiber mat prepared by solution blow spinning.

L00317: D. Barati, J. D. Walters, S. R. P. Shariati, Moeinzadeh, S. and E. Jabbari. Effect of Organic Acids on Calcium Phosphate Nucleation and Osteogenic Differentiation of Human Mesenchymal Stem Cells on Peptide Functionalized Nanofibers. *Langmuir* 2015;31(5130-5140

LACTEL Comments: Poly(DL-lactide) IV 0.65 dL/g & Mw 90 kDa; 50:50 Poly(DL-lactide-co-glycolide) IV 1.1 dL/g & Mw 105 kDa; Tissue engineering (orthopedic); electrospinning.