## Posters Relating to GDUFA Science and Research in Fiscal Year 2021

- 1. Ajjarapu S, Rangappa S, Ghosh P, Kelchen M, Raney S, Urena-Benavides E, Maibach H, and Narasimha Murthy S. *A Mechanistic Evaluation of How Metamorphosis of a Topical Dosage Form Impacts Permeation*. Poster Presentation at The American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 2. Ajjarapu S, Rangappa S, Ghosh P, Kelchen M, Raney S, Urena-Benavides E, Maibach H, and Narasimha Murthy S. *A Mechanistic Evaluation of the Impact of Formulation Viscosity and Fractional Solubility on Drug Release and Permeation*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 3. Alam K, Sharan S, Fang L, Jiang W, Kim M, Zhao L, Zhang L, and Lionberger R. *Assessing Whether Partial AUCs are Needed to Demonstrate Bioequivalence for Liposomal Doxorubicin.* Poster Presentation at the 2020 American College of Clinical Pharmacy (ACCP) Annual Meeting. Virtual Meeting, Oct. 24, 2020.
- 4. Arora S, Polak S, Jamei M, Tsakalozou E, Ghosh P, Alam K, Liu X, Namjoshi S, Grice J, Mohammed Y, and Roberts M. *Integrating Drug Product Quality Attributes in a Bottom-Up Physiologically Based Pharmacokinetic (PBPK) Model to Simulate In Vitro Skin Permeation of Acyclovir Commercial Formulations.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 5. Bae J, Patel M, Manna S, Smith W, Vo A, Wang Y, Choi S, Kozak D, Zheng J, and Xu X. *Impact of Manufacturing Process on Critical Quality Attributes of Multivesicular Liposomes*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 6. Bielski E, Conti D, Oguntimein O, Sheth P, Hallinger M, Svensson M, Sandell D, Bulitta J, and Hochhaus G. *The Effects of Formulation Factors and Actuator Design on Mometasone Furoate Metered Dose Inhaler In Vitro Aerosolization Performance*. Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 7. Bois F, Hsieh N, Gao W, Chiu W, and Reisfeld B. *Well-Tempered MCMC Simulations for Population Pharmacokinetic Models*. Poster Presentation at the American Conference on Pharmacometrics (ACoP) 11. Virtual Meeting, Nov. 09, 2020.
- 8. Bolla P, Hamad G, Jiang Y, Ramezanli T, Ghosh P, and Raney S. Feasibility of In Vitro Permeation Testing for Cleocin T® (Clindamycin Phosphate) Topical Lotion to Support a Demonstration of Bioequivalence. Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 9. Bolla P, Hamad G, Jiang Y, Ramezanli T, Ghosh P, Raney S, Ashraf M, and Zidan A. Feasibility of In Vitro Permeation Testing for Cleocin T<sup>®</sup> (Clindamycin Phosphate) Topical Lotion to Support a Demonstration of Bioequivalence. Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 10. Chan T, Ren P, Yang W, Wang Y, Luke M, Kim M, and Zhang Y. Assessment on the Formulation Similarity of Approved Generic Drug Products and their Respective Reference Products Which are Considered as Potential BCS Class 3 Drugs. Poster Presentation at the 2020 American College of Clinical Pharmacy (ACCP) Annual Meeting. Virtual Meeting, Oct. 24, 2020.
- 11. Chopski S, Walenga R, Boyce H, Babiskin A, and Kim M. *Physiologically-Based Pharmacokinetic Model to Describe the Pharmacokinetics of Crushed Morphine Sulfate and Naltrexone Hydrochloride Extended-Release Capsules with Abuse Deterrent Properties.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.

- 12. Das S, Wu F, Fang L, and Polli J. *Using Partial AUC to Characterize the Impact of Shape of Pharmacokinetic Profiles on Bioequivalence Evaluation*. Poster Presentation at the American Society for Clinical Pharmacology & Therapeutics (ASCPT) 2021. Virtual Meeting, Mar. 12, 2021.
- 13. Dhapare S, Bielski E, Conti D, Oguntimein O, Sheth P, Svensson M, Sandell D, Bulitta J, and Hochhaus G. *Effects of Formulation and Actuator Design on Spray Pattern and Plume Geometry of Mometasone Furoate Metered Dose Inhalers (MDIs)*. Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 14. Fanse S, Bao Q, Zou Y, Wang Y, and Burgess D. *Influence of Polymer Crosslinking on the Mechanical Properties of Polydimethylsiloxane Based Intrauterine Systems*. Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 15. Garner J, Hadar J, Skidmore S, Jessmon F, Park H, Park K, Jhon Y, Qin B, and Wang Y. *Effect of Reaction Temperature on PLGA Properties and Semi-Solvent Interactions*. Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 16. Garner J, Hadar J, Skidmore S, Jessmon F, Park H, Park K, Jhon Y, Qin B, and Wang Y. Effect of Solvent Molar Volume on Its Ability to Solubilize PLGAs and Potential Implications for Understanding Polymer Structure. Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 17. Garner J, Hadar J, Skidmore S, Jessmon F, Park H, Park K, Jhon Y, Qin B, and Wang Y. Scanning Analysis of Semi-Solvent Impact (SASSI) Assays of Naltrexone Microparticles Prepared by Different Manufacturing Solvents and Conditions. Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 18. Gong X, and Hu M. Heterogeneous Treatment Effect Analysis Based on Machine Learning Methodology. Poster Presentation at the American Society for Clinical Pharmacology & Therapeutics (ASCPT) 2021. Virtual Meeting, Feb. 14, 2021.
- 19. Gong Y, Feng K, Lee J, Pan Y, Bai T, Li B, Kim C, Yoon M, Zhang P, Fang L, and Zhao L. *Quantitative Modeling and Simulation to Evaluate Alternative Approaches to be Used in COVID-19 Interrupted Bioequivalence Studies*. Poster Presentation at the American Society for Clinical Pharmacology & Therapeutics (ASCPT) 2021. Virtual Meeting, Feb. 15, 2021.
- 20. Guhl M, Mercier F, Sharan S, Feng K, Sun G, Sun W, Grosser S, Zhao L, Fang L, Mentre F, Comets E, and Bertrand J. Model-Based Tests of Bioequivalence: Impact of a Model Misspecification. Poster Presentation at the 42nd Annual Conference of the International Society for Clinical Biostatistics 2021. Virtual Meeting, Jul. 18, 2021.
- 21. Guhl M, Mercier F, Sharan S, Feng K, Sun G, Sun W, Grosser S, Zhao L, Fang L, Mentre F, Comets E, and Bertrand J. *Model-Based Tests of Bioequivalence: Impact of a Model Misspecification*. Poster Presentation at The Population Approach Group Europe (PAGE) 2021 Meeting. Virtual Meeting, Sep. 07, 2021.
- 22. Hamad G, Bolla P, Kelchen M, Ghosh P, Ramezanli T, Raney S, Ashraf M, and Zidan A. A Mechanistic Evaluation of Drug Availability from Imvexxy® (Estradiol) Vaginal Inserts. Poster Presentation at the Controlled Release Society (CRS) 2021 Annaul Meeting. Virtual Meeting, Jul. 25, 2021.
- 23. Hamad G, Niu M, Ghosh P, Ramezanli T, Raney S, Ashraf M, and Zidan A. *Interaction Studies of Tretinoin with Microspheres in Tretinoin Topical Gel.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 24. Hamad G, Niu M, Ghosh P, Ramezanli T, Raney S, Ashraf M, and Zidan A. *Interaction Studies of Tretinoin with Microspheres in Tretinoin Topical Gel.* Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 25. Hamad G, Niu M, Ghosh P, Ramezanli T, Raney S, Ashraf M, and Zidan A. *Preparation, Characterization, and In Vitro Release Test (IVRT) Study of Tretinoin-Loaded Microspheres in a*

- *Topical Gel Product.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 26. Hamad G, Willett D, Yilmaz H, Ahmed S, Niu M, Bolla P, Ghosh P, Ramezanli T, Raney S, Ashraf M, and Zidan A. *Investigating the Relationship Between Tretinoin Distribution in Microsponges and Release Mechanism Using In-SEM Raman Spectroscopy.* Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 27. Haq A, Chandler M, and Michniak-Kohn B. *Solubility-Physicochemical-Thermodynamic Theory of Penetration Enhancer Mechanism of Action.* Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 28. Hsieh N, Bois F, Tsakalozou E, Yoon M, Reisfeld B, and Chiu W. *A Bayesian Population Compartmental Absorption and Transit Modeling Approach to Support Generic Drug Development and Regulation Application to Bupropion.* Poster Presentation at the American Conference on Pharmacometrics (ACOP) 11. Virtual Meeting, Nov. 09, 2020.
- 29. Jiang Y, Simamora M, Ramezanli T, and Raney S. Factors Influencing Transepidermal Water Loss Measurements Used to Test Skin Barrier Integrity In Vitro: A Literature Review. Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 30. Jordan L, Hoover A, Zheng K, Feng X, Mahjabeen S, Sun W, Xia L, Lee S, Hwang S, Nwakama P, Xi X, Rodriguez J, Kim M, Tampal N, Boyce H, and Tian L. *In Vitro Evaluation of a Morphine Sulfate Extended-Release Formulation Sprinkled on Soft Foods.* Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 31. Kaisar M, Dhapare S, Newman B, Svensson M, Sandell D, Bulitta J, and Hochhaus G. Factors Influencing Plume Characteristics of Flovent® HFA Following Passage through Bio-Relevant Mouth-Throat Models. Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 32. Kim D, Natu R, Malinauskas R, Herbertson L, Baek J, Feng X, Qu H, and Xu X. *Development of In Vitro Predictive Models for Abuse-Deterrent Opioid Safety Assessment*. Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 33. Kolanjiyil A, Hosseini S, Alfaifi A, Golshahi L, Hindle M, and Longest W. *How Spray Metric Variability Impacts the Initial Deposition of Nasal Sprays*. Poster Presentation at the Respiratory Drug Delivery (RDD) 2021 Virtual Conference. Virtual Meeting, May. 07, 2021.
- 34. Lee J, Feng K, Xu M, Gong X, Sun W, Kim J, Zhang Z, Wang M, Fang L, and Zhao L. *Applications of Adaptive Designs in Generic Drug Development*. Poster Presentation at the American Society for Clinical Pharmacology & Therapeutics (ASCPT) 2021. Virtual Meeting, Mar. 09, 2021.
- 35. Ma Y, Liang J, Zheng J, Wang Y, Ashraf M, and Srinivasan C. Significance of Cryogenic Broad Ion Beam Milling in Evaluating Microstructures of PLGA-based Drug Products. Poster Presentation at the MicroscopyMicroanalysis (MM) 2021 Annual Meeting. Virtual Meeting, Aug. 02, 2021.
- 36. Mekjaruskul C, Beringhs A, Luo W, Xu Q, Halquist M, Qin B, Wang Y, and Lu X. *Membrane-Drug Binding and its Impact on In Vitro Release of Dexamethasone*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 37. Mohammed Y, Namjoshi S, Dabbaghi M, Ramezanli T, Raney S, Grice J, and Roberts M. *Scanning Electron Micrographic Structural Characterization of Microsponge Gel Products.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 38. Mohammed Y, Namjoshi S, Dabbaghi M, Ramezanli T, Raney S, Jiang Y, Grice J, and Roberts M. Microstructural Characterization of Microsponge-Based Gel Products Using CryoSEM. Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 39. Mohammed Y, Namjoshi S, Silva L, Dabbaghi M, Ramezanli T, Raney S, Grice J, Chen T, Lian G, and Roberts M. Experimental Measurements and Mathematical Modelling of Volatile Loss from Binary

- *Solvent Systems.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 40. Naik S, Palui G, Majumdar S, Raghavendra A, Sharmah A, Koonce N, Zheng J, Paredes A, Jiang W, and Patri A. *Comprehensive Physico-chemical Characterization of Liposomal Doxorubicin*. Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 41. Oguntimein O, Le C, Ngooi S, Chee M, Moriates C, Wallingford S, Cardin T, Weissman A, Farnan J, Samarth A, Shah N, Cook M, and Arora V. *Identifying Message to PROmote Value & Education (IMPROVE) of Generic Oral Contraceptive Prescribing*. Poster Presentation at the Association of Military Surgeons United States (AMSUS) 2020 Annual Meeting. Virtual Meeting, Dec. 06, 2020.
- 42. Owens K, Argon S, Yu J, Ragueneau-Majlessi I, Yang X, Wu F, Lee S, Sun W, Ramamoorthy A, and Zhang L. *Exploring the Relationship of Drug BCS Classification, Food-Effect, and Gastric pH-Mediated Drug Interactions*. Poster Presentation at the American Society for Clinical Pharmacology & Therapeutics (ASCPT) 2021. Virtual Meeting, Mar. 15, 2021.
- 43. Qin B, Garner J, Hadar J, Skidmore S, Jessmon F, Park H, Park K, Wang Y, and Jhon Y. *Effect of Solvent Isomeric Structures on the Dissolution of PLGAs with Different Lactide:Glycolide (L:G) Ratios.*Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 44. Qin Y, Bao Q, Wang Y, Zhu A, Burgess D, Zhou L, and Shawn Z. *Drug Particle Characterization Inside Long-Acting Intrauterine Systems with 3D Imaging Analytics*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 45. Ramezanli T, Jiang Y, Dabbaghi M, Tiffner K, Mohammed Y, Namjoshi S, Birngruber T, Bodenlenz M, Raney S, Roberts M, and Sinner F. Correlation of Physical and Structural (Q3) Properties of Lidocaine/Prilocaine Topical Products with Product Performance In Vitro and In Vivo. Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 46. Ramezanli T, Jiang Y, Ghosh P, Dabbaghi M, Tiffner K, Mohammed Y, Namjoshi S, Birngruber T, Bodenlenz M, Roberts M, Sinner F, and Raney S. Correlation of Physico-Structural (Q3) Properties of Lidocaine/Prilocaine Topical Products with Product Performance In Vitro and In Vivo. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 47. Rangappa S, Ajjarapu S, Ghosh P, Kelchen M, Raney S, Repka M, Maibach H, and Narasimha Murthy S. *Comparative Evaluation of the Permeation of Metronidazole Using Static Diffusion Cells and Flow-Through Diffusion Cells.* Poster Presentation at The American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 48. Rangappa S, Ajjarapu S, Ghosh P, Kelchen M, Raney S, Repka M, Maibach H, and Narasimha Murthy S. *Critical Quality Attributes of Topical Clobetasol Propionate Foams*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 49. Schroeter J, Rose M, Kimbell J, Chopski S, and Walenga R. *Effect of Polydispersity on PBPK Model Simulations of Intranasal Corticosteroid Sprays*. Poster Presentation at the International Society for Aerosols in Medicine (ISAM) 2021. Virtual Meeting, May. 22, 2021.
- 50. Shen M, Wang Y, Zhang S, Qin B, Wang R, Bao Q, and Burgess D. *PLGA Microsphere Stability Characterization Using Image-Based Key Performance Attributes and Release Prediction.* Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 51. Siriwardane D, Jiang W, and Mudalige T. *Profiling In-Vitro Release of Verteporfin from VISUDYNE Liposomal Formulation and Investigating the Kinetics of Human Serum Albumin (HSA) Verteporfin Complex Formation*. Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 52. Smith W, Bae J, Zhang Y, Wang Y, Qin B, Kozak D, and Xu X. Interplay Between Particle Flocculation and Dissolution Leading to Variation in Bioavailability and Clinical Performance of Injectable

- *Suspensions.* Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 53. Smith W, Vo A, Bae J, Wang Y, Qin B, and Xu X. *Influence of Polymeric Excipients on the Precision of Particle Size Distribution Measurements of Suspensions Using Laser Diffraction.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 30, 2020.
- 54. Sun W, Boyce H, Tang F, Hollenbeck R, Ibrahim A, Hoag S, and Kim M. *Physical Manipulation of an Opioid Drug Product Containing Combination of Opioid Agonist and Antagonist.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 55. Sung J, Becker R, Knapton A, Pang E, and Howard K. *A Humanized Mouse Model to Predict Immunogenicity of Impurities in Generic Peptide Drugs.* Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 56. Tardivon C, Loingeville F, Sharan S, Donnelly M, Feng K, Sun W, Sun G, Grosser S, Zhao L, Fang L, Mentre F, and Bertrand J. *Evaluation of Model-Based Bioequivalence approach for one single sample pharmacokinetic studies.* Poster Presentation at the Population Approach Group Europe (PAGE) 2021 Annual Meeting. Virtual Meeting, Sep. 02, 2021.
- 57. Tian L, Tan M, Lin H, Jiang W, Ruzicka C, Rodriguez J, and Gao Z. *Biphasic Dissolution Study of Nifedipine Extended-Release (ER) Tablets*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 30, 2020.
- 58. Tiffner K, Ramezanli T, Birngruber T, Bodenlenz M, Lackner B, Raml R, Schwagerle G, Kainz S, Gander E, Raney S, and Sinner F. *A Clinical Study to Assess the Bioequivalence of Lidocaine and Prilocaine Topical Drug Products Using Dermal Open Flow Microperfusion*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 59. Tsakalozou E, Alam K, Babiskin A, and Zhao L. *PBPK Modeling of Percutaneous Pharmacokinetics for Tazarotene and Tretinoin Creams: Applicability and Challenges.* Poster Presentation at the Innovations in Dermatological Sciences Conference. Virtual Meeting, Sep. 29, 2021.
- 60. Tsakalozou E, Alam K, Babiskin A, Fang L, and Zhao L. *Development of a Dermal PBPK Modeling for an Ethinyl Estradiol-Containing Transdermal Delivery System*. Poster Presentation at the American Society for Clinical Pharmacology & Therapeutics (ASCPT) 2021. Virtual Meeting, Mar. 12, 2021.
- 61. Varadarajan A, Ajjarapu S, Rangappa S, Ghosh P, Raney S, Repka M, Narasimha Murthy S, and Kundu S. *Rheological Characterization of Topical Clobetasol Propionate Foams*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 62. Vitry P, Tabosa A, Belsey N, Tsikritsis D, Woodman T, Bunge A, Delgado-Charro M, and Guy R. *Assessing Topical Drug Clearance from the Skin Using Raman Spectroscopy.* Poster Presentation at The American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 63. Vitry P, Tabosa A, Belsey N, Tsikritsis D, Woodman T, Bunge A, Delgado-Charro M, and Guy R. *Assessing Topical Drug Penetration into the Skin Using Raman Spectroscopy.* Poster Presentation at The American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 64. Walenga R, Boyce H, Feng X, Zidan A, Kamal N, Xu X, Babiskin A, Kim M, and Zhao L. *Hybrid CFD-PBPK Model for Prediction of Systemic PK Following Nasal Insufflation of Milled Oxycodone Hydrochloride Extended-Release Tablets.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 65. Wan B, Andhariya J, Bao Q, Wang Y, Choi S, Zou Y, and Burgess D. *Effect of Polymer Source Variation on Physicochemical Properties of Risperidone Microspheres*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.

- 66. Wang R, Bao Q, Wang Y, Choi S, Zhou L, Zhang S, and Burgess D. *Formulation Optimization of PLGA Microspheres Prepared Using a Coacervation Method.* Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 67. Xie L, Kelchen M, Ghosh P, Raney S, and Shen J. *Development of an In Vitro Release Testing Method for Rectal Suppositories*. Poster Presentation at the American Association of Pharmaceutical Scientists (AAPS) 2020. Virtual Meeting, Oct. 26, 2020.
- 68. Xie L, Yue W, Kelchen M, Ghosh P, Niu M, Raney S, and Shen J. *Impact of Material Attributes on In Vitro Release Characteristics of Rectal Suppositories*. Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 69. Yurtsever F, Siriwardane D, Jiang W, and Mudalige T. *Exploring an Electroanalytical Method to Determine Drug Release from Liposomal Doxorubicin HCl.* Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 70. Zarmpi P, Maciel-Tabosa M, Vitry P, Belsey N, Vorng J, Tsikritsis D, Woodman T, White K, Bunge A, Delgado-Charro M, and Guy R. *Correlative Raman and Mass Spectroscopic Imaging to Quantify Drug Delivery into the Skin*. Poster Presentation at the 2021 Academy of Pharmaceutical Science UK meeting. Virtual Meeting, Sep. 07, 2021.
- 71. Zhang D, Li S, Jarrells T, Munson E, Kozak D, and Jiang X. *Solid State 13C NMR Analysis of Patiromer.* Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 72. Zhang Q, Qin B, Wang Y, Li Q, and Kozak D. *Scientific Gap Analysis of Polymeric In Situ Forming Depot Products for the Development of GDUFA Research Projects.* Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 73. Zhang Y, Patel D, Zhu D, Dong Y, Kozak D, Ashraf M, and Xu X. *Adaptive Perfusion: A Novel In Vitro Drug Release Testing Method for Complex Drug Products*. Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 74. Zhang Y, Patel D, Zhu D, Dong Y, Kozak D, Ashraf M, and Xu X. *Adaptive Perfusion: An In Vitro Drug Release Testing Method for Complex Drug Products*. Poster Presentation at the Controlled Release Society (CRS) Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 75. Zhang Y, Patel D, Zhu D, Dong Y, Kozak D, Ashraf M, and Xu X. *Adaptive Perfusion: An In Vitro Drug Release Testing Method for Complex Drug Products.* Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 76. Zheng K, Jordan L, Tian L, Hoover A, Mahjabeen S, Sun W, Xia L, Lee S, Hwang S, Nwakama P, Xi X, Kim M, Tampal N, Boyce H, and Feng X. *In Vitro Performance of Pantoprazole Sodium Delayed Release Granules when Sprinkled on Soft Foods.* Poster Presentation at the Controlled Release Society (CRS) 2021 Annual Meeting. Virtual Meeting, Jul. 25, 2021.
- 77. Zheng K, Jordan L, Tian L, Hoover A, Mahjabeen S, Sun W, Xia L, Lee S, Hwang S, Nwakama P, Xi X, Kim M, Tampal N, Boyce H, and Feng X. *In Vitro Performance of Pantoprazole Sodium Delayed Release Granules when Sprinkled on Soft Foods.* Poster Presentation at the FDA Science Forum. Virtual Meeting, May. 26, 2021.
- 78. Zou L, Pottel J, Khuri N, Ngo H, Warren M, Huang Y, Schoichet B, and Giacomini K. *Interactions of Oral Molecular Excipients with Breast Cancer Resistance Protein, BCRP.* Poster Presentation at the American Society for Clinical Pharmacology & Therapeutics (ASCPT) 2021. Virtual Meeting, Mar. 15, 2021.