Posters Published Relating to GDUFA Research in Fiscal Year 2019

- 1. Ajjarapu, S., Rangappa, S., Raney, S., Repka, M., Murthy, S. *Method Development and Optimization of an In Vitro Permeation Test (IVPT) to Compare the Rate and Extent of Drug Permeation from Topical Drug Products*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 6, 2018.
- 2. Andhariya, J., Jog, R., Shen, J., Zou, Y., Wang, Y., Choi, S., Burgess, D. Development of In Vitro-In Vivo Correlation for Complex Parenteral Microsphere Drug Products Effect of Burst Release. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 6, 2018.
- 3. Bao, Q., Zou, Y., Wang, Y., Choi, S., Kozak, D., Burgess, D. *In Vitro Release Testing Methods for Long-Acting Intrauterine Systems*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 6, 2018.
- Barenie, R., Kesselheim, A., Gagne, J., Campbell, E., Dutcher, S., Jiang, W., Sarpatwari, A. Does Variation in the Physical Characteristics of Generic Drugs Affect Patient Adherence? Results from National Surveys Of pharmacists and Patients. Poster Presentation at Academy Health Organization Annual Research Meeting. Washington, DC, June 2-4, 2019.
- Bielski, E., Conti, D., Oguntimein, O., Sheth, P., Hallinger, M., Svensson, M., Sandell, D., Bulitta, J, Hochhaus, G. *The Effects of Formulation Factors and Actuator Design on Mometasone Furoate Metered Dose Inhalerperformance*. Poster Presentation at FDA Science Forum. Silver Spring, MD, Sept. 11, 2019.
- Boc, S., Conti, D., Chen, M., Jiao, Y., Kurumaddali, A., Oguntimein, O., Delvadia, R., Saluja, B., Lee, S., Shur, J., Price, R., Hindle, M., Bulitta, J, Hochhaus, G. *Investigation of Pharmacokinetic Sensitivity to Lung Deposition of Locally-Acting Orally Inhaled Drug Products*. Poster Presentation at AAPS. Silver Spring, MD, Sept. 11, 2019.
- Boyce, H. Sun, D., S. Raofi, M. Kinjo, Z. Meng, T. Li. Preferential Drug Loss of Physically Manipulated Abuse-Deterrent (AD) Opioid Drug Products Prepared for Nasal Insufflation Studies. Poster Presentation AAPS Pharmsci 360. Washington, DC, Nov. 7, 2018.
- Boyce, H., Sun, D., Kinjo, M., Raofi, S., Frost, M., Luke, M., Kim, M., Lionberger, R., Vince, B., Kelsh, D., and Li, Z. *Pharmacokinetic Study of Physically Manipulated Oxycodone Hydrochloride Products Following Nasal Insufflation in Recreational Opioid Users*. Poster Presentation at 2019 Annual Meeting, American Society for Clinical Pharmacology and Therapeutics (ASCPT). Washington, DC, Mar. 13, 2019.
- 9. Choi, J., Choi, S., Li, F., Hoffman, EA., Castro, M., Goss, C., Hall, C., Mceleney, S., Sieren, JP, and Lin, CL. *Cluster-guided Image Matching Analysis of Multiscale Lung Response to Bronchial Thermoplasty*. Poster Presentation at the American Thoracic Society 2019 International Conference, Dallas, TX, May 19, 2019.
- Dabbaghi, M., Mohammed, Y., Namjoshi, S., K, T., Rantou, E., Ramezanli, T., Raney, S., Roberts, M., and Grice, J. *Deciphering the Effects of Microstructure on Lidocaine-Prilocaine Topical Product Performance*. Poster Presentation at Controlled Release Society Annual Meeting. Valencia, Spain, July 21, 2019.
- Dong, Y., Hengst, L., Patel, D., Hunt, R., Qu, H., Choi, S., Ashraf, M., Cruz, C.N., Xu, X. Understanding Drug Partition through Biphasic Diffusion. AAPS PharmSci 360, Washington DC, Nov 4-7, 2018.
- 12. Drescher, S. et al. Assessing Central and Peripheral Pulmonary Deposition of Three Fluticasone Propionate Dry Powder Inhaler Formulations with Different Aerodynamic Particle Size

Distributions in Healthy Subjects Via Population Pharmacokinetics Modeling. Poster Presentation at Drug Delivery to the Lungs. Edinburgh, UK, Dec. 13, 2018.

- Farhan, N., Basu, S., Kim, S., Lingineni, K., Vozmediano, V., Ait-Oudhia, S., Fang, L., Zhao, L., Lesko, L., and Schmidt, S. *Application of Physiologically-Based Oral Absorption & Pharmacokinetic Modeling to Investigate Formulation Factors Influencing the Pharmacokinetics of Novel Oral Anticoagulants*. Poster Presentation at American Conference on Pharmacometrics (ACoP) 9 Meeting, San Diego, CA, Oct. 8-10, 2018.
- Feng, X., Zidan, A., Kamal, N., Xu, X., Sun, D., Walenga, R., Boyce, H., Cruz, C., and Ashraf, M. A Flow-Through Dissolution Method for Evaluation of Drug Release from Manipulated Abuse Deterrent Formulations. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018.
- 15. Garner, J., Hadar, J., Skidmore, S., Park, H., Park, K., Qin, B., Jiang, X., and Wang, Y. *Effect of Solvents and Their Isomers on Dissolution of Plgas with Different Lactide:Glycolide (L:G) Ratios*. Poster Presentation at CRS Annual Meeting. Valencia, Spain, July 21, 2019.
- 16. Hadar, J., Garner, J., Skidmore, S., Park, H., Park, K., Qin, B., Jiang, X., and Wang, Y. *Compositional Analysis of Glucose-Poly(Lactide-Co-Glycolide) in Sandostatin LAR Formulation.* Poster Presentation at CRS Annual Meeting. Valencia, Spain, July 21, 2019.
- 17. Haute, VD., Wenlei Jiang W., Mudalige, T. *Evaluation of size-based distribution of drug and excipient in amphotericin B liposomal formulation.* 4th PQRI/FDA Conference on Advancing Product Quality. Rockville, MD. April 9-11, 2019.
- Hosseini, S., Schuman, T., Walenga, R., Babiskin, A, Golshahi, L. Assessment of Internal Nasal Valve Using Anatomically-Accurate 3d Airway Models. Poster Presentation at American Rhinologic Society. New Orleans, LA, Sept. 13, 2019.
- 19. Hsieh, N., Reisfeld, B., and Chiu, W. *Pksensi: An R Package to Apply Sensitivity Analysis in Pharmacokinetic Modeling*. Fort Collins, CO, Mar. 10, 2019.
- 20. Hsu, H., Pavuluri, V., Yang Y., Abraham, C., Naraharisetti, S., Ashraf, M., Al-Ghabeish, M. Influences of Formulation Variables on Nasal Permeation and Stability of Naloxone in Intranasal Formulations. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 7, 2018.
- Kamal, N., Zidan, A., Feng, X., Xu, X., Sun, D., Walenga, R., Boyce, H., Cruz, C., and Ashraf, M. Development of In Vitro Permeation Method for Nasally Insufflated Abuse Deterrent Formulations. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 6, 2018.
- Kelchen, M., Ghosh, P., Ramezanli, T., and Raney, S. Strategic Analysis of the Roadmap for Implementing Characterization-Based Bioequivalence Approaches in Product-Specific Guidances for Generic Topical Dermatological Drug Products. Poster Presentation at Innovations in Dermatological Sciences. Somerset, NJ, Sept. 9, 2019.
- Kibria, G, Cruz C. Stability of Abuse-deterrent Properties of PEO-based Abuse-deterrent Formulations. Poster Presentation at 4th FDA/PQRI Conference on Advancing Product Quality: Patient-Centric Product Design, Drug Development, and Manufacturing. Received Best Poster Award (1st place). Rockville, MD, Apr. 11, 2019.
- 24. Kim, S., Sharma, V., Lingineni, K., Farhan, N., Fang, L., Zhao, L., Brown, J., Cristofoletti, R., Vozmediano, V., Ait-Oudhia, S., Lesko, L., Trame, M., and Schmidt, S. A Model- and Systems-Based Approach to Assess Impact of Potential Pharmacokinetic Differences on Pharmacodynamics and Questions Regarding Generic Substitution. Poster Presentation at American Conference on Pharmacometrics (ACoP) 9 Meeting. San Diego, CA, Oct. 8-10, 2018.

- Kitabi, E., Ivaturi, V., Liang, Z., Fang, L., Gobburu, J., and Gopalakrishnan, M. A Tool for Prioritization of Investigation of Generic Drug Ineffectiveness Complaints. Poster Presentation at 2019 Annual Meeting, American Society for Clinical Pharmacology and Therapeutics (ASCPT). Washington, DC, Mar. 15, 2019.
- Kuzma, B., Senemar, S., and Stagni, G. Effect of Formulation Wipe-Off Time on Topical Bioavailability of Metronidazole Using Dermal Microdialysis. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 7, 2018.
- 27. Kuzma, B., Senemar, S., and Stagni, G. *Estimation of In Vivo Skin Permeation (Flux) and Cumulative Amount Input of Metronidazole Formulations in Mini-Pigs' Dermis*. Poster Presentation at Gordon Research Conference on the Barrier Function of Mammalian Skin. Waterville Valley, NH, Aug. 12, 2019.
- 28. Kuzma, B., Senemar, S., and Stagni, G. *Estimation of In Vivo Skin Permeation (Flux) and Cumulative Amount Input of Metronidazole Formulations in Mini-Pigs' Dermis.* Poster Presentation at Innovations in Dermatological Sciences. Somerset, NJ, Sept. 9, 2019.
- 29. Kuzma, B., Senemar, S., DePinto, R., and Stagni, G. *LC/MS/MS Method for the Quantification of Metronidazole in Skin Dialysate*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 6, 2018.
- Kuzma, B., Senemar, S., Ramezanli, T., Ghosh, P., Raney, S., and Stagni, G. Evaluation of Local Bioavailability of Metronidazole from Topical Formulations Using Dermal Microdialysis: Preliminary Studies in Yucatan Mini-Pig. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 6, 2018.
- Le Merdy, M., Fan, J., Babiskin, A., Zhao, L. *Physiologically-Based Pharmacokinetic Model to* Support Ophthalmic Suspension Product Development. Poster Presentation at 2019 Annual Meeting, American Society for Clinical Pharmacology and Therapeutics (ASCPT). Washington, DC, Mar. 14, 2019.
- 32. Mangal, S., Conti, D., Delvadia, R., Oguntimein, M., Shur, J, Price, R. *Microstructural Mapping of Dry Powder Inhalers (DPIs) Using Morphologically Directed Raman Spectroscopy (MDRS): A Novel Analytical Tool for DPI Characterization*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018.
- Mangal, S., Conti, D., Delvadia, R., Oguntimein, M., Shur, J, Price, R. *Microstructural Mapping of Dry Powder Inhalers (Dpis) Using Morphologically Directed Raman Spectroscopy (MDRS): A Novel Analytical Tool for DPI Characterization*. Poster Presentation at FDA Science Forum. Silver Spring, MD, Sept. 12, 2019.
- Merdy, M., Fan, J., Babiskin, A., and Zhao, L. *Physiologically-Based Pharmacokinetic Model to Support Ophthalmic Suspension Product Development*. Poster Presentation at 2019 Annual Meeting, American Society for Clinical Pharmacology and Therapeutics (ASCPT) Pre-Conference: PBPK Modeling for the Development and Approval of Locally Acting Products. Washington, DC, Mar. 13, 2019.
- 35. Miao, L., Wu, F., Yang, X, Ramamoorthy A, Lee S, Raines K, Zhang L, Seo P. Application of dissolution profile comparison for gastric pH-dependent drug-drug interaction prediction. Poster Presentation at ACCP Annual Meeting. Chicago, Illinois, Sep. 16, 2019.
- 36. Mosley, S., Frye, R., Langaee, T., Schmidt, S., Schmidt, S., Gong, Y., Binkley, P., Johnson, J., and Cavallari, L. *Determination of CYP2D6 Phenotyping for Metoprolol Using the Genotype-Derived Activity Score*. Poster Presentation at ACCP Annual Meeting. Seattle, WA, Oct. 20, 2018.

- 37. Namjoshi, S., Mohammed, Y., Telaprolu, K., Dabbaghi, M., Jung, N., Windbergs, M., Grice, J., Ramezanli, T., Raney, S., and Roberts, M. *Topical Semisolid Product Bioequivalence-A Case for Product Quality and Performance Assessment As Evaluation Tools*. Poster Presentation at Gordon Research Conference on the Barrier Function of Mammalian Skin. Waterville Valley, NH, Aug. 12, 2019.
- Qu, H., Patel, D., Kozak, D., Walenga, R., Choi, S., Ashraf, M., Faustino, P., Cruz, C., and Xu, X. Asymmetrical-Flow Field Fractionation to Assess the Impact of Manufacturing process Variables on the Globule Size of Distribution of Cyclosporine Emulsions. ACS Annual Meeting Silver Spring, MD, Mar. 28, 2019.
- Rangappa, S., Ajjarapu, S., Varadarajan, A., Prado, R., Ghosh, P., Raney, S., Kundu, S., Repka, M., and Murthy, S. *Comparative Assessment of the Physical and Structural Similarity of Topical Drug Products Containing Lidocaine and Prilocaine*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018.
- 40. Reisfeld, B., Chiu, W., Hsieh, N., Olschanowsky, C., Bois, F., Ghosh, S. *Popkat: A Framework for Bayesian Population PBPK Analysis*. Fort Collins, CO, Mar. 11, 2019.
- 41. Rangappa, S., Ajjarapu, S., Ghosh, P., Rantou, E., Raney, S., Repka, M., and Murthy, S. *Evaluation* of Bioavailability of Lidocaine and Prilocaine from Topical Drug Products Using an In Vitro Permeation Test (IVPT). Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018.
- 42. Rangappa, S., Ajjarapu, S., Varadarajan, A., Prado, R., Ghosh, P., Raney, S., Kundu, S., Repka, M., and Murthy, S. *Comparative Assessment of the Physical and Structural Similarity of Topical Drug Products Containing Lidocaine and Prilocaine*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018.
- 43. Senemar, S., Kuzma, B., Ramezanli, T., Ghosh, P., Raney, S., and G, S. *Evaluating the Bioequivalence of Topical Dermatological Drug Products Containing Metronidazole Using Dermal Microdialysis: Preliminary Studies in Rabbits*. Poster Presentation at Gordon Research Conference on the Barrier Function of Mammalian Skin. Waterville Valley, NH, Aug. 12, 2019.
- 44. Sharan, S., Li, Z., Fang, L., Kim, MJ., Zhao, L. *Population Pharmacokinetic Modeling to Characterize The Impact of Oral Abuse After Administration of Manipulated Hydrocodone Bitartrate Extended Release Tablets.* Poster Presentation at 2019 Annual Meeting, American Society for Clinical Pharmacology and Therapeutics (ASCPT). Washington DC, Mar. 14, 2019.
- 45. Shukla, S., Thomas, S., Hammell, D., Bunge, A., Hassan, H., and Stinchcomb, A. Assessment of Local and Systemic Bioavailability of Lidocaine from Two Lidocaine Topical Delivery Systems Using Pharmacokinetic and Skin (Tape) Stripping Analyses. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018.
- 46. Shukla, S., Thomas, S., Hammell, D., Bunge, A., Hassan, H., and Stinchcomb, A. *Impact of Operator Variability on the Reproducibility of Tape Stripping Results*. Poster Presentation at Gordon Research Conference on the Barrier Function of Mammalian Skin. Waterville Valley, NH, Aug. 12, 2019.
- Siriwardane, D., Wang, C., Ansar, S., Jiang, W., and Mudalige, T. Quantification of Lysophosphatidylcholines (Lpcs) and Free Fatty Acids (Ffas) in Parenteral Liposomal Formulations by Liquid Chromatography – Mass Spectrometry (LC-MS). Poster Presentation at 4th PQRI/FDA Conference on Advancing Product Quality. Rockville, MD, Apr. 9, 2019.
- 48. Suh, M., Kastellorizios, M., Zou, Y., Wang, Y., Choi, S., Burgess, D. *Effect of Implant Formation on Drug Release of in Situ Forming Implants*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 6, 2018.

- 49. Sun, W., Zhang, Z., Zhou, L., Grosser, S., Li, B., Yim, S., Raney, S., Ghosh, P., Kim, C., Wang, R. *Effect of Adhesion on Pharmacokinetics (PK) of Transdermal (TDS) Topical Products*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 6, 2018.
- 50. Thomas, C.D., Monsely S.A., El Rouby N., Kim S., Lingineni K., Langaee T., Gong, Y., Johnson J.A., Schmidit, S.O., Fyre, R.F., Cavallari L.H. *Determination of CYP2D6 Phenotyping for Metoprolol Using CYP2D6 Genotype-Derived Activity Score: Results from a Prospective, Clinical Trial.* Poster Presentation at 2019 Annual Meeting, American Society for Clinical Pharmacology and Therapeutics (ASCPT). Washington, DC, Mar. 13, 2019.
- 51. Thomas, S., Hammell, D., Hassan, H., and Stinchcomb, A. *A Pharmacokinetic Study of Two Oxybutynin Trandermal Formulations with Transient Heat Exposure*. Poster Presentation at Gordon Research Conference on the Barrier Function of Mammalian Skin. Waterville Valley, NH, Aug. 12, 2019.
- 52. Thomas, S., Shukla, S., Hammell, D., Hassan, H., and Stinchcomb, A. *In Vitro and In Vivo Evaluation of Two Lidocaine Topical Delivery Systems with or Without the Influence of Transient Heat Exposure*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018.
- 53. Tiffner, K., Birngruber, T., Schwagerle, G., Bodenlenz, M., Augustin, T., Raml, R., Kanfer, I., Raney, S., and Sinner, F. Evaluation of Dermal Open Flow Microperfusion (Dofm) As a General Methodology to Assess the Bioequivalence of Hydrophobic, Protein-Bound Topical Drug Products. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018.
- 54. Tiffner, K., Kanfer, I., Augustin, T., Raml, R., Raney, S., and Sinner, F. *In Vitro Release Test (IVRT) Comparisons of Six Acyclovir Cream, 5% Products to Evaluate the Impact of Compositional Differences on Product Performance*. Poster Presentation at AAPS Pharmsc. 360. Washington, DC, Nov. 5, 2018.
- 55. Ramezanli, T. *Best Practices & Efficient Strategies for Generic Topical Product Development*. Presentation at 2019 Small Business and Industry Assistance (SBIA) Workshop, Complex Generic Drug Product Development Workshop. College Park, MD, Sept. 25, 2019.
- Tiffner, K., Rantou, E., Bodenlenz, M., Augustin, T., Reisnegger, P., Raml, R., Raney, S., and Sinner, F. *Reference-Scaled Average Bio-Equivalence (SABE): A Promising Statistical Approach to Analyze Cutaneous Pharmacokinetic Results for Topically Applied Drug Products*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018. Poster Presentation At. Washington, DC, Nov. 5, 2018.
- 57. Tiffner, K., T, B., Schwagerle, G., Bodenlenz, M., Augustin, T., Raml, R., Kanfer, I., and Sinner, F. Dermal Pharmacokinetic Endpoint Studies to Evaluate Bioequivalence of Topically Applied Lidocaine and Prilocaine Drug Products. Poster Presentation at Skin and Formulation 5th Symposium. Reims, France, Sept. 22, 2019.
- Tsakalozou, E., M, L., A, B., and L., Z. Development of an Ocular Physiologically-Based Pharmacokinetic Model to Describe the Impact of Formulation Attributes on the Disposition of an Antibiotic Applied on the Rabbit Eye. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 7, 2018.
- 59. Tsakalozou, E., Ni, Z., Babiskin, A., and Zhao, L. *Advancements in the Dermal Physiologically-Based Pharmacokinetic (PBPK) Modeling Under the Generics Drug User Fee Amendments (GDUFA) Program.* Poster Presentation at 2019 American Society for Clinical Pharmacology and Therapeutics (ASCPT), Pre-Conference: PBPK Modeling for the Development and Approval of Locally Acting Products. Washington, DC, Mar. 13, 2019.
- 60. Vaghasia, B., Aqueel, M., Siddiqui, A., Ashraf, M., Cruz, C. Evaluation of the Internal and External Structure of Directly Compressed Polyethylene Oxide (PEO) Based Matrix Tablets Before and

after Curing Using X-ray Micro-Computed Tomography. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 7, 2018.

- Vitry, P., Tabosa, A., Belsey, N., Tsikritsis, D., Woodman, T., Bunge, A., Delgado-Charro, M., Guy, R. *Evaluating Topical Drug Bioavailability in the Skin Using Raman Spectroscopy*. Poster Presentation at Gordon Research Conference on the Barrier Function of Mammalian Skin. Waterville Valley, NH, Aug. 12, 2019.
- 62. Walenga, R., Conti, D., Oguntimein, O., Delvadia, R., Rygg, A., and Babiskin, A. *Droplet Evaporation from a Solution-Based Metered Dose Inhaler: A Computational Approach*. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 5, 2018.
- 63. Wang, C., Siriwardane, D., Jiang, W., and Mudalige, T. *Investigation of Cholesterol Oxidation Products (Cops) in Liposomal Drug Products*. Poster Presentation at 4th PQRI/FDA Conference on Advancing Product Quality. Rockville, MD, Apr. 11, 2019.
- 64. Wood, E. *Tip Enhanced Raman Spectroscopy as a Novel Method for Supporting the Physicochemical Sameness of Ophthalmic Emulsions*. Poster Presentation at 2019 FDA Science Forum. Silver Spring, MD, Sep. 11, 2019.
- 65. Xu, X. Development, Characterization, and Evaluation Considerations of Particle Analysis to Support Generic Product Quality and Bioequivalence Determination. Poster Presentation at SBIA/FDA Complex Generic Drug Product Workshop. College Park, MD, Sep. 25, 2019.
- 66. Yang, Y., Zhang, JH., Wang, J., Hsu, HJ., Wang, J., Faustino, P., Cruz, C., Ashraf, M. *Integrated method developments for in vitro evaluation of sunscreen products*. ACS Annual Meeting. Orland, FL.
- Zhang, Q., Ghosh, P., Raney, S., Hammell, D., Hassan, H., and Stinchcomb, A. Assessment of Bioavailability of Rivastigmine from Two Rivastigmine Transdermal Delivery Systems with and Without Exposure to Heat Using In Vitro Permeation Test (IVPT). Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 6, 2018.
- Zhang, Q., Ghosh, P., Rantou, E., Raney, S., Hammell, D., Stinchcomb, A. Evaluation of Metronidazole Bioavailability from Dermal Products Using an In Vitro Permeation Test (IVPT) Across Human Skin. Poster Presentation at Gordon Research Conference on the Barrier Function of Mammalian Skin. Waterville Valley, NH, Aug. 12, 2019.
- 69. Zhou, J. Development and Characterization of Composition-Equivalent Formulations to the One-Month Lupron Depot. Poster Presentation at AAPS Pharmsci 360. Washington, DC, Nov. 7, 2018.