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## Area of Expertise

My group works in the area of pharmacometrics. Our specific focus of research is in developing population pharmacokinetic and pharmacodynamic models to understand and optimize dosing regimen. Our current projects are in quantifying the effect of non-adherence to medications on the prophylaxis of HIV infection.

## Qualifications

PhD in Pharmaceutical Sciences, Mercer University  
BPharm, Kakatiya University

## Recent Publications

### **Artificial Intelligence and Pharmacometrics: Time to Embrace, Capitalize, and Advance?**

Chaturvedula, A., Calad-Thomson, S., Liu, C., Sale, M., Gattu, N. & Goyal, N., Jul 2019, In : CPT: Pharmacometrics and Systems Pharmacology. 8, 7, p. 440-443 4 p.

### **Diversity in the era of precision medicine - From bench to bedside implementation**

Mamun, A., Nsiah, N. Y., Srinivasan, M., Chaturvedula, A., Basha, R., Cross, D., Jones, H. P., Nandy, K. & Vishwanatha, J. K., 1 Jan 2019, In : Ethnicity and Disease. 29, 3, p. 517-524 8 p.

### **Population Pharmacokinetics of Pemetrexed in Adult Non-Small Cell Lung Cancer in Indian Patients**

Srinivasan, M., Chaturvedula, A., Fossler, M. J., Patil, A., Gota, V. & Prabhash, K., 1 Jan 2019, In : Journal of Clinical Pharmacology. 59, 9, p. 1216-1224 9 p.

### **Population pharmacokinetics of primaquine and the effect of hepatic and renal dysfunction: An exploratory approach**

Sridharan, K., Sannala, C. K. R., Mallayasamy, S., Chaturvedula, A., Kadam, P., Hase, N., Shukla, A., Gogtay, N. & Thatte, U., 1 Jan 2019, In : Indian Journal of Pharmacology. 51, 1, p. 17-24 8 p.

### **Tenofovir plasma concentration from preexposure prophylaxis at the time of potential HIV exposure: A population pharmacokinetic modeling and simulation study involving serodiscordant couples in east Africa**

Mallayasamy, S., Chaturvedula, A., Fossler, M. J., Sale, M., Goti, V., Bumpus, N. N., Marzinke, M. A., Hendrix, C. W. & Haberer, J. E., 1 Jan 2019, In : Antimicrobial agents and chemotherapy. 63, 8, e00446-19.

### **A Systematic Evaluation of Effect of Adherence Patterns on the Sample Size and Power of a Clinical Study**

Mallayasamy, S., Chaturvedula, A., Blaschke, T. & Fossler, M. J., Dec 2018, In : CPT: Pharmacometrics and Systems Pharmacology. 7, 12, p. 818-828 11 p.

### **Establishing a Multidisciplinary Framework to Study Drug-Drug Interactions of Hormonal Contraceptives: An Invitation to Collaborate**

Lesko, L. J., Vozmediano, V., Brown, J. D., Winterstein, A., Zhao, P., Lippert, J., Höchel, J., Chaturvedula, A., White, A. & Schmidt, S., Nov 2018, In : CPT: Pharmacometrics and Systems Pharmacology. 7, 11, p. 706-708 3 p.

### **Hospitalized Patients with and Without Hemodialysis Have Markedly Different Vancomycin Pharmacokinetics: A Population Pharmacokinetic Model-Based Analysis**

Goti, V., Chaturvedula, A., Fossler, M. J., Mok, S. & Jacob, J. T., 1 Apr 2018, In : Therapeutic Drug Monitoring. 40, 2, p. 212-221 10 p.

### **Markov Mixed Effects Modeling Using Electronic Adherence Monitoring Records Identifies Influential Covariates to HIV Preexposure Prophylaxis**

Madras, K., Chaturvedula, A., Haberer, J. E., Sale, M., Fossler, M. J., Bangsberg, D., Baeten, J. M., Celum, C. & Hendrix, C. W., 1 Jan 2017, In : Journal of Clinical Pharmacology. 57, 5, p. 606-615 10 p.

**Population pharmacokinetics of tenofovir in HIV-1-uninfected members of serodiscordant couples and effect of dose reporting methods**

Lu, Y., Goti, V., Chaturvedula, A., Haberer, J. E., Fossler, M. J., Sale, M. E., Bangsberg, D., Baeten, J. M., Celum, C. L. & Hendrix, C. W., 1 Sep 2016, In : Antimicrobial agents and chemotherapy. 60, 9, p. 5379-5386 8 p.

**Sponsored Projects**

**A Challenge in Family Planning: Understanding the Risks of Unintended Pregnancies and Side Effects Resulting from Drug Interactions with Contraceptives**

White, A. & Chaturvedula, A.

University of Florida

1/02/18 → 31/10/20

**Improving PrEP protection of Transgender women through mechanistic pharmacokinetic understanding**

Chaturvedula, A.

Johns Hopkins University

11/03/19 → 29/02/20

**Real-World Adherence to HIV/PrEP in Serodiscordant African Couples**

Chaturvedula, A.

Massachusetts General Hospital

1/06/16 → 31/05/18