

Azin Jahangiri

Contact information

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Educational background

2001-2007 Pharm. D,
Faculty of Pharmacy, Tehran University of Medical Sciences
Thesis Topic: Apoptosis induction and cell cycle changes in resistant T47D cells following treatment with doxorubicin and mdr1 siRNA
Supervisor: Prof. Ebrahim Azizi

2012-2016 Ph.D., Pharmaceutics
Faculty of Pharmacy, Tabriz University of Medical Sciences
Thesis Topic: Preparation of atorvastatin and ezetimibe solid dispersions and nanoparticles and evaluation of their dissolution rate, physicochemical properties and in vivo efficiency
Supervisors: Prof. Mahammad Barzegar-Jalali, Prof. Khosro Adibkia

Professional experience

2007 – 2011 Registered pharmacist in charge at pharmacy

2016 – Current Assistant Professor of Pharmaceutics, Urmia University of Medical Sciences, Urmia, Iran

Rewards and rankings

- Ranked 9th in National Basic science exams (2004)
- Ranked 2th in National Entrance Exams for PhD (2012)

Teaching & Research Interests

- Improving solubility of poorly water-soluble drugs using several techniques, incl. dispersion, co-crystallization, and lyophilization.
- Novel drug delivery systems
- Design and preparation of solid nanoparticles
- Floating drug delivery systems
- Biopharmacy and pharmacokinetics
- Cosmetics and toiletries

Teaching Experience (2016-Current)

- Theoretical and practical pharmaceuticals (semi-solids, solutions and suspensions)
- Pulmonary drug delivery systems
- Colon drug delivery systems
- Delivery of peptides and proteins
- Drug targeting
- Micromeritics
- Rheology
- Biopharmacy and pharmacokinetics
- Theoretical and practical cosmetics and toiletries (shampoo, toothpaste, hair color, hair straighteners, antiperspirants and deodorants)

Research Experience

Research supervisor (2017-Current)

- Preparation and evaluation of physicochemical properties of niosomes containing cetirizine
- Formulation and evaluation of loratadine oral gummy jelly
- Formulation development of orally fast disintegrating tablets of loratadine by electrospraying and freeze drying methods
- Preparation of celecoxib microcapsules by emulsion solvent evaporation method
- Preparation and evaluation of celecoxib microparticles using electrospraying method
- Evaluating the accuracy of the label claim on toothpaste products available in Iran market
- Effect of collector plate material on the process yield, morphology and dissolution rate of particles prepared by electrospraying
- Preparation and evaluation of orally fast disintegrating tablets of loratadine by freeze drying method
- Particle engineering of celecoxib using an electrospraying technique for preparation of respirable dry powder and in vitro characterization
- Preparation of ibuprofen-isonicotinamide co-crystals using electrospraying and evaluation of their physicochemical properties
- Evaluation of PEG 4000 solution stability in different temperature and environmental conditions in the time interval from zero to twelve months

- *In vitro* bioequivalence study on ibuprofen 200 mg tablet in Iran market
- Preparation and evaluation of physicochemical properties and dissolution rate of glibenclamide binary and ternary solid dispersions
- Preparation and evaluation of the physicochemical properties of Erlotinib binary and ternary solid dispersions as prepared by electrospaying
- Preparation and evaluation of modified release orally fast-disintegrating tablets of loratadine
- Preparation and evaluation of celecoxib microparticles using electrospaying method
- Preparation of celecoxib microcapsules by emulsion solvent evaporation method
- Check the accuracy of the label claim on toothpaste products available in Iran market

Technical Experience

- UV-Vis spectrophotometry
- HPLC
- FT-IR
- DSC
- PXRD
- Electrospinning and electrospaying
- Chemometrics
- Solubility and dissolution rate determination techniques
- Nanoparticle preparation techniques

Administrative Experiences

2017– Current Associate Editor for the Journal of Advanced Chemical and Pharmaceutical Materials (JACPM)

Software Skills

- Office (Word, Excel and PowerPoint),
- SPSS
- Sigma plot
- Endnote

Publications

- **Jahangiri A**, Nokhodchi A, Asare-Addo K, Salehzadeh E, Emami S, Yaqoubi S, Hamishehkar H. Carrier-Free Inhalable Dry Microparticles of Celecoxib: Use of the Electro spraying Technique in Methods. Biomedicines. 2023 Jun 17;11(6):1747.
- Barghi L, Vekalati A, **Jahangiri A**. Stability-Enhanced Ternary Solid Dispersions of Glyburide: Effect of Preparation Method on Physicochemical Properties. Advances in Pharmacological and Pharmaceutical Sciences. 2023 May 11;2023.
- Ghafari R, **Jahangiri A**, Shayanfar A, Emami S. Solid-state characterization of ibuprofen-isonicotinamide cocrystals prepared by electro spraying and solvent evaporation. Therapeutic Delivery. 2023 Feb;14(2):121-38.
- **Jahangiri A**, Pashaei M. Evaluation of PEG 4000 solution stability in different temperatures and environmental conditions over the twelve months. Studies in Medical Sciences. 2022 Mar 10;32 (11):799-814.
- **Jahangiri A**, Khalilzad F, Barghi L. Dissolution improvement of binary solid dispersions of erlotinib prepared by one-step electro spray method. Biology Methods and Protocols. 2022;7(1): bpac001.
- Fattahzadeh A, **Jahangiri A**, Ranjkeshzadeh N, Ghaderi F. Evaluation of Celecoxib-Lactose Incompatibility Reactions at Solid State using Physicochemical Methods. (2021): 139-146.

- Maleki Dizaj S, Sharifi S, **Jahangiri A***. Electrospun nanofibers as versatile platform in antimicrobial delivery: Current state and perspectives. *Pharmaceutical Development and Technology*. 2019 Nov 26; 24(10):1187-99.
- Barghi L, Farajzadeh A, **Jahangiri A***. Preparation and evaluation of glibenclamide binary solid dispersions prepared by fusion and solvent-fusion method. *Biointerface Research in Applied Chemistry*. 2019; 9(6):4612-6.
- Sharifi S, Vahed SZ, **Jahangiri A**. Dendrimers as drug delivery systems; the benefits and challenges. *Journal of advanced chemical and pharmaceutical materials (JACPM)*. 2019 Apr 25; 2(2):119-23.
- Samani AA, Yazdani J, **Jahangiri A**. Oral delivery of proteins and peptides by hydrogel systems: a brief overview. *Journal of advanced chemical and pharmaceutical materials (JACPM)*. 2019 Jan 25; 2(1):100-2.
- Sharifi S, Mokhtarpour M, **Jahangiri A**, Dehghanzadeh S, Maleki-Dizaj S, Shahi S. Hydroxyapatite nanofibers as beneficial nanomaterial in dental sciences. *BIOINTERFACE RESEARCH IN APPLIED CHEMISTRY*. 2018 Dec 15; 8(6):3695-9.
- **Jahangiri A**, Barghi L. Polymeric nanoparticles: review of synthesis methods and applications in drug delivery. *Journal of advanced chemical and pharmaceutical materials (JACPM)*. 2018 Jul 25; 1(2):38-47.
- Barghi L, **Jahangiri A***. Fast-dissolving nanofibers: as an emerging platform in pediatric and geriatric drug delivery. *Journal of advanced chemical and pharmaceutical materials (JACPM)*. 2018 Jul 25; 1(2):26-8.
- **Jahangiri A**, Barzegar-Jalali M, Javadzadeh Y, Hamishehkar H, Adibkia K. Physicochemical characterization of atorvastatin calcium/ezetimibe amorphous nano-solid dispersions prepared by electrospaying method. *Artificial cells, nanomedicine, and biotechnology*. 2017 Aug 18;45(6):1138-45.
- Adibkia K, Saghakhaneh S, Barzegar-Jalali M, Hamishehkar H, **Jahangiri A**. Application of dry milling in the preparation of amorphous ezetimibe/ polyvinylpyrrolidone-K30 dispersions. *Latin American Journal of Pharmacy*. 2017; 36(4):694-700.
- **Jahangiri A**, Adibkia K, Asadpour-Zeynali K, Javadzadeh Y, Hamishehkar H, Barzegar-Jalali M. Application of multivariate calibration methods, in dissolution testing and simultaneous determination of atorvastatin and ezetimibe in their combined solid dosage form. *Pharmaceutical Sciences*. 2016 Jun 30; 22(2):105-11.

- **Jahangiri A**, Adibkia K. "Applications of electrospinning/electrospraying in drug delivery." *Bioimpacts*, 6(1) (2016), 1-2.
- **Jahangiri A**, Barzegar-Jalali M, Garjani A, Javadzadeh Y, Hamishehkar H, Asadpour-Zeynali K, Adibkia K. Evaluation of physicochemical properties and in vivo efficiency of atorvastatin calcium/ezetimibe solid dispersions. *European Journal of Pharmaceutical Sciences*. 2016 Jan 20; 82:21-30.
- Payab S, Davaran S, Tanhaei A, Fayyazi B, **Jahangiri A**, Farzaneh A, Adibkia K. Triamcinolone acetonide–Eudragit® RS100 nanofibers and nanobeads: Morphological and physicochemical characterization. *Artificial cells, nanomedicine, and biotechnology*. 2016 Jan 2; 44(1):362-9.
- **Jahangiri A**, Barzegar-Jalali M, Garjani A, Javadzadeh Y, Hamishehkar H, Afroozian A, Adibkia K. Pharmacological and histological examination of atorvastatin-PVP K30 solid dispersions. *Powder technology*. 2015 Dec 1; 286:538-45.
- Hamishehkar H, Shokri J, Fallahi S, **Jahangiri A**, Ghanbarzadeh S, Kouhsoltani M. Histopathological evaluation of caffeine-loaded solid lipid nanoparticles in efficient treatment of cellulite. *Drug development and industrial pharmacy*. 2015 Oct 3; 41(10):1640-6.
- **Jahangiri A**, Barzegar-Jalali M, Garjani A, Javadzadeh Y, Hamishehkar H, Rameshrad M, Adibkia K. Physicochemical characterization and pharmacological evaluation of ezetimibe-PVP K30 solid dispersions in hyperlipidemic rats. *Colloids and Surfaces B: Biointerfaces*. 2015 Oct 1; 134:423-30.
- **Jahangiri A**, Davaran S, Fayyazi B, Tanhaei A, Payab S, Adibkia K. Application of electrospraying as a one-step method for the fabrication of triamcinolone acetonide-PLGA nanofibers and nanobeads. *Colloids and Surfaces B: Biointerfaces*. 2014 Nov 1; 123:219-24.

Conference presentations

- Afshin Vekalati, Leila Barghi, **Azin Jahangiri ***, Dissolution rate enhancement and flow properties improvement of Glyburide using ternary solid dispersions, 22nd Iranian Pharmacy Students Seminar, 16-19 April 2019, Zanjan, Iran.

- **Azin Jahangiri**, Khosro Adibkia, Physicochemical characterization and pharmacological evaluation of ezetimibe-PVP K30 solid dispersions in hyperlipidemic rats. International Eurasia Pharmacy Congress, 3-7 September 2015, Erzincan, Turkey.
- Sana saghakhaneh, **Azin Jahangiri**, Khosro Adibkia, Mohammad Barzegar-Jalali, Hamed Hamishehkar, Physicochemical characterization and dissolution evaluation of ezetimibe solid dispersions prepared by dry milling. 19th Iranian Pharmacy Students Seminar (IPSS-19), 6th-9th October 2015, Shiraz, Iran.
- **Azin Jahangiri**, Khosro Adibkia, Pharmacological and histological examination of atorvastatin-PVP K30 solid dispersions. International Eurasia Pharmacy Congress, 3-7 September 2015, Erzincan, Turkey.
- **Azin Jahangiri**, Farnaz Monajjemzadeh, Effective factors on salt selection in pharmaceutical industries. Fourth International Meeting on Pharmacy & Pharmaceutical Sciences (IMPPS-4), 18-21 September 2014, Istanbul, Turkey.
- **Azin Jahangiri**, Yousef Javadzadeh, Shahriar Payab, Pooya Noorizadeh , , Khosro Adibkia, Physicochemical characterization of methylprednisolone acetate-PLGA nanoparticles prepared via electrospraying method. Fourth International Meeting on Pharmacy & Pharmaceutical Sciences (IMPPS-4), 18-21 September 2014, Istanbul, Turkey.
- **Azin Jahangiri**, Nazila Jafari-Aghdam, Shahriar Payab, Mohammad Barzegar-Jalali1, Khosro Adibkia, Methylprednisolone acetate–Eudragit® RS100 electrospuns: Preparation and physicochemical characterization. Fourth International Meeting on Pharmacy & Pharmaceutical Sciences (IMPPS-4), 18-21 September 2014, Istanbul, Turkey.
- **Azin Jahangiri**, Hamed Hamishehkar, Javad Shokri, Maryam Kouhsoltani, Shahoo Fallahi, Preparation and characterization of Caffeine loaded solid lipid nanoparticles for cellulite treatment. 6th Iranian controlled Release Society Conference (ICRC2014) & 1th Middle East Controlled release Conference (MECRC2014), 25-27 February 2014, Tehran, Iran.