

CURRICULUM VITAE OF PANAGIOTIS BARMPALEXIS

PERSONAL DETAILS

Name: Panagiotis Barmpalexis
Home Address: K. Tzavella 12, Athens, Greece
Telephone: +30 6973 395036
Email: panagiotis.barmpalexis@rontis.com
barbalexisp@gmail.com
Marital Status: Married, with one children
Birth Date: 29/09/1981
Birth Place: Thessaloniki, Greece

STUDIES - SCIENTIFIC ACTIVITIES – WORKING EXPERIENCE

I. Education

2006-2010 PhD in Pharmaceutical Technology School of Pharmacy, Aristotle University of Thessaloniki. Title: "Design and Development of Immediate and Controlled Release Pharmaceutical Formulations with the Aid of Solid Dispersions".
2004-2007 BSc in Economics and Management, LSE external program, University of London.
1999-2004 Degree in Chemical Engineering, Aristotle University of Thessaloniki

II. Working Experience

13/05/2014 – until now

Working for RONTIS HELLAS S.A in the R&D Department as a principal formulation scientist. Responsibilities: 1) Design and supervise pre-formulation, formulation development, process development, process optimization, scale-up and clinical manufacturing on assigned projects with the scope to achieve a patent-non - infringing, robust and commercially viable formulation. 2) Design and implement strategies for formulation development, 3) Support on project transfer from development to commercial scale (scale-up), 4) Coordination and support during manufacturing of validation batches, 5) Design/Evaluation/Support on contract development activities, 6) Assessment of API evaluation, 7) Assessment on data collection, evaluation & dossier compilation, 8) Response to deficiency letters received by authorities or clients relative to the formulation activities, 9) Preparation of Development Pharmaceutics Reports, Master Formulas, Batch Records, Manufacturing and Packaging Instructions, Stability protocols, and any other necessary reports/documents associated with the formulation activities, 10) Coordination and evaluation of stability studies along with analytical development

team to evaluate trends and identify improvements, 11) Supervise of lab and pilot scale plant infrastructure, 12) Participation on R&D's related audits, 13) Supervise training of new formulation members, 14) Patent reviewing, evaluation and writing, 15) Implementation of QbD experimental approach.

17/01/2013 – 12/05/2014

Working for GENEPHARM S.A in the R&D Department as a formulation scientist. Main responsibilities: 1) Developing new solid and/or liquid (sterile or non-sterile) drug delivery systems, 2) Optimizing and/or improving existing products, analytical procedures and production processes using QbD approaches, 3) Data evaluation of formulation trials and process validation activities, 4) Planning and executing scale-up trials, 5) Participate in technology transfer activities and validation batches, 5) Patent reviewing, evaluation and writing, 6) Planning stability studies monitoring results and preparing stability protocols and reports

01/07/2008 – 14/01/2013

Working for PHARMATHEN S.A. in the R&D Department as a senior formulation scientist. Main responsibilities: 1) developing new solid and/or liquid (sterile or non-sterile) drug delivery systems (NDDS), 2) optimizing and/or improving existing products, analytical procedures and production processes, 3) data evaluation of formulation trials and process validation activities, 4) planning and executing scale-up trials, 5) participate in technology transfer activities and validation batches, 6) patent reviewing, evaluation and writing, 7) planning stability studies monitoring results and preparing stability protocols and reports

01/10/2006 - 31/01/2008

Working as a pharmaceutical scientist in a PAVET research project titled: "Development of new materials and methods for optimizing Nimodipine and Lecarnidipine therapeutic activity: time-targeting and bioavailability optimization by converting conventional drug formulations to floating drug delivery systems".

01/06/2003 - 31/08/2003

Training as a process engineer in a fresh frozen vegetable food industry (GENERAL FOOD S.A.) based on EPEAEK II student's practice exercise for chemical engineers.

III. Computer Skills

- Knowledge of several operating systems including Microsoft Windows (XP, Vista, Windows 7), Mac OS, Linux (Ubuntu)
- Excellent knowledge of MS and Open Office
- Excellent knowledge of several scientific based software programs

IV. Language Qualifications

- English - excellent oral and written communication skills (proficiency level).

V. Attendance in Conferences/Seminars

- Coating – Fine particles, granules, pellets, tablets. Huettlin Bosch Seminars, 05th to 07th May (2015), Schopfheim, Germany
- Pharmaceutical Co-Crystal Summit 2012. IQPC International Quality & Productivity Centre, 25th – 26th September (2012), Amsterdam, Kingdom of the Netherlands

RESEARCH INTERESTS

- Enhance of solubility and bioavailability of active pharmaceutical ingredients with the aid of drug delivery systems (solid dispersion, solution etc.) or crystal and particulate modification (co-crystals, nano-suspensions etc.)
- Study of physicochemical/thermodynamic properties and solid state properties of active pharmaceutical ingredients and excipients
- Application of multivariate analysis methods, statistical experimental design and artificial neural networks (ANNs)
- In-line monitoring of pharmaceutical processes by Process Analytical Technologies (PAT)
- Study of several formulation and process techniques during research and development of new pharmaceutical products

PATENTS and SCIENTIFIC PUBLICATIONS

I. Patents

1. WO2014037022A1: *Pharmaceutical composition comprising an atypical antipsychotic agent and method for the preparation thereof*
2. WO2014005606A1: *Stable injectable pharmaceutical composition of neurokinin 1 receptor antagonist and process for preparation thereof*
3. WO2013185789A1: *Pharmaceutical composition containing phosphate binding polymer*
4. WO2015022703A1: *A stable pharmaceutical composition of fesoterodine hydrochloride*
5. WO2016086950A1: *Pharmaceutical composition containing non-lipophilic hydrophobic drug and process for the preparation thereof*
6. PCT-Filled (PCT/EP2015/001966): *Pharmaceutical composition containing agomelatine and process for preparation thereof*
7. PCT-Filled (PCT/EP2015/002291): *Pharmaceutical composition containing a non-steroidal antiinflammatory drug and a proton pump inhibitor*
8. PCT-Filled (PCT/EP2015/002239): *Stable analgesic pharmaceutical composition and process for the preparation thereof*

II Scientific Publications

1. **Barmpalexis P.**, Kanaze F.I., Georgarakis E., "Developing and optimizing a validated isocratic reversed-phase high-performance liquid chromatography separation of nimodipine and impurities in tablets using experimental design methodology". *Journal of Pharmaceutical and Biomedical Analysis*, 49 (2009) 1192-1202.
2. **Barmpalexis P.**, Kanaze F.I., Kachrimanis K., Georgarakis E., "Artificial neural networks in the optimization of a nimodipine controlled release tablet formulation". *European Journal of Pharmaceutics and Biopharmaceutics*, 74 (2010), 316-323.
3. Kanaze F.I., Kokkalou E., Niopas I., **Barmpalexis P.**, Georgarakis E., Bikiaris D., "Dissolution rate and stability study of flavanone aglycones, naringenin and hesperetin, by drug delivery systems based on polyvinylpyrrolidone (PVP) nanodispersions". *Drug Development and Industrial Pharmacy*, 36(3) (2010) 292-301.
4. **Barmpalexis P.**, Kachrimanis K., Georgarakis E., "Solid dispersions in the development of nimodipine effervescent floating tablet formulations and optimization by genetic programming". *European Journal of Pharmaceutics and Biopharmaceutics*, 77(1) (2011) 122-131.
5. **Barmpalexis P.**, Kachrimanis K., Tsakonas A., Georgarakis E., "Symbolic regression via genetic programming in the optimization of a controlled release pharmaceutical formulation". *Chemometrics and Intelligent Laboratory Systems*, 107(1) (2011) 75-82.
6. Papadimitriou S.A, **Barmpalexis P.**, Karavas E., Bikiaris D., "Optimizing the ability of PVP/PEG mixtures to be used as appropriate carriers for the preparation of drug solid dispersions by melt mixing technique using artificial neural networks:I". *European Journal of Pharmaceutics and Biopharmaceutics*, 82(1) (2012) 175-86.
7. Matsaridou I., **Barmpalexis P.**, Salis A., Nikolakakis I., "Influence of Surfactant HLB and Oil/Surfactant Ratio on the Formation and Properties of Self-emulsifying Pellets and Microemulsion Reconstitution". *AAPS PharmSciTech*, 13(4) (2012) 1319-30.
8. **Barmpalexis P.**, Koutsidis I., Karavas E., Louka D., Papadimitriou S., Bikiaris D., "Development of PVP/PEG mixtures as appropriate carriers for the preparation of drug solid dispersions by melt mixing technique and optimization of dissolution using artificial neural networks". *European Journal of Pharmaceutics and Biopharmaceutics*, 85(3B) (2013) 1219-31.
9. **Barmpalexis P.**, Kachrimanis K., Georgarakis E., "Physicochemical characterization of nimodipine-polyethylene glycol solid dispersion systems" *Drug Development and Industrial Pharmacy*, 40(7) (2014) 886-95.
10. Siafaka P., **Barmpalexis P.**, Lazaridou M., Papageorgiou G., Koutris E., Karavas E., Kostoglou M., Bikiaris D., "Controlled release formulations of risperidone antipsychotic drug in novel aliphatic polyester carriers: Data analysis and modelling" *European Journal of Pharmaceutics and Biopharmaceutics*, (2015) 94, 473-84.
11. Siafaka P.I., **Barmbalexis P.**, Bikiaris D.N.* "Novel electrospun nanofibrous matrices

prepared from poly(lactic acid)/poly(butylene adipate) blends for controlled release formulations of an anti-rheumatoid agent" *European Journal of Pharmaceutical Sciences*, (2016) 10(88): 12-25.

12. **Barmpalexis P.***, Syllignaki P., Kachrimanis K. A study of water uptake by selected superdisintegrants from the sub-molecular to the particulate level. *Pharm Dev Tech: accepted for publication*.

III. Scientific Conferences (published in conference abstracts)

International Conference Contributions

1. **Barmpalexis P.**, Kachrimanis K., Bikiaris D., Georgarakis E., "Artificial neural networks modeling swelling of nimodipine controlled release tablet formulations". 7th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, Malta (Valletta), 2010. Poster presentation.
2. Papadimitriou S.A, Karavas E., Scopelitis K., **Barmpalexis P.**, Georgarakis E., Bikiaris D. "Optimizing the ability of PVP/PEG mixtures to be used as appropriate carriers for the preparation of drug solid dispersions by melt mixing technique by artificial neural networks" 8th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, Turkey (Istanbul), 2012. Poster presentation.
3. **Barmpalexis P.**, Karagianni I., Nikolakakis I., Kachrimanis K, Construction of cocrystals-soluplus[®] thermodynamic phase diagrams. 11th Central European Symposium on Pharmaceutical Technology, Belgrade September 22 - 24 2016.

Creek Conference Contributions

1. Asimopoulou A.N., Sikalides K., **Barmpalexis P.**, Maurides G., Papageorgiou V.P.: "Hydroxyapatite-Shikonin drug delivery systems", 5th Panhellenic Scientific Conference of Chemical Engineering, Greece (Thessaloniki), 2005. Oral presentation.
2. **Barmpalexis P.**, Kachrimanis K., Georgarakis E., "Optimization of Nimodipine sustained release formulations with the aid of experimental design and artificial neural networks", 14th Panhellenic Pharmaceutical Conference, Greece (Athens), 2009. Oral presentation.
3. **Barmpalexis P.**, Kachrimanis K., Georgarakis E., "Phase-diagrams of Nimodipine-PEG binary systems using differential scanning calorimetry (DSC) and hot stage optical microscopy" 15th Panhellenic Pharmaceutical Conference, Greece (Athens), 2011. Poster presentation.
4. Konstanti L., Papanikolaou G., **Barmpalexis P.**, Koutris E., Karavas E., "Non

isothermal crystallization kinetics of PEG-4000 using differential scanning calorimetry (DSC)". Therma 2012, Greece (Thessaloniki), 2012. Poster presentation.

5. **Barpalexis P.**, Sillignaki P., Kachrimanis K., "Studying the hydration process of super-disintegrants with the aid of polarized light microscopy and ATR-FTIR", 16th Panhellenic Pharmaceutical Conference, Greece (Athens), 2013. Poster presentation.

TEACHING EXPERIENCE

- Assisting in laboratory exercises of the courses: "Methods for Drug Control I" and "II"

Invited lectures:

- 2015 - "The role of pharmacist in generic's research and development in Greece".
Department of Pharmacy, Aristotle University of Thessaloniki.

COMMUNITY INVOLVEMENT

Referee service in peer-review journals

1. Journal of Pharmacy and Nutrition Sciences
2. International Journal of Pharmaceutics