

Curriculum Vitae

Raimar Löbenberg, PhD

Director, Drug Development and Innovation Centre

<http://pharm.ualberta.ca/research/drug-development-and-innovation-centre>

Professor, Faculty of Pharmacy and Pharmaceutical Sciences

Katz Group-Rexall Centre for Pharmacy & Health Research

University of Alberta

11361 – 87 Avenue, Room 3-142-K

Edmonton, AB T6G 2E1

Phone: [780 492 1255](tel:7804921255)

Fax: [780 492 1217](tel:7804921217)

Email: raimar@ualberta.ca

Skype: raimarloebenberg

INDEX

| | |
|---|-----------|
| CITIZENSHIP | 3 |
| EDUCATION | 3 |
| POST DOCTORAL FELLOW SHIP | 3 |
| SABBATICALS | 3 |
| POSITIONS HELD | 3 |
| SERVICE | 3 |
| CONSULTANCIES | 4 |
| NATIONAL AND INTERNATIONAL PROFESSIONAL ACTIVITIES | 4 |
| QUALIFICATIONS | 5 |
| ASSOCIATION MEMBERSHIPS (PAST AND CURRENT) | 5 |
| AWARDS AND RECOGNITIONS | 5 |
| PUBLICATIONS AND H-INDEX | 6 |
| Book Chapter | 6 |
| Review Articles | 7 |
| Research Publications | 9 |
| SYMPOSIA, WORKSHOPS AND CE EVENTS | 21 |
| PRESENTATIONS | 23 |

Citizenship

German, Canadian

Education

Nov 1996 Doctor of Philosophy in Pharmaceutical Technology,
Johann Wolfgang Goethe-University, Frankfurt,
title of the dissertation: Nanoparticles as carriers for AZT
Apr 1990 University degree in Pharmacy,
Johannes Gutenberg-University, Mainz
Jun 1986 Abitur, Eleonoren Schule, Darmstadt

Post Doctoral Fellow Ship

Jan 96 – Jun 97 FDA-Project on dissolution behavior of Case I and II compounds and *in vitro/in vivo* correlations, under Prof. Dr. J.B. Dressman

Sabbaticals

Jul 07 – Jun 08 International Liaison Officer to the USP:
Development of Global Drug Performance Standards using Biowaivers.
Jul 97 – Jun 99 Two-year sabbatical performing *in vivo* studies on drug absorption and BCS classification, at the University of Michigan, Ann Arbor, USA, Prof. Dr. G.L. Amidon.

Positions held

Aug 2019 – present Director, Xphyto Therapeutics Inc.
Dec 2018 – present Chief Scientific Officer, RS Therapeutics Inc.
Jul 2012 – present Professor at the University of Alberta, Faculty of Pharmacy and Pharmaceutical Sciences
Nov 2009 – Aug 2013 Division Chair, Pharmaceutical Sciences
Jul 2009 – present Director of the Drug Development and Innovation Centre
Jul 2005 – Jun 2012 Associate Professor at the University of Alberta, Faculty of Pharmacy and Pharmaceutical Sciences
Dec 2001 – present President of JRC Pharmaceuticals Inc.
Jan 2000 – Jun 2005 Assistant Professor at the University of Alberta, Faculty of Pharmacy and Pharmaceutical Sciences.
Jul 1997 – Jan 2000 Hochschul Assistant, Department of Pharmaceutical Technology, Frankfurt University

Service

- Division Chair, 2009 – 2013
- Senate of the University of Alberta; 2008 - 2013
- Associate Editor: Journal of Biomedical Nanotechnology; 2007-2011
- Editorial Advisory Board: Dissolution Technologies; ongoing
- Editorial Advisory Board: Archives of Pharmacal Research; ongoing
- Editorial Advisory Board: The Open Drug Delivery Journal; ongoing

- Editorial Advisory Board: Current Traditional Medicine; 2014 ongoing
- Graduate Studies committee 2000 – 2004, 2008 - 2010
- AFPC Representative to the USP Convention 2005, 2010, 2015
- Academic Appeals committee 2005 / 2006
- Member of the General Faculty Council, 2001-04, 05-13, 14-15
- Curriculum development: Member of the Dermatology Module
- Faculty representative to the University Library
- University Communications Advisory Committee 2013-ongoing
- University Chemical Safety Committee
- Assessment committee 2010 - 2014
- Curriculum committee 2013 - 2104
- New Pharm D Committee 2009 – ongoing
- Pre-Clinical Trial Committee, Cross Cancer Institute 2014- ongoing
- Communication advisory committee, 2013 ongoing

Consultancies

- Canna Bunker Development
- Tyrelest
- GSK
- Expert and Chair of reconsideration panels of Health Canada
- Expert witness in patent disputes
- Vertex Inc. Boston
- Merck Frosst, Krikland
- Portsystems LLC, Ann Arbor
- Kinetana Group, Hong Kong
- Biopack Inc, Edmonton
- AltaChem Pharma, Edmonton
- Health Canada, Medical Marijuana Research Program
- QLT Inc. Vancouver
- Novokin Inc. Edmonton
- Cannasat Therapeutics, Toronto
- Cevena Bioproducts Inc. Edmonton
- Sinoveda Canada Inc.

National and International Professional Activities

| | |
|-------------|---|
| 2020 - 2021 | Vice chair USP Expert Committee Dietary Supplements |
| 2019 - 2021 | CSPS Board of Directors |
| 2018 - 2020 | Member USP Expert Committee Dietary Supplements |
| 2015 - 2017 | Vice Chair USP Expert Committee Dietary Supplements |
| 2016 - 2017 | Past President Canadian Society for Pharmaceutical Sciences |
| 2014 - 2015 | President Canadian Society for Pharmaceutical Sciences |
| 2012 - 2013 | President Elect Canadian Society for Pharmaceutical Sciences |
| 2012 - 2020 | Health Canada: Scientific Advisory Committee on Pharmaceutical Sciences and Clinical Pharmacology |
| 2011 - 2020 | Scientific Advisory Panel on Opioid Analgesic Abuse (SAP-OAA) |
| 2006 - 2019 | AAPS Steering Committee for In Vitro Release and Dissolution |

| | |
|-------------|---|
| 2006 - 2018 | Vice Chair of the Specialty Committee of Traditional Chinese Medicine in Pharmaceuticals; World Foundation of Chinese Medicine Societies |
| 2014 - 2015 | Dietary Supplements Compendium Advisory Committee |
| 2010 - 2015 | USP Extended-Release Dietary Supplements Expert Panel |
| 2010 - 2015 | Chair USP Committee Performance testing of Dietary Dosage Forms |
| 2010 - 2015 | USP Expert Committee Dietary Supplements and Botanical Medicines |
| 2010 - 2015 | USP Expert Committee General Chapters; Dosage Forms Subcommittee |
| 2005 - 2010 | USP Expert Committee Dietary Supplements, Bioavailability |
| 2005 - 2010 | USP Membership Committee |

Qualifications

| | | |
|-----|------|--|
| Jun | 2009 | Director Drug Development and Innovation Centre – holds a Health Canada site license |
| Dec | 2005 | Narcotic license for handling cannabis possession, production, packing, sale , transportation |
| Apr | 1994 | Qualification to be production and quality control manager in the pharmaceutical industry in Germany (AMG §15) |
| May | 1993 | State appointed examiner at the school for Pharmaceutical Technical Assistants |
| Jul | 1991 | Approbation als Apotheker |

Association Memberships (past and current)

- International Association for Pharmaceutical Technology, APV
- Controlled Release Society, CRS
- International Pharmaceutical Federation, FIP
- Association de Pharmacie Galénique Industrielle, APGI
- **American Association of Pharmaceutical Scientists, AAPS**
- Michigan Mass Spec Discussion Group
- Deutsche Pharmazeutische Gesellschaft, DPhG
- European Association of Pharma Biotechnology
- **Canadian Society of Pharmaceutical Sciences, CSPS**
- Alberta Lung Association
- NHP Research Society of Canada

Awards and Recognitions

- 2018 Visiting Scientist University of Michigan
- 2017 Visiting Scientist University of Michigan
- 2016 Visiting Scientist University of Michigan
- 2014 Special Scholar University of Sao Paulo, Neglected Diseases
- 2013 Award of Merit 2013 Faculty of Pharmacy and Pharmaceutical Sciences
- 2012 Guest Professor at the Jiangxi University of TCM, China
- 2012 University of Alberta **President's Achievement Award** "Connecting Communities"
- 2011 Hugh Kelly Fellowship, Rhodes University, South Africa
- 2010 Premier's **Gold Award of Excellence**
- 2010 **Canada Awards of Excellence**
- 2010 ASTech 2010 Award; Alberta Science and Technology Leadership Foundation
- 2006 Second Best Article, Bundesverband der Pharmazeutischen Industrie in Deutschland
- 2004 **Most Cited Paper Award** International Journal of Pharmaceutics

- 2004 Senate community service recognition
- 2003 Senate community service recognition
- 2002 Senate community service recognition
- 2001 Senate community service recognition
- 2001 ACCP New Investigator Award

Publications and h-Index

Google Scholar (h-Index) (please see current scores at:)

URL: <http://scholar.google.com/citations?user=wP6VNfMAAAAJ>

Peer Reviewed Publications (**bold PI**, trainee)

Book Chapter

- 6 BOU-CHACRA, N.A.; CURTIVO, C.P.D.; TAVARES, G.D.; LÖBENBERG, R. Fundamentos da Qualidade por Design. In: Terezinha de Jesus Andreoli Pinto; Natalia Bellan. (Org.). Diretrizes no processo de regulamentação sanitária dos medicamentos no Brasil. 1 ed. São Paulo: Manole, 2014, p. 1-34.
- 5 Book Title: Rhodiola Rosea
Editors: Alain Cuerrier, Kwesi Ampong-Nyarko
Chapter Title: Commercialization of Rhodiola Rosea
Authors: Nav Sharma and Raimar Löbenberg
- 4 Book Title: Generic Drug Product Development
Editors: Isadore Kanfer, Leon Shargel
Chapter Title: Experimental Formulation Development
Authors: Isadore Kanfer, Roderick B. Walker, Raimar Löbenberg and Nádia Araci Bou-Chacra
- 3 Book Title: Therapeutic Delivery Solutions
Editors: Chung Chan; Kwok Chow; Bill McKay; Michelle Fung
ISBN: 978-1-118- 11126-0
Chapter Title: Biorelevant Dissolution Testing
Authors: May Almukainzi, Nadia Bou-Chacra and Raimar Löbenberg
- 2 Book Title: Therapeutic delivery methods: concise overview of emerging areas
Editors: Beom-Jin Lee
Chapter Title: Mechanism of gastrointestinal drug absorption and application in therapeutic drug delivery
Authors: Raimar Löbenberg, Humberto Ferraz, Nadia A Bou-Chacra, Gordon L Amidon,
- 1 Book Title: Methods for Assessing Oral Absorption
Editors: J.B. Dressman, H. Lennernäs
Chapter Title: Solubility as a Limiting Factor to Drug Absorption : p. 137-154
Authors: Löbenberg R, Vieira M, and Amidon GL
Marcel Dekker, New York, 2000 ISBN: 0-8247-0272-7

Review Articles

- 26 de Oliveira, I.F., Barbosa, E.J., Peters, M.C.C., Henostroza, M.A.B., Yukuyama, M.N., dos Santos Neto, E., Löbenberg, R., **Bou-Chacra, N.**
Cutting-edge advances in therapy for the posterior segment of the eye: Solid lipid nanoparticles and nanostructured lipid carriers
(2020) International Journal of Pharmaceutics, 589, art. no. 119831
- 25 Yukuyama, M.N., de Araujo, G.L.B., de Souza, A., Löbenberg, R., Barbosa, E.J., Henostroza, M.A.B., Rocha, N.P.D., de Oliveira, I.F., Folchini, B.R., Peroni, C.M., Masiero, J.F., **Bou-Chacra, N.A.**
Cancer treatment in the lymphatic system: A prospective targeting employing nanostructured systems
(2020) International Journal of Pharmaceutics, 587, art. no. 119697
- 24 R Loebenberg
Biowaiver for Immediate and Modified Release Dosage forms Scientific summary of the CSPS workshop
Journal of Pharmacy & Pharmaceutical Sciences 23
- 23 DA Silva, DW Pate, RD Clark, NM Davies, A El-Kadi, **R Löbenberg**
Phytocannabinoid drug-drug interactions and their clinical implications
Pharmacology & Therapeutics, 107621 (Nov 2020)
- 22 WH Abd-Elisalam, MA Alsherbiny, J Kung, DW Pate, **R Löbenberg**
LC–MS/MS quantitation of phytocannabinoids and their metabolites in biological matrices
Talanta 204 846–867 June 2019
- 21 DA Silva, J Al-Gousous, NM Davies, NB Chacra, GK Webster, E Lipka, GL Amidon, **R Löbenberg**
Simulated, biorelevant, clinically relevant or physiologically relevant dissolution media: The hidden role of bicarbonate buffer
European Journal of Pharmaceutics and Biopharmaceutics Volume 142, September 2019, Pages 8-19
- 20 Almukainzi, M., Araujo, G.L.B. & **Löbenberg, R.**
Orally disintegrating dosage forms
J. Pharm. Investig. (2018) 49 229-243
- 19 DA Silva, GK Webster, N Bou-Chacra, **R Löbenberg**
The Significance of Disintegration Testing in Pharmaceutical Development
DISSOLUTION TECHNOLOGIES 25 (3), 30-38 2018
- 18 Summary of the In Vivo Predictive Dissolution (iPD)–Oral Drug Delivery (ODD) Conference 2018
B Hens, J Al-Gousous, K Wang, N Salehi, RM Ziff, Y Tsume, M Bermejo, ...
Dissolution Technologies 25 (2), 50-53 2018
- 17 Nadia Bou Chacra, Katherine Jasmine Curo Melo, Ivan Andrés Cordova Morales, Erika S Stippler, Filippou Kesisoglou, Mehran Yazdani, Raimar Löbenberg
Evolution of choice of solubility and dissolution media after two decades of Biopharmaceutical Classification System
AAPS Journal 19(4):989-1001 2017
- 16 Development of An algorithm to identify Mass Production Candidate Molecules to Develop Children's Oral Medicines: A North American perspective Varsha Bhatt-Mehta; Robert B. MacArthur; Raimar Löbenberg; Jeffrey J. Cies; Ibolja Cernak; and Richard H. Parrish II AAPS Open access December 2016
- 15 Challenges and Future Prospects of Nanoemulsion as a Drug Delivery System
Megumi Nishitani Yukuyamaa, Edna Tomiko Myiake Katoa , Raimar Löbenbergb and Nadia Araci Bou-Chacra
Current Pharmaceutical Design, 2017, 23, 1-14

- 14 An Algorithm to Identify Compounded Non-Sterile Products that Can Be Formulated on a Commercial Scale or Imported to Promote Safer Medication Use in Children
Varsha Bhatt-Mehta, Robert B. MacArthur, Raimar Löbenberg, Jeffrey J. Cies,
Ibolja Cernak and Richard H. Parrish II
Pharmacy 3 (4), 284-294
- 13 Liposomal Drug Delivery: A Versatile Platform for Challenging Clinical Applications
Asadullah Madni, Muhammad Sarfraz, Mubashar Rehman, Mahmood Ahmad, Naveed Akhtar, Saeed Ahmad,
Nayab Tahir, Shakeel Ijaz, Raida Al-Kassas, Raimar Löbenberg
Journal of Pharmacy & Pharmaceutical Sciences 2014
- 12 Overview of the preparation of organic polymeric nanoparticles for
drug delivery based on gelatine, chitosan, poly(D,L-lactide-co-glycolic
acid) and polyalkylcyanoacrylate
Patrick Lai, Weiam Daear, Raimar Loebenberg and **Elmar J Prenner**
Colloids and Surfaces B: Biointerfaces 118 (2014) 154-163
- 11 Dengue Diagnostics: Current Scenario
Advaita Ganguly, Ravindra B Malabadi, Raimar Loebenberg, Mavanur R Suresh and **Hoon H Sunwoo**
Research in Biotechnology, 4(2): 19-25, 2013
- 10 A Mini-review of Dengue Vaccine Development
Advaita Ganguly, Ravindra B Malabadi, Raimar Loebenberg, Mavanur R Suresh and **Hoon H Sunwoo**
Research in Pharmacy 3(2): 18-25, 2013
- 9 Al-Hallak, M.K., Sarfraz, M.K., Azarmi, S., Roa, W.H., Finlay, W.H., Löbenberg, R., 2011
Pulmonary delivery of inhalable nanoparticles: Dry powder inhalers, Therapeutic Delivery 2012 (10) , pp. 1313-1324
- 8 **Margareth R. C. Marques**, Raimar Löbenberg, and May Almukainzi
Simulated Biological Fluids with Possible Application in Dissolution Testing
Dissolution Technology, August 2011 p 15- 28
- 7 Cheng Tong, Ruben Lazano, Yun Mao Tarhseen Mirza, Raimar Loebenberg, Beverly Nickerson, Vivian Gray,
Qingxi Wang
The Value of Dissolution in the Drug Development Continuum
Pharmaceutical Technology 2009, Volume 33, Issue 4, pp. 52-64
- 6 Azarmi, S., Roa, W.H., **Löbenberg, R.**
Targeted delivery of nanoparticles for the treatment of lung diseases
(2008) Advanced Drug Delivery Reviews, 60 (8), pp. 863-875.
- 5 Donauer, N., **Löbenberg, R.**
A mini review of scientific and pharmacopeial requirements for the disintegration test
(2007) International Journal of Pharmaceutics, 345 (1-2), pp. 2-8..
- 4 Gill, S., Löbenberg, R., Ku, T., Azarmi, S., Roa, W., **Prenner, E.J.**
Nanoparticles: Characteristics, mechanisms of action, and toxicity in pulmonary drug delivery - A review
(2007) Journal of Biomedical Nanotechnology, 3 (2), pp. 107-119.
- 3 Azarmi, S., Roa, W., **Löbenberg, R.**
Current perspectives in dissolution testing of conventional and novel dosage forms
(2007) International Journal of Pharmaceutics, 328 (1 SPEC. ISS.), pp. 12-21.
(ranked No 1 downloaded article)

- 2 Fung, P., Jung, J., Au, D., Huynh, S., Yeung, A.A., Löbenberg, R.
West Nile virus in Canada
(2006) Canadian Pharmacists Journal, 139 (3), pp. 50-56.
- 1 Löbenberg, R., Amidon, G.L.
Modern bioavailability, bioequivalence and biopharmaceutics classification system. New scientific approaches to international regulatory standards
(2000) European Journal of Pharmaceutics and Biopharmaceutics, 50 (1), pp. 3-12.

Research Publications

- 145 J Zuo, C Park, M Doschak, R Löbenberg
Are the release characteristics of Erzhi pills in line with traditional Chinese medicine theory? A quantitative study
Journal of Integrative Medicine
- 144 Tavares, G.D., Gonçalves, J.E., Monteiro, L.M., Löbenberg, R., Storpirtis, S., Bou-Chacra, N.A., Consiglieri, V.O.
N,N,N-trimethylchitosan-poly (n-butylcyanoacrylate) core-shell nanoparticles as a potential oral delivery system for acyclovir
(2020) Colloids and Surfaces B: Biointerfaces, 196, art. no. 111336
- 143 DA Silva, NM Davies, MR Doschak, J Al-Gousous, N Bou-Chacra, R Loebenberg
Mechanistic understanding of underperforming enteric coated products: Opportunities to add clinical relevance to the dissolution test
Journal of Controlled Release 6/2020
- 142 C Park, N Meghani, R Loebenberg, JH Cui, QR Cao, BJ Lee
Fatty acid chain length impacts nanonizing capacity of albumin-fatty acid nanomicelles: Enhanced physicochemical property and cellular delivery of poorly water-soluble drug
European Journal of Pharmaceutics and Biopharmaceutics 152 257-269 2020
- 141 C Park, N Baek, R Loebenberg, BJ Lee
Importance of the fatty acid chain length on in vitro and in vivo anticancer activity of fattigation-platform albumin nanoparticles in human colorectal cancer xenograft mice model
Journal of Controlled Release 324 55-68 2020
- 140 JO Njoku, D Mukherjee, GK Webster, R Löbenberg
Amorphous Solid Dispersions in Early Stage of Formulation Development: Predicting Excipient Influence on Dissolution Profiles Using DDDPlus
Dissolution Technology May 2020
- 139 DA Silva, J Al-Gousous, NM Davies, NB Chacra, GK Webster, E Lipka, GL Amidon, R Loebenberg
Biphasic Dissolution as an Exploratory Method During Early Drug Product Development
Pharmaceutics 12 (5), 420 2020
- 138 A de Souza, MN Yukuama, EJ Barbosa, LM Monteiro, ACB Faloppa, ... NA Bou-Chacra
A new medium-throughput screening design approach for the development of hydroxymethylnitrofurazone (NFOH) nanostructured lipid carrier for treating leishmaniasis
Colloids and Surfaces B: Biointerfaces, 111097 2020
- 137 KJC Melo, MAB Henostroza, R Lobenberg, NA Bou-Chacra
Rifampicin nanocrystals: Towards an innovative approach to treat tuberculosis

- KJC Melo, MAB Henostroza, R Lobenberg, NA Bou-Chacra
Materials Science and Engineering: C, 110895 112 1-13 2020
- 136 MAB Henostroza, KJC Melo, MN Yukuyama, R Löbenberg, **NA Bou-Chacra**
Cationic rifampicin nanoemulsion for the treatment of ocular tuberculosis
Colloids and Surfaces A: Physicochemical and Engineering Aspects, 124755 Volume 597, 20 July 2020 1-11
- 135 JIS Da Silva De Jesus, R Löbenberg, **NA Bou-Chacra**
Raman Spectroscopy for Quantitative Analysis in the Pharmaceutical Industry
Journal of Pharmacy & Pharmaceutical Sciences 23 (1), 24-46 2020
- 134 ED Rocha, MRS Ferreira, E dos Santos Neto, EJ Barbosa, R Löbenberg, FR Lournco, **N Bou-Chacra**
Enhanced In Vitro Antimicrobial Activity of Polymyxin B–Coated Nanostructured Lipid Carrier Containing Dexamethasone Acetate.
Journal of Pharmaceutical Innovation, 1-11 2020
- 133 J Zuo, W Zhang, H Jian, **NA Bou-Chacra, R Löbenberg**
Esculetin as bioactive marker: towards a rational scientific approach for the treatment of hyperuricemia using Traditional Chinese Medicine
Brazilian Journal of Pharmaceutical Sciences 56 1 2020
- 132 J Zuo, GLB de Araujo, MA Stephano, Z Zuo, NA Bou-Chacra, **R Loebenberg**
Design space approach in the development of esculetin nanocrystals by a small-scale wet-bead milling process
Journal of Drug Delivery Science and Technology, 55, 1-11 101486 2020
- 131 M Mahmoudian, H Valizadeh, R Löbenberg, **P Zakeri-Milani**
Enhancement of the Intestinal Absorption of Bortezomib by Self-nanoemulsifying Drug Delivery System
Pharmaceutical Development and Technology, 25 (3), 351-358 2020
- 130 Peters MCC, Santos Neto ED, Monteiro LM, Yukuyama MN, Machado MGM, de Oliveira IF, Zanin MHA
Löbenberg R, **Bou-Chacra N**
Advances in ophthalmic preparation: the role of drug nanocrystals and lipid-based nanosystems.
J Drug Target. 28 (3), 259-270 1 2020
- 129 JO Njoku, DA Silva, D Mukherjee, GK Webster, **R Löbenberg**
In silico Tools at Early Stage of Pharmaceutical Development: Data Needs and Software Capabilities
AAPS PharmSciTech 20 (6), 243 Sep 2019
- 128 EJ Barbosa, R Löbenberg, GLB de Araujo, **NA Bou Chacra**
Niclosamide repositioning for treating cancer: Challenges and nano-based drug delivery opportunities
European Journal of Pharmaceutics and Biopharmaceutics 141:58-69 Sep 2019
- 127 LM Monteiro, R Löbenberg, N Fotaki, GLB de Araújo, PC Cotrim, **NA Bou Chacra**
Co-delivery of buparvaquone and polymyxin B in nanostructured lipid carrier for leishmaniasis treatment
Journal of global antimicrobial resistance 18, 279-283 2 2019
- 126 B Hens, M Corsetti, M Bermejo, R Löbenberg, PM González, A Mitra, ...
“Development of Fixed Dose Combination Products” Workshop Report: Considerations of Gastrointestinal Physiology and Overall Development Strategy
The AAPS journal 21 (4), 75 June 2019
- 125 MD Duque, DA Silva, MG Issa, V Porta, R Löbenberg, **HG Ferraz**

In Silico Prediction of Plasma Concentrations of Fluconazole Capsules with Different Dissolution Profiles and Bioequivalence Study Using Population Simulation
Pharmaceutics 11 (5), 215 May 2019

- 124 J Al-Gousous, H Ruan, JA Blechar, KX Sun, N Salehi, P Langguth, ...
Mechanistic Analysis and Experimental verification of Bicarbonate-Controlled Enteric Coat Dissolution: Potential in vivo Implications
European Journal of Pharmaceutics and Biopharmaceutics 139 47-58 2019
- 123 MN Yukuyama, ETM Kato, GLB de Araujo, R Löbenberg, LM Monteiro, ...
Olive oil nanoemulsion preparation using high-pressure homogenization and d-phase emulsification—A design space approach
Journal of Drug Delivery Science and Technology 49 622-632 2019
- 122 JCZ Compri, VMA Felli, FR Lourenço, T Takatsuka, N Fotaki, ...
Highly water-soluble orotic acid nanocrystals produced by high-energy milling
Journal of pharmaceutical sciences 108(5):1848-1856
- 121 P Paixão, M Bermejo, B Hens, Y Tsume, J Dickens, K Shedden, N Salehi, ...
Linking the Gastrointestinal Behavior of Ibuprofen with the Systemic Exposure between and within Humans—Part 2: Fed State
Molecular pharmaceutics 15 (12), 5468-5478 2018
- 120 M Bermejo, P Paixão, B Hens, Y Tsume, MJ Koenigsnecht, JR Baker
Linking the Gastrointestinal Behavior of Ibuprofen with the Systemic Exposure between and within Humans—Part 1: Fasted State Conditions, ...
Molecular pharmaceutics 15 (12), 5454-5467 2018
- 119 Marcelo Dutra Duque, Michele Georges Issa, Daniela Amaral Silva, Eduardo José Barbosa, Raimar Löbenberg, **Humberto Gomes Ferraz**
In Silico Simulation of Dissolution Profiles for Development of Extended-Release Doxazosin Tablets
Dissolution Tech Dec 2018 25 14-21
- 118 Bolger, Michael, Macwan, Joyce, Sarfraz, Muhammad, Almukainzi, May, **Löbenberg, Raimar**
The Irrelevance of in vitro Dissolution in Setting Product Specifications for Drugs like Dextromethorphan that are Subject to Lysosomal Trapping
JPharm Sci [108, ISSUE 1](#), P268-278
- 117 Daniela Amaral Silva, Marcelo Dutra Duque, Neal M. Davies, Raimar Löbenberg, **Humberto Gomes Ferraz**
Application of in silico tools in clinical practice using Ketoconazole as model drug
JPPS 21(1s):242s-253s 2018
- 116 Nayab Khalid, Muhammad Sarfraz, Mosab Arafat, Muhammad Akhtar, Raimar Löbenberg and Nisar-Ur-Rahman
Nano-sized Droplets of Self-emulsifying System for Enhancing Oral Bioavailability of Chemotherapeutic Agent VP-16 in Rats: A Nano Lipid Carrier for BCS Class IV Drugs
JPPS 21(1):398-408 2018
- 115 Parmar, Manoj; K.C., Remant Bahadur; Löbenberg, Raimar; **Uludag, Hasan**
Additive polyplexes to undertake siRNA therapy against CDC20 and survivin in breast cancer cells
Biomacromolecules accepted 19(11):4193-4206 2018
- 114 Megumi Nishitani Yukuyama, Pedro Leonidas Oseliero Filho, Edna Tomiko Myiake Kato, Raimar Lobenberg, Cristiano Luis Pinto de Oliveira, Gabriel Lima Barros de Araujo, **Nadia Araci Bou-Chacra**
High internal vegetable oil nanoemulsion: D-phase emulsification as a unique low energy process
Colloids and Surfaces A: Physicochemical and Engineering Aspects 2018

- 113 Aline de Souza, Débora Soares Souza Marins, Samir Leite Mathias, Lis Marie Monteiro, Megumi Nishitani Yukuyama, Cauê Benito Scarim, Raimar Löbenberg, **Nádia Araci Bou-Chacra**
Promising Nanotherapy in Treating Leishmaniasis
International journal of pharmaceutics 547:421-431 2018
- 112 Paulo Paixão, Marival Bermejo, Bart Hens, Yasuhiro Tsume, Joseph Dickens, Kerby Shedden, Niloufar Salehi, Mark J Koenigsknecht, Jason R Baker, William L Hasler, Robert Lionberger, Jianghong Fan, Jeffrey Wysocki, Bo Wen, Allen Lee, Ann Frances, Gregory E Amidon, Alex Yu, Gail Benninghoff, Raimar Löbenberg, Arjang Talattof, Duxin Sun, **Gordon L Amidon**
Gastric Emptying and Intestinal Appearance of Nonabsorbable Drugs Phenol Red and Paromomycin in Human Subjects: A Multi-Compartment Stomach Approach
European Journal of Pharmaceutics and Biopharmaceutics 129:162-174
Aug 2018
- 111 Behzad Sharif Makhmalzadeh, Ommoleila Molavi, Mohammad Reza Vakili, Hai-Feng Zhang, Amir Solimani, Hoda Soleymani Abyaneh, Raimar Loebenberg, Raymond Lai, **Afsaneh Lavasanifar**
Functionalized Caprolactone-Polyethylene Glycol Based Thermo-Responsive Hydrogels of Silibinin for the Treatment of Malignant Melanoma
Journal of Pharmacy & Pharmaceutical Sciences 21 (1), 143-159 2018
- 110 DA Silva, **R Löbenberg**, N Davies
Are Excipients Inert? Phenytoin Pharmaceutical Investigations with New Incompatibility Insights
Journal of Pharmacy & Pharmaceutical Sciences 21 (1s), 19-31s 2018
- 109 Bart Hens, Arjang Talattof, Paulo Paixão, Marival Bermejo, Yasuhiro Tsume, Raimar Löbenberg, Gordon L Amidon
Measuring the Impact of Gastrointestinal Variables on the Systemic Outcome of Two Suspensions of Posaconazole by a PBPK Model
The AAPS Journal 20 (3), 57 2018
- 108 GLB de Araujo, FF Ferreira, CES Bernardes, JAP Sato, OM Gil, ...
A New Thermodynamically Favored Flubendazole/Maleic Acid Binary Crystal Form: Structure, Energetics and In Silico PBPK Model-based Investigation
Crystal Growth & Design 18, 2377–2386. 2018
- 107 DDM Ghisleni, IS Kikuchi, AM Saviano, **NA Bou-Chacra**, R Loebenberg
In Vitro Therapeutic Equivalence of Cephalexin 500 mg Tablets Commercialized in Brazil
LATIN AMERICAN JOURNAL OF PHARMACY 37 (1), 7-11 2018
- 106 MF Dario, FF Oliveira, DSS Marins, AR Baby, MVR Velasco, R Löbenberg, ...
Synergistic photoprotective activity of nanocarrier containing oil of *Acrocomia aculeata* (Jacq.) Lodd. Ex. Martius—Arecaceae
Industrial Crops and Products 112, 305-312, 2018
- 105 S Alrushaid, **NM Davies**, JE Anderson, T Le, JA Yáñez, ZH Maayah, ...
Pharmaceutical Characterization of MyoNovin, a Novel Skeletal Muscle Regenerator: in silico, in vitro and in vivo Studies
Journal of Pharmacy & Pharmaceutical Sciences 21 (1s), 1-18s, 2018
- 104 J Zuo, H He, Z Zuo, N Bou-Chacra, **R Löbenberg**
Erding Formula in hyperuricaemia treatment: unfolding traditional Chinese herbal compatibility using modern pharmaceutical approaches
Journal of Pharmacy and Pharmacology 70 (1), 124-132, 2018
- 103 Z Fasihi, P Zakeri-Milani, A Nokhodchi, J Akbari, M Barzegar-Jalali, ...
Thermodynamic approaches for the prediction of oral drug absorption
Journal of Thermal Analysis and Calorimetry 130 (3), 1371-1382, 2017
- 102 MB Parmar, DNM Sundaram, RB KC, R Maranchuk, HM Aliabadi, ...
Combinational siRNA delivery using hyaluronic acid modified amphiphilic polyplexes against cell cycle and phosphatase proteins to inhibit growth and migration of t...
Acta biomaterialia, 66:294-309 2017

- 101 B Hens, Y Tsume, M Bermejo, P Paixão, M Koenigsknecht, R Baker,
Dynamic Change in pH by Low Buffer Capacity of Gastrointestinal Fluids Along The Human Gastrointestinal Tract:
Implications For In Vivo Dissolution and Absorptio...
2017 Mol Pharm
- 100 MD Duque, MG Issa, DA Silva, BA Sakamoto, LNCR Kakuda, ...
Intrinsic dissolution simulation of highly and poorly soluble drugs for BCS solubility classification
DISSOLUTION TECHNOLOGIES 24 (4), 6-11
- 99 Samaa Alrushaid, Casey L. Sayre, Jaime A. Yáñez, M. Laird Forrest,
Sanjeewa N. Senadheera, Frank J. Burczynski, Raimar Löbenberg, Neal M.
Davies
Pharmacokinetic and Toxicodynamic Characterization of a Novel
Doxorubicin Derivative

Pharmaceutics 9 (3), 35
- 98 Mosab Arafat, Cathrin Kirchhoefer, Momir Mikov, Muhammad Sarfraz, Raimar Löbenberg
Nanosized Liposomes Containing Bile Salt: A Vesicular Nanocarrier for
Enhancing Oral Bioavailability of BCS Class III Drug
J PharmPharmSci 20, 305 - 318, Aug 2017
- 97 B Hens, Y Tsume, M Bermejo, P Paixao, M Koenigsknecht, JR Baker, ...
Low Buffer Capacity and Alternating Motility along the Human Gastrointestinal Tract: Implications for in Vivo
Dissolution and Absorption of Ionizable Drugs
Molecular Pharmaceutics Aug 2017
- 96 LM Monteiro, R Löbenberg, El Ferreira, PC Cotrim, E Kanashiro, M Rocha, ...
Targeting Leishmania amazonensis amastigotes through macrophage internalisation of a
hydroxymethylnitrofurazone nanostructured polymeric system
International Journal of Antimicrobial Agents Jul 2017
- 95 Ghada Bachour, Nadia Araci Bou-Chacra, and Raimar Löbenberg
Evaluation of the Rupture Test for Stability Studies of Soft-Shell Capsules
Dissolution Technol. 2017 Nov.
- 94 Nayab KHALID, Nisar U. RAHMAN, Raimar LÖBENBERG,
Muhammad AKHTAR, Muhammad K. SARFARAZ, Bra'a M. HAJJAR
Design and Evaluation of SMEDDS to Enhance Solubility and
Dissolution of Anticancer Drug Using Modified Cylinder Method
Lat. Am. J. Pharm. 36 (4): 647-57 (2017)
- 93 Roger K. Verbeeck, Isadore Kanfer, **Raimar Löbenberg***, Bertil Abrahamsson, Rodrigo Cristofolletti, D.W. Groot,
Peter Langguth, James E. Polli, Alan Parr, Vinod P. Shah Mehul Mehta, and **Jennifer B. Dressman**
BIOWAIVER MONOGRAPHS FOR IMMEDIATE RELEASE SOLID ORAL DOSAGE FORMS:
ENALAPRIL"
Journal of Pharmaceutical Sciences April 2017
- 92 Braa Hajjar, Kira-Isabel Zier, Nayab Khalid, Shirzad Azarmi, Raimar Löbenberg
Evaluation of a microemulsion-based gel formulation for topical drug delivery of diclofenac sodium
Journal of Pharmaceutical Investigation (2017)
- 91 May Almukainzi · Ranih Gabr · Ghada Abdelhamid · Raimar Löbenberg
Mechanistic understanding of the effect of renal impairment on metformin oral absorption using computer simulations
Journal of Pharmaceutical Investigation (2017) 47:151–161
- 90 Lukas Uebbing, Lukas Klumpp, Gregory K. Webster, Raimar Löbenberg
Justification of disintegration testing beyond current FDA criteria using in vitro and in silico models
Drug Design, Development and Therapy, April 2017
- 89 Lis Monteiro, Raimar Löbenberg, Paulo C. Cotrim, Gabriel Lima Barros de Araújo and **Nádia Bou-Chacra**

- 88 SS Yoo, L Guo, X Sun, AR Shaw, Z Yuan, R Löbenberg, WH Roa
Fabrication and in vitro characterization of gadolinium-based nanoclusters for simultaneous drug delivery and radiation enhancement
Nanotechnology 27 (38), 385104, 2016
- 87 J Zuo, Q Zheng, H Jian, T Porttin, C Willson, F Misquita, J Capicio, ...
Traditional Chinese Medicine for Managing Inflammatory Pain of Arthritis with Herbal Medicines
Current Traditional Medicine 2 (2), 80-93
- 86 MB Parmar, BE Arteaga Ballesteros, T Fu, RB KC, H Montazeri Aliabadi, Hugh JC, Löbenberg R, Uludağ H
Multiple siRNA delivery against cell cycle and anti-apoptosis proteins using lipid-substituted polyethylenimine in triple-negative breast cancer and nonmalignant cells
Journal of Biomedical Materials Research Part A July 2016 doi: 10.1002/jbm.a.35846
- 84 Moghimipour E, Sajadi Tabassi S, Ramezani M, Handali S, Löbenberg R
Absorption enhancing effect of total saponins derived from Acanthopyllum squarrusom and Quillaja saponaria on nasal permeation of gentamicin sulfate and carboxyfluorescein
Research Journal of Pharmaceutical, Biological and Chemical Sciences, vol. 7, issue 3 (2016) pp. 285-291
- 83 E Moghimipour, SAS Tabassi, M Ramezani, S Handali, R Löbenberg
Brush border membrane vesicle and Caco-2 cell line: Two experimental models for evaluation of absorption enhancing effects of saponins, bile salts, and some synthetic surfactants
Journal of Advanced Pharmaceutical Technology & Research 7 (3), 75
- 82 Parvin Zakeri-Milani, Zohreh Fasihi, Jafar Akbari, Ensieh Jannatabadi, Mohammad Barzegar-Jalali, Raimar Löbenberg, Hadi Valizadeh
Crystal-liquid Fugacity Ratio as a Surrogate Parameter for Intestinal Permeability
JPPS 2016 Aug Vol 19 (3)
- 81 M Sarfraz, W Roa, N Bou-Chacra, R Löbenberg
Inflammation caused by Nano-sized delivery Systems: is there a benefit?
Molecular Pharmaceutics, August 2016
- 80 M Sarfraz, W Shi, Y Gao, SD Clas, W Roa, N Bou-Chacra, R Löbenberg,
Immune response to antituberculosis drug-loaded gelatin and polyisobutyl-cyanoacrylate nanoparticles in macrophages
Therapeutic Delivery 7 (4), 213-228
- 79 M Almukainzi, F Jamali, A Aghazadeh-Habashi, R Löbenberg
Disease specific modeling: Simulation of the pharmacokinetics of meloxicam and ibuprofen in disease state vs. healthy conditions
European Journal of Pharmaceutics and Biopharmaceutics 100, 77-84
- 78 S Khiljee, NU Rehman, T Khiljee, R Loebenberg, RS Ahmad
Formulation and clinical evaluation of topical dosage forms of Indian Penny Wort, walnut and turmeric in eczema.
Pakistan journal of pharmaceutical sciences 1 (28), 2001-2007
- 77 Felipe Rebello Lourenço, Fabiane Lacerda Francisco, Márcia Regina Spuri Ferreira, Terezinha de Jesus Andreoli, Raimar Löbenberg, Nádia Bou-Chacra
Design Space Approach for Preservative System Optimization of an Anti-Aging Eye Fluid Emulsion
Journal of Pharmacy & Pharmaceutical Sciences 18 (3), 551-561
- 76 Lis Marie Monteiro, Guilherme Diniz Tavares, Elizabeth Igne Ferreira, Vladi Olga Consiglieri, Nadia Araci Bou-Chacra, Raimar Löbenberg

Reverse phase high-performance liquid chromatography for quantification of hydroxymethylnitrofurazone in polymeric nanoparticles
Brazilian Journal of Pharmaceutical Sciences 51 (3), 561-567

- 75 **Mhammad Naeem, Nisar**, UR Rahman, GUILHERME TAVARES, Savio F Barbosa, Nadia B Chacra, Raimar Löbenberg, Muhammad K Sarfraz
Physicochemical, in vitro and in vivo evaluation of flurbiprofen microemulsion
Anais da Academia Brasileira de Ciências 87 (3), 1823-1831
- 74 Sávio Fujita Barbosa, Takayuki Takatsuka, Guilherme Diniz Tavares, Gabriel Lima Barros Araújo, Hui Wang, Reinhard Vehring, Raimar Löbenberg, **Nádia Araci Bou-Chacra**
Physical–chemical properties of furosemide nanocrystals developed using rotation revolution mixer
Pharmaceutical Development and Technology, 1-11
- 73 L Endrenyi, F Jamali, R Löbenberg
Subsequent Entry Biologics in Canada: Current State of the Science
Journal of Pharmacy & Pharmaceutical Sciences 18 (2), 177-183
- 72 Physicochemical, in vitro and in vivo evaluation of flurbiprofen microemulsion Naeem, M., Rahman, N.U., Tavares, G.D., Barbosa, S.F., **Chacra, N.B.**, Löbenberg, R., Sarfraz, M.K.
Anais da Academia Brasileira de Ciências, 2015 87 (3), pp. 1823-1831
- 71 Investigating the Dissolution Profiles of Amoxicillin, Metronidazole, and Zidovudine Formulations used in Trinidad and Tobago, West Indies
Arlene Villarroel Stuart, Jieyu Zuo, and **Raimar Löbenberg**
AAPS PharmSciTech, Vol. 15, No. 5, October 2014
- 70 Physicochemical, in vitro and in vivo evaluation of flurbiprofen microemulsion
Muhammad Naeem · **Nisar Ur Rahman** · Guilherme D Tavares · Sávio F Barbosa · Nádia B Chacra · Raimar Löbenberg · Muhammad K Sarfraz
Annals of the Brazilian Academy of Sciences (2015) 87(3): 1823-1831
- 69 Comparing the dissolution profiles of seven metformin formulations in Simulated Intestinal Fluid
A Villarroel Stuart, Y Clement, P Sealy, R Löbenberg, L Montane-Jaime, RG Maharaj, A Maxwell
Dissolution technologies Feb 2015
- 68 Simulation of In Vitro Dissolution Behavior Using DDDplus™
May Almukainzi, Arthur Okumu, Hai Wei, **Raimar Löbenberg**.
AAPS PharmSciTech. 2015 Feb;16(1):217-21. doi: 10.1208/s12249-014-0241-5. Epub 2014 Nov 20
- 67 Hyaluronic Acid-Tocopherol Succinate-Based Self-Assembling Micelles for Targeted Delivery of Rifampicin to Alveolar Macrophages
Yuan Gao, Muhammad Khan Sarfraz, Sophie-Dorothee Clas, Wilson Roa, and **Raimar Löbenberg**
Journal of Biomedical Nanotechnology, Vol. 11, 1–18, 2015
- 66 Antiulcerogenic Potential Activity of Free and Nanoencapsulated Passiflora serratodigitata L. Extracts, Marc Strasser, Pety Noriega, Raimar Löbenberg, **Nadia Bou-Chacra** and Elfriede Marianne Bacchi
Research International, Accepted June 2014
- 65 In Vitro Dissolution of Generic Immediate-Release Solid Oral Dosage Forms Containing BCS Class I Drugs: Comparative Assessment of Metronidazole, Zidovudine, and Amoxicillin Versus Relevant Comparator Pharmaceutical Products in South Africa and India
NHS Reddy, S Patnala, R Löbenberg, **I Kanfer**
AAPS PharmSciTech, 1-11, 2014
- 64 Investigating the Dissolution Profiles of Amoxicillin, Metronidazole, and Zidovudine Formulations used in Trinidad and Tobago, West Indies

- AV Stuart, J Zuo, R Löbenberg
AAPS PharmSciTech, 2014
- 63 Challenges and Opportunities to Use Biowaivers to Compare Generics in China
J Zuo, Y Gao, N Bou-Chacra, R Löbenberg
AAPS PharmSciTech, 2014
- 62 Evaluation of the DDSolver Software Applications
J Zuo, Y Gao, N Bou-Chacra, R Löbenberg
BioMed research international, 2014
- 61 Modeling the Absorption of Metformin in Patients Post Gastric Bypass Surgery
M Almukainzi, R Löbenberg
J Diabetes Metab 5 (353), 2, 2014
- 60 The critical role of NIR spectroscopy and statistical process control (SPC) strategy towards captopril tablets (25 mg) manufacturing process understanding: a case study
CP Dal Curtivo, NB Funghi, GD Tavares, SF Barbosa, R Löbenberg, **Nadia Bou-Chacra**
Pharmaceutical development and technology, 1-7, 2013
- 59 Investigation of the Disintegration Behavior of Dietary Supplements in Different Beverages
Jieyu Zuo, Yuan Gao, May Almukainzi, and Raimar Löbenberg
Dissolution Technologies Nov 2013
- 58 Development of an ultrasensitive hetero-sandwich ELISA assay based on bispecific monoclonal antibody for the detection of dengue NS1 protein
Advaita Ganguly, Ravindra B. Malabadi, Raimar Löbenberg, Mavanur R. Suresh, **Hoon H. Sunwoo**
Journal of Pharmacy Research 7 (2013) 374-380
- 57 Studying the compatibility of a metoclopramide-HCl–paracetamol mixture via IHCMC and establishing a validated RP-HPLC method for its determination in tablets
AM Hegazy, R Loebenber, NY Hassan, FH Metwally, M Abdel-Kawy
Analytical Methods, 2013,5, 3714-3720
- 56 Fong, S.Y.K., Liu, M., Wei, H., Löbenberg, R., Kanfer, I., Lee, V.H.L., Amidon, G.L., **Zuo, Z.**
Establishing the pharmaceutical quality of Chinese herbal medicine: A provisional BCS classification Molecular Pharmaceutics, 2013 ,10 (5), pp. 1623-1643
- 55 Yuan Gao, Jieyu Zuo, Nadia Bou-Chacra, Terezinha de Jesus Andreoli Pinto, Sophie-Dorothee Clas, R. B. Walker and **Raimar Löbenberg**
In vitro release kinetics of anti- tuberculosis drugs from nanoparticles assessed using a modified dissolution apparatus
BioMed Research International, 2013, art. no. 136590
- 54 **Roa, W.H.Y.**, Yaremko, B., McEwan, A., Amanie, J., Yee, D., Cho, J., McQuarrie, S., Riauka, T., Sloboda, R., Wiebe, L., Loebenber, R., Janicki, C.
Dosimetry study of [I-131] and [I-125]- meta-iodobenzyl guanidine in a simulating model for neuroblastoma metastasis
Technology in Cancer Research and Treatment; Volume 12, Issue 1, 2013, Pages 79-90
- 53 Al-Hallak, M.H.D.K., Sarfraz, M.K., Azarmi, S., Roa, W.H., Finlay, W.H., Rouleau, C., **Löbenberg, R.**
Distribution of effervescent inhalable nanoparticles after pulmonary delivery: An in vivo study
Therapeutic Delivery 2012 3 (6), pp. 725-734

- 52 Naiyana Gujral, Raimar Löbenberg, Mavanur Suresh, and **Hoon Sunwoo**
In-Vitro and In-Vivo Binding Activity of Chicken Egg Yolk Immunoglobulin Y (IgY) against Gliadin in Food Matrix.
Journal of Agriculture and Food Chemistry 2012 60 (12) , pp. 3166-3172
- 51 **Raimar Löbenberg**, Nadia B. Chacra, Erika S. Stippler, Vinod P. Shah, Anthony J. DeStefano, Walter W. Hauck, and Roger L. Williams
Global Standards for Comparator Pharmaceutical Products: Case Studies of Amoxicillin, Metronidazole, and Zidovudine in the Americas, AAPS Journal 2012, Volume 14, Number 3, Pages 462-472
- 50 S. Waldmann, M. Almukainzi, N.B. Chacra, G.L. Amidon, B.-J. Lee, J. Feng, I. Kanfer, J.Z. Zuo, M. B. Bolger, **R. Löbenberg**, Provisional Biopharmaceutical Classification of common Herbs used in Western Medicine
Molecular Pharmaceutics 9 (4) , pp. 815-822
- 49 Dehalu, V., Weigel, S., Rebe, S., Grombe, R., Löbenberg, R., Delahaut, P. Production and characterization of antibodies against crosslinked gelatin nanoparticles and first steps toward developing an ELISA screening kit, Analytical and Bioanalytical Chemistry , pp. 1-7
- 48 Túlia de Souza Botelho, Vanessa Franco Tavares, Cátia Panizzon Dal Curtivo, Silvie Rosa Balzan Sarolli, Marcio Adriano Fernandes, Carmen Maria Dunaduzzi, Raimar Löbenberg, **Nádia Araci Bou-Chacra**
A Statistical Approach to Evaluating the Manufacture of Furosemide Tablets
Pharmaceutical Technology, Volume 35, Issue 3, pp. 112-121, 2011
- 47 Almukainzi, M., Salehi, M., Chacra, N.A.B., **Löbenberg, R.**
Comparison of the rupture and disintegration tests for soft-shell capsules
(2011) Dissolution Technologies, 18 (1), pp. 21-25.
- 46 Roa, W.H., Azarmi, S., Al-Hallak, M.H.D.K., Finlay, W.H., Magliocco, A.M., **Löbenberg, R.**
Inhalable nanoparticles, a non-invasive approach to treat lung cancer in a mouse model
(2011) Journal of Controlled Release, 150 (1), pp. 49-55.
- 45 Al-Hallak, M.H.D.K., Sarfraz, M.K., Azarmi, S., Kohan, M.H.G., Roa, W.H., **Löbenberg, R.**
Microcalorimetric method to assess phagocytosis: Macrophage-nanoparticle interactions
(2011) AAPS Journal, 13 (1), pp. 20-29.
- 44 Khiljee, S., Nisar-Ur-Rehman, Sarfraz, M.K., Montazeri, H., Khiljee, T., **Löbenberg, R.**
In vitro release of Indian penny wort, walnut, and turmeric from topical preparations using two different types of membranes
(2010) Dissolution Technologies, 17 (4), pp. 27-32.
- 43 Almukainzi, M., Salehi, M., Araci Bou-Chacra, N., **Löbenberg, R.**
Investigation of the performance of the disintegration test for dietary supplements
(2010) AAPS Journal, 12 (4), pp. 602-607.
- 42 De Melo Jr., V.P., Löbenberg, R., **Bou-Chacra, N.A.**
Statistical evaluation of tablet coating processes: Influence of pan design and solvent type
(2010) Brazilian Journal of Pharmaceutical Sciences, 46 (4), pp. 658-664.
- 41 Lai, P., Nathoo, S., Ku, T., Gill, S., Azarmi, S., Roa, W., Löbenberg, R., **Prenner, E.J.**
Real-time imaging of interactions between dipalmitoylphosphatidylcholine monolayers and gelatin based nanoparticles using Brewster angle microscopy

- (2010) Journal of Biomedical Nanotechnology, 6 (2), pp. 145-152.
- 40 Al-Hallak, K.M.H.D., Azarmi, S., Anwar-Mohamed, A., Roa, W.H., **Löbenberg, R.**
Secondary cytotoxicity mediated by alveolar macrophages: A contribution to the total efficacy of nanoparticles in lung cancer therapy?
(2010) European Journal of Pharmaceutics and Biopharmaceutics, 76 (1), pp. 112-119.
- 39 Al-Hallak, M.H.D.K., Azarmi, S., Sun, C., Lai, P., Prenner, E.J., Roa, W.H., **Löbenberg, R.**
Pulmonary toxicity of polysorbate-80-coated inhalable nanoparticles; In vitro and in vivo evaluation
(2010) AAPS Journal, 12 (3), pp. 294-299.
- 38 Al-Hallak, M.H.D.K., Azarmi, S., Xu, Z., Maham, Y., **Löbenberg, R.**
Isothermal microcalorimetry as a quality by design tool to determine optimal blending sequences
(2010) AAPS Journal, 12 (3), pp. 417-423.
- 37 Schmid, K., **Löbenberg, R.**
Influence of the changed USP specifications on disintegration test performance
(2010) Dissolution Technologies, 17 (1), pp. 6-10.
- 36 Okumu, A., DiMaso, M., **Löbenberg, R.**
Computer simulations using GastroPlus™ to justify a biowaiver for etoricoxib solid oral drug products
(2009) European Journal of Pharmaceutics and Biopharmaceutics, 72 (1), pp. 91-98.
- 35 Okumu, A., DiMaso, M., **Löbenberg, R.**
Dynamic dissolution testing to establish in vitro/in vivo correlations for montelukast sodium, a poorly soluble drug
(2008) Pharmaceutical Research, 25 (12), pp. 2778-2785.
- 34 Azarmi, S., **Löbenberg, R.,** Roa, W.H., Tai, S., Finlay, W.H.
Formulation and in vivo evaluation of effervescent inhalable carrier particles for pulmonary delivery of nanoparticles
(2008) Drug Development and Industrial Pharmacy, 34 (9), pp. 943-947.
- 33 Higaki, K., Choe, S.Y., Löbenberg, R., Welage, L.S., **Amidon, G.L.**
Mechanistic understanding of time-dependent oral absorption based on gastric motor activity in humans
(2008) European Journal of Pharmaceutics and Biopharmaceutics, 70 (1), pp. 313-325.
- 32 Wei, H., Dalton, C., Di Maso, M., Kanfer, I., **Löbenberg, R.**
Physicochemical characterization of five glyburide powders: A BCS based approach to predict oral absorption
(2008) European Journal of Pharmaceutics and Biopharmaceutics, 69 (3), pp. 1046-1056.
- 31 Ku, T., Gill, S., **Löbenberg, R.,** Azarmi, S., Roa, W., Prenner, E.J.
Size dependent interactions of nanoparticles with lung surfactant model systems and the significant impact on surface potential
(2008) Journal of Nanoscience and Nanotechnology, 8 (6), pp. 2971-2978.
- 30 Al-Hallak, M.H.D.K., Xu, Z., Ghaffari, F., **Löbenberg, R.**
The effect of compression forces on the stability of dibasic calcium phosphate dihydrate tablets in the presence of glutamic acid hydrochloride monitored by isothermal calorimetry
(2007) Thermochemica Acta, 467 (1-2), pp. 86-90.

- 29 Schröder, K., Schmid, K., Löbenberg, R.
Influence of bulk and tapped density on the determination of the thermal conductivity of powders and blends
(2007) AAPS PharmSciTech, 8 (3), art. no. 78.
- 28 Ely, L., Roa, W., Finlay, W.H., Löbenberg, R.
Effervescent dry powder for respiratory drug delivery
(2007) European Journal of Pharmaceutics and Biopharmaceutics, 65 (3), pp. 346-353.
- 27 Diana Stuart, Raimar Löbenberg, Tabitha Ku, Shirzad Azarmi, Leticia Ely, Wilson Roa and **Elmar J. Prenner**
Biophysical investigation of nanoparticle interactions with lung surfactant model systems
J Biomed Nanotechnology Volume 2, Numbers 3-4, pp. 245-252(8), October/December 2006
- 26 Weyhers, H., Löbenberg, R., Mehnert, W., Souto, E.B., Kreuter, J., **Müller, R.H.**
In vivo distribution of 125I-radiolabelled solid lipid nanoparticles
(2006) Pharmazeutische Industrie, 68 (7), pp. 889-894.
Second Best Article Award
- 25 Wei, H., Löbenberg, R.
Biorelevant dissolution media as a predictive tool for glyburide a class II drug
(2006) European Journal of Pharmaceutical Sciences, 29 (1), pp. 45-52.
- 24 Azarmi, S., Tao, X., Chen, H., Wang, Z., Finlay, W.H., Löbenberg, R., Roa, W.H.
Formulation and cytotoxicity of doxorubicin nanoparticles carried by dry powder aerosol particles
(2006) International Journal of Pharmaceutics, 319 (1-2), pp. 155-161.
- 23 Sloley, B.D., Lin, Y.-C.J., Ridgway, D., Semple, H.A., **Tam, Y.K.**, Coutts, R.T., Löbenberg, R., Tam-Zaman, N.
A method for the analysis of ginsenosides, malonyl ginsenosides, and hydrolyzed ginsenosides using high-performance liquid chromatography with ultraviolet and positive mode electrospray ionization mass spectrometric detection
(2006) Journal of AOAC International, 89 (1), pp. 16-21.
- 22 Yuen, S., Schreyer, M., Finlay, W.H., Löbenberg, R., Moussa, W.
Activation of a photosensitive pharmaceutical agent by a triboluminescent material
(2006) Applied Physics Letters, 88 (12), art. no. 123901
- 21 Azarmi, S., Huang, Y., Chen, H., McQuarrie, S., Abrams, D., Roa, W., Finlay, W.H., Miller, G.G., Löbenberg, R.
Optimization of a two-step desolvation method for preparing gelatin nanoparticles and cell uptake studies in 143B osteosarcoma cancer cells
(2006) Journal of Pharmacy and Pharmaceutical Sciences, 9 (1), pp. 124-132.
- 20 **Raimar Löbenberg** and Wayne Steinke
Investigation of vitamin and mineral tablets and capsules on the Canadian market
JPPS 9 (1): 40-49 2006
- 19 Sweeney, L.G., Wang, L Z., Löbenberg, Raimar, Wong, Jonathan P., Carlos Lange, **Finlay, Warren H.**
Spray Freeze Dried Ciprofloxacin Powder for Liposomal Inhaled Aerosol Drug Delivery
Int J Pharm 305 (1-2): 180-185 2005
- 18 Azarmi, S., Ghaffari, F., Löbenberg, R., Nokhodchi, A.
Mechanistic evaluation of the effect of thermal-treating on Eudragit RS matrices
(2005) Farmaco, 60 (11-12), pp. 925-930.

- 17 Löbenberg, R., Kim, J.S., **Amidon, G.L.**
Pharmacokinetics of an immediate release, a controlled release and a two pulse dosage form in dogs
(2005) European Journal of Pharmaceutics and Biopharmaceutics, 60 (1), pp. 17-23.
- 16 Gittens, S.A., Bagnall, K., Matyas, J.R., Löbenberg, R., **Uludağ, H.**
Imparting bone mineral affinity to osteogenic proteins through heparin-bisphosphonate conjugates
(2004) Journal of Controlled Release, 98 (2), pp. 255-268.
- 15 Gittens, S.A., Kitov, P.I., Matyas, J.R., Löbenberg, R., **Uludağ, H.**
Impact of tether length on bone mineral affinity of protein-bisphosphonate conjugates
(2004) Pharmaceutical Research, 21 (4), pp. 608-616.
- 14 **Valizadeh, H.**, Nokhodchi, A., Qarakhani, N., Zakeri-Milani, P., Azarmi, S., Hassanzadeh, D., Löbenberg, R.
Physicochemical Characterization of Solid Dispersions of Indomethacin with PEG 6000, Myrj 52, Lactose, Sorbitol, Dextrin, and Eudragit® E100
(2004) Drug Development and Industrial Pharmacy, 30 (3), pp. 303-317.
- 13 Sham, J.O.-H., Zhang, Y., Finlay, W.H., Roa, W.H., **Löbenberg, R.**
Formulation and characterization of spray-dried powders containing nanoparticles for aerosol delivery to the lung
(2004) International Journal of Pharmaceutics, 269 (2), pp. 457-467.
- 12 Azarmi, S., Valizadeh, H., **Barzegar-Jalali, M.**, Löbenberg, R.
In situ cross-linking of polyanionic polymers to sustain the drug release of acetazolamide tablets
(2003) Pharmazeutische Industrie, 65 (9), pp. 877-881.
- 11 Miyazaki, S., Takahashi, A., Kubo, W., Bachynsky, J., Löbenberg, R.
Poly n-butylcyanoacrylate (PNBCA) nanocapsules as a carrier for NSAIDs: In vitro release and in vivo skinpenetration
(2003) Journal of Pharmacy and Pharmaceutical Sciences, 6 (2), pp. 240-245.
- 10 Takahashi, A., Suzuki, S., Kawasaki, N., Kubo, W., **Miyazaki, S.**, Loebenberg, R., Bachynsky, J., Attwood, D.
Percutaneous absorption of non-steroidal anti-inflammatory drugs from in situ gelling xyloglucan formulations in rats
(2002) International Journal of Pharmaceutics, 246 (1-2), pp. 179-186.
- 9 Alyaudtin, R.N., Reichel, A., Löbenberg, R., Ramge, P., **Kreuter, J.**, Begley, D.J.
Interaction of poly(butylcyanoacrylate) nanoparticles with the blood-brain barrier in vivo and in vitro
(2001) Journal of Drug Targeting, 9 (3), pp. 209-221.
- 8 Löbenberg, R., Krämer, J., Shah, V.P., Amidon, G.L., **Dressman, J.B.**
Dissolution testing as a prognostic tool for oral drug absorption: Dissolution behavior of glibenclamide
(2000) Pharmaceutical Research, 17 (4), pp. 439-444.
- 7 Araujo, L., Sheppard, M., Löbenberg, R., **Kreuter, J.**
Uptake of PMMA nanoparticles from the gastrointestinal tract after oral administration to rats: Modification of the body distribution after suspension in surfactant solutions and in oil vehicles
(1999) International Journal of Pharmaceutics, 176 (2), pp. 209-224.
- 6 Araujo, L., Löbenberg, R., **Kreuter, J.**

Influence of the surfactant concentration on the body distribution of nanoparticles
(1999) Journal of Drug Targeting, 6 (5), pp. 373-385.

- 5 Galia, E., Nicolaides, E., Hörter, D., Löbenberg, R., Reppas, C., **Dressman, J.B.**
Evaluation of various dissolution media for predicting In vivo performance of class I and II drugs
(1998) Pharmaceutical Research, 15 (5), pp. 698-705.
- 4 Löbenberg, R., Maas, J., **Kreuter, J.**
Improved body distribution of 14C-labelled AZT bound to nanoparticles in rats determined by radioluminography
(1998) Journal of Drug Targeting, 5 (3), pp. 171-179.
- 3 Löbenberg, R., Araujo, L., Von Briesen, H., Rodgers, E., **Kreuter, J.**
Body distribution of azidothymidine bound to hexyl-cyanoacrylate nanoparticles after i.v. injection to rats
(1998) Journal of Controlled Release, 50 (1-3), pp. 21-30.
- 2 Löbenberg, R., Araujo, L., **Kreuter, J.**
Body distribution of azidothymidine bound to nanoparticles after oral administration
(1997) European Journal of Pharmaceutics and Biopharmaceutics, 44 (2), pp. 127-132.
- 1 Löbenberg, R., **Kreuter, J.**
Macrophage targeting of azidothymidine: A promising strategy for AIDS therapy
(1996) AIDS Research and Human Retroviruses, 12 (18), pp. 1709-1715.

Symposia, Workshops and CE Events

Canadian Society for Pharmaceutical Sciences, Workshop: Bioequivalence and Biowaivers for **Excipients** Workshop: Regulatory, Compliance and Bioequivalence
September 20-12 2019, Ottawa

Canadian Society for Pharmaceutical Sciences, Workshop: Bioequivalence and Biowaivers for Complex molecules and Formulations
September 11-12 2018, Ottawa

Canadian Society for Pharmaceutical Sciences, Workshop: Bioequivalence and Biowaivers for Immediate and Modified Release Dosage Forms
November 19th 2015, Ottawa

Canadian Society for Pharmaceutical Sciences, Annual meeting
May 2015, Toronto

Subsequent Entry Biologics (SEBs) in Canada: Current State of the Science
December 10th 2014 Ottawa

CSPS Workshop: "Managing Quality in the Product Lifecycle: Pre-and Post-approval Changes"
March 2014 – Toronto

Sindusfarma Workshop
Practical Aspects of QbD Implementation in the Pharmaceutical Industry
March 24-25th 2014 Sao Paulo, Brazil

AAPS Outreach Workshop
March 7-8th 2013 Argentina member of the organizing committee

Statistical Methods in Quality by Design
Workshop USP Sao Paulo, Brazil member of the organizing committee
March 5th 2013

Quality By Design
CSPS Workshop
June 2012 Toronto (chair of the organizing committee)

The new Canadian BCS workshop
June 2012 Toronto (co-chair of the organizing committee)

Biopharmaceutics Classification System
CSPS and Health Canada Workshop
June 2011 Ottawa (member of the organizing committee)

Graduate Course: Introduction to nanotechnology-base drug delivery systems and drug targeting
(Co-moderator and presenter)
USP April 2011 Sao Paulo

The BCS and Dissolution testing
USP / SINDUSFARMA Brazil workshop (member of the organizing committee)
April 2011 Sao Paulo

The BCS and Quality by Design
USP / SINDUSFARMA Brazil workshop
April 2011 Sao Paulo (member of the organizing committee)

Performance Standards for Essential Drugs
Co-organizer, Moderator and Presenter
AAPS Meeting New Orleans 2010

Alcohol Dose Dumping
Co-organizer; Round Table
AAPS Meeting, 2009 Los Angeles

Current performance testing for pharmaceuticals and TCM dosage forms
Hands on workshop (co-organizer and presenter)
Shanghai University for Traditional Chinese Medicine October 2008

12th World Congress of Clinical Nutrition
Co-Chair of the organizing committee for Natural Health Products
Edmonton 2007

First Summer School in Nanotechnology
NIPER, India (presenter and evaluator)
May 2007

AAPS Steering Committee for In Vitro Release and Dissolution
Co-moderator for Phase II IVIVC and Dissolution Development
Durham, NC April 2007

Dissolution testing in pharmaceutical and nutraceutical industry
CSPS Workshop organizer
June 2005 Toronto

ICMENS special session: Pharmaceutical NanoEngineering Conference
W. H. Finlay and R Löbenberg (co-organizer)
International Conference on MEMS, NANO and Smart Systems (ICMENS) July 2005 Banff

ICMENS special session: Medical and Pharmaceutical NanoEngineering Conference 2004
R Löbenberg, W. H. Finlay and W. Roa (organizers)
Banff 2004

Co-organizer of the Canada-Japan Nanopharmaceutical Symposium both are part of the:
International Conference on MEMS, NANO and Smart Systems (ICMENS)
Banff August 2004

Open House October 2003
2 hours sterile compounding techniques lecture
3 hours sterile compounding techniques lab exercises

Open house October 2002 Faculty of Pharmacy University of Alberta
2 hour seminar on contemporary compounding practice
3 hour lab exercises on modern compounding techniques.

Organizer of the symposium:
Nutraceuticals: the importance of herbal medicine.
December 14th 2001, Faculty of Pharmacy, University of Alberta.

Open house October 2001 Faculty of Pharmacy University of Alberta
2 hours seminar and plenary discussion on modern compounding practices

Presentations

Invited Presentations

- 148 Phytocannabinoid DDIs and their clinical implications
Daniela Amaral Silva, Robert D. Clark, Raimar Löbenberg
SimulationsPlus October 2020
- 147 Medical Marijuana: Fiber, Food, Medicine or Narcotic?
National University of Trujillo Peru December 2019
- 146 Medical Marijuana: Fiber, Food, Medicine or Narcotic?
Thammasat University Thailand November 2019
- 145 Medical Marijuana: Fiber, Food, Medicine or Narcotic?
Naresuan University Thailand November 2019

- 144 Clinical Relevance: Why are enteric coating failing in vivo?
Daniela Amaral, Neal Davis, **Raimar Loebenberg**
CSPS Workshop, Ottawa, 20th September 2019
- 143 Marijuana: Fiber, Food, Medicine or Narcotic?
Canada China Health Summit
August 24th 2019 Richmond ON
- 142 Marijuana: Fiber, Food, Medicine or Narcotic?
Asian Association of Schools of Pharmacy (AASP) Conference
Ajou University, July 4th 2019, Suwon, Korea
- 141 Inhalable Nanoparticles: the impact of the route of administration
Ajou University Faculty of Pharmacy
July 3rd 2019 Suwon, Korea
- 140 Marijuana: Fiber, Food Medicine or Narcotic?
Municipal Issues in Cannabis Regulation Conference Calgary
May 5th 2019
- 139 Topical compounded and over the counter options for chronic Pain
36th annual Calgary Therapeutics course.
April 25th 2019
- 138 Performance testing in quality control and product development
UofT seminar series
April 2019
- 137 The GI-tract and drug delivery
AAPS workshop Nov 2018
- 136 *Performance Testing in Quality Control and Product Development,
Where are We?*
PQRI Oct 2018
- 135 Marijuana: Food, Drug or Narcotic?
World federation of TCM,
China July 2018
- 134 Science and regulations for Traditional Medicines; NHP registration in Canada
World federation of TCM,
China July 2018
- 133 Mechanistic Drug Development
ODD Conference
Lake Tahoe, March 2018
- 132 Mechanistic IVIVC
ODD Conference
Lake Tahoe, March 2018
- 131 Theoretical Basis of Dissolution
AAPS Conference workshop
November 2017
- 130 IVIVC
Gilead
Edmonton, AB October 2017

- 129 Clinical Relevant Product Specifications:
Understanding In vitro and In vivo Data Using In silico Approaches
USP Workshop
- 128 Biopharmaceutical Considerations in preformulation and formulation development
Gilead
Edmonton, AB September 2017
- 127 Nanotechnology: Inhalable Nanoparticles: the role of macrophages
XIX Pharmaceutical Congress Sao Paulo
Sao Paulo, October 2017
- 126 Relevant Product Specifications: What the FDA Wants and What the FDA gets
XIX Pharmaceutical Congress Sao Paulo
Sao Paulo, October 2017
- 125 Post Graduate program and PharmD
XIX Pharmaceutical Congress Sao Paulo
Sao Paulo, October 2017
- 124 Meet the Experts – Pharmaceutical Sciences to Bedside Treatment
XIX Pharmaceutical Congress Sao Paulo
Sao Paulo, October 2017
- 123 The dosage form – GI interface: Mechanistic Key for Bioavailability and Interchangeability,
World federation of TCM,
China August 2017
- 122 Biowaivers a Global overview
PQRI – FDA conference
Rockville March 2017
- 121 Scientific and regulatory issues for Traditional Medicines
World Congress of Clinical Nutrition
Plenary talk, Bangkok, Thailand, December 2016
- 120 Quality by Design for the Pharmaceutical Industry - From the Biopharmaceutics Drug
Classification System to Physiological Based Pharmacokinetic Models
Gilead, Edmonton Alberta October 2016
- 119 Biowaivers – A global overview
Jiangxi University of TCM
Nanchang China, September 28th 2016
- 118 Biowaivers – A Global overview
Guangxi University of Chinese Medicine
Guangxi China Sep 27 2016
- 117 Scientific and regulatory Issues with Traditional Medicines
World Federation of TCM, annual conference
Guilin China September 26
- 116 Inhalable Nanoparticles – the impact of the route of administration
College of Pharmacy
The University of Michigan, Ann Arbor, Aug 26th

- 115 How to answer reviewer's comments
December 3rd
University of Sao Paulo
- 114 Biowaivers, A Global overview
CPS Workshop
Nov 2015, Ottawa
- 113 IVIVC in a QbD environment
Eastern Analytical Symposium
Sumerset NJ Nov 2015
- 112 Clinical relevant product specifications
BMS – scientific seminar
New Brunswick NJ
November 2015
- 111 Computer Simulations in Pharmaceutical Research and Development: an Industrial Perspective
18th Pharmaceutical Congress of São Paulo
October 11th 2015 Sao Paulo
- 110 *The Next Generation of the Modern and Innovative Drug Development: The Use of Pharmaceutical Software*
18th Pharmaceutical Congress of São Paulo
October 11th 2015 Sao Paulo
- 109 Dissolution Testing in Quality Control in Nanostructured System Development
18th Pharmaceutical Congress of São Paulo
October 11th 2015
- 108 Pulmonary Delivery systems applied to TB drugs
Simpósio "Nanotecnologia Aplicada a Fármacos para Doenças Negligenciadas"
Oct 8th Sao Paulo
- 107 How to Establish Therapeutic Equivalence in vitro?
Federal University of Ceará, Brazil
June 24th 2015
- 106 How to Develop Clinically Relevant Dissolution Methods
CSPS Annual meeting May 2015
- 105 The BCS and Biowaivers
Pharmaceutical Science Group
May 12th 2015 Toronto
- 104 In vitro / in vivo Correlations in a QbD environment
LabCQ - Laboratório de Controle de Qualidade de Fármacos e Medicamentos
Departamento de Medicamentos - Universidade Federal do Rio de Janeiro
April 2015
- 103 Performance Testing of Conventional and Novel Dosage Forms
Workshop for Nonelected Diseases
USP December 2nd 2014, Sao Paulo, Brazil

- 102 Research Methodologies 2 – Think outside the box
Hunan University of Traditional Chinese Medicine
November 13th, Changsha, China
- 101 Research Methodologies 1 – How to prepare research publication?
Hunan University of Traditional Chinese Medicine
November 12th, Changsha, China
- 100 Inhalable Nanoparticles a None-Invasive Route of Administration to Treat Lung Cancer
World Federation of TCM, annual meeting
November, 7th Guangzhou, China
- 99 Performance Testing of Conventional and Novel Dosage Forms
Research Week
University Sao Paulo, October 22nd 2014, Sao Paulo, Brazil
- 98 Bioavailability Profile as Predicted by Simulation and Modeling Approaches
Bioequivalence summit
September 15-16th 2014 Boston
- 97 Pharmacopeial Performance testing
In vivo Predictive Dissolution Conference
The University of Michigan, Ann Arbor
August 2014
- 96 QbD in an ICH environment
Sindusfarma, Workshop Sao Paulo, Brazil
March 24-25, 2014
- 95 Establishing IVIVC in a QbD environment
Sindusfarma, Workshop Sao Paulo, Brazil
March 24-25, 2014
- 94 DDSolver, introduction into the software application in drug development
Sindusfarma, Workshop Sao Paulo, Brazil
March 24-25, 2014
- 93 Inhalable Nanoparticles
Alberta Nanotechnology Symposium
Feb 7th 2014, Edmonton
- 92 Inhalable Nanoparticles
PHARMA TRANSPIRE 2014 International conference on Advances in Biopolymer Drug Delivery Systems
Jan 31st 2014, Kurnool-518218 A.P, India
- 91 Predicting Food-Effects using Dissolution Testing
AAPS / CSPS Outreach Workshop
December 2/3 201 Grahams Town South Africa
- 90 Inhalable Nanoparticles: Does the route of Administration matter?

Central South Hunan University
31 October, Changsha, China 2013

- 89 Inhalable Nanoparticles to treat Lung cancer
Hunan University of TCM
October 28, Changsha, China 2013
- 88 What should the Pharmaceutical Scientist know about USP Performance testing?
World Federation of TCM, annual meeting
October 26th, Chengdu, China 2013
- 87 Inhalable Nanoparticles: Does the route of administration matter?
Beijing University of Chemical Technology
October 24 2013
- 86 Bioavailability Profile as Predicted by Simulation and Modeling Approaches
ACCP annual meeting
Bethesda, MD
September 2013
- 85 Recent Advances in Therapy of Lung Diseases using Nanoparticles
Raimar Löbenberg
International Society for Aerosol Medicine, Nanotoxicology work shop
Chapel Hill, NC, April 6, 2013
- 84 Bioequivalence in the Americas using the WHO guidelines; an overview.
Raimar Löbenberg
AAPS Workshop, La Plata, Argentina, March 7-8 2013
- 83 Computer simulations to predict oral drug performance to establish IVIVC
Raimar Löbenberg
AAPS Workshop, La Plata, Argentina, March 7-8 2013
- 82 USP Performance testing for Natural Health Products
AFDP Functional Ingredients Workshop –
Edmonton, Alberta, February 22, 2013
- 81 Integrative Approach to Pharmaceuticals and Natural Medicines
Global Health community lecture series on TCM
February 13th 2013 Roots on White
- 80 Celebrate Chinese New Year “Scientific Methods to understand TCM”
Scott Library University of Alberta February 11th 2013
- 79 Inhalable Nanoparticles
Raimar Loebenberg
Ajou University, Korea, Nov 2012
- 78 The Use of Biowaivers: an overview of generic drugs in the Americas
Raimar Loebenberg
Korean Society of Pharmaceutical Sciences and Technology, Nov 2012
- 77 Performance testing of Traditional Medicines

Raimar Loebenberg
Hunan University of Traditional Chinese Medicine

76 Scientific methods to modernize TCM

Raimar Loebenberg
World Federation of TCM, Nov 2012, Nanchang, China

75 USP Performance testing for Dietary Supplements

Raimar Loebenberg
AAPS annual meeting Chicago, Oct 2012

74 The BCS an Introduction

Raimar Loebenberg
USP Conference, Sao Paulo, August Brazil 2012

73 BCS and Permeability

Raimar Loebenberg
USP Conference, Buenos Ares, August Argentina 2012

72 BCS and Solubility

Raimar Loebenberg
USP Conference, Buenos Ares, August Argentina 2012

71 The BCS an Introduction

Raimar Loebenberg
USP Conference, Buenos Ares, August Argentina 2012

70 Pulmonary Toxicity of Ploysorbate-80 Coated Inhalable Nanoparticles: In Vitro and In Vivo Study

Raimar Loebenberg, Elmar Prenner
CSC annual meeting Calgary May 2012

69 The Role of Biowaivers in Drug Development

Raimar Loebenberg
CSPS Workshop June 2012 Toronto

68 Bioavailability Profile as Predicted by Simulation Approaches

Raimar Loebenberg
CSPS Workshop June 2012 Toronto

67 Principles of the Biopharmaceutical Drug Classification System in Quality by Design

Raimar Loebenberg
CSPS Workshop June 2012 Toronto

66 Dissolution testing for bio-prediction, waivers of BA/BE and special applications

Speaker : Dr. Raimar Löbenberg,
Grahams Town South Africa 2011

65 Development of in vitro performance testing methods for herbal drugs and nutritional supplements

Dr. Raimar Löbenberg,
Grahams Town South Africa 2011

- 64 Theory of Dissolution Testing with regard to the Bio-performance of Drugs
Dr. Raimar Löbenberg,
Grahams Town South Africa 2011
- 63 Inhalable Nanoparticles
Student's Union University of Alberta
November 2011
- 62 The BCS and Biowaivers an Overview
CSPS/Health Canada workshop
June 2011 Ottawa
- 61 The Value of Dissolution Testing
Pharmaceutical Science Group annual meeting 2011
May 2011 Toronto
- 60 Inhalable Effervescent Nanoparticles a new Dosage Form
Introduction to nanotechnology-base drug delivery systems and drug targeting
USP May 2011 Sao Paulo
- 59 The Biopharmaceutical Drug Classification System and Quality by Design
USP / SINDUSFARMA Brazil workshop
April 2011 Sao Paulo
- 58 Dissolution testing an industrial perspective
USP / SINDUSFARMA Brazil workshop
April 2011 Sao Paulo
- 57 In vitro / In Vivo Correlations: Current Knowledge
USP / SINDUSFARMA Brazil workshop
April 2011 Sao Paulo
- 56 The BCS and Biowaivers
USP / SINDUSFARMA Brazil workshop
April 2011 Sao Paulo
- 55 Biowaivers
CSPS Webinar
March 2011
- 54 The Value of Dissolution Testing
Symposium: Performance Standards for Essential Drugs
AAPS Meeting 2010 New Orleans
- 53 Dissolution Testing and Isothermal Microcalorimetry in QbD
Fudan University
October 2010 Shanghai
- 52 Applying the Biopharmaceutics Drug Classification System to
Traditional Medicines
Specialty Committee for Pharmaceutical Quality of Traditional Chinese Medicines

WFCMS, Suzhou, China, October 2010

- 51 New non-invasive treatment options of lung cancer
Luye Pharmaceuticals
Yantai, China, October 2010

- 50 Performance standards for Generics
Luye Pharmaceuticals
Yantai, China, October 2010

- 49 Scientific and regulatory aspects of nano-medicines
10th Annual Symposium, CSPS
Vancouver 2010

- 48 Inhalable nanoparticles to treat lung cancer
8th International Conference and Workshop on Biological Barriers - in vitro Tools, Nanotoxicology, and
Nanomedicine Saarbrücken, Germany, March 2010

- 47 In Vitro Similarity as Surrogate for Therapeutic Equivalence
An investigation on the South American Markets
AAPS Outreach Workshop Grahamstown, South Africa Dec 2009

- 46 Alcohol Dose Dumping
Symposium
AAPS Meeting Los Angeles 2009

- 45 Importance of Dissolution testing for Herbal Formulations
Symposium
AAPS Meeting Los Angeles 2009

- 44 Quality By Design and Traditional Medicines
Shanghai University of Traditional Chinese Medicine
October 2009

- 43 Inhalable Nanoparticles
Yabao Pharmaceuticals, Xian China
Oct 2009

- 42 Modern Biopharmaceutics
Yabao Pharmaceuticals, Xian China
Oct 2009

- 41 Dissolution Testing and Microcalorimetry in Quality by Design
International Conference of the Korean Pharmaceutical Society.
Seoul Oct 2009

- 40 Nano-Sized Drug Delivery Systems
SINDUSFARMA Brazil (Brazilian Pharmaceutical Association)
Sao Paulo, Brazil, July 2009

- 39 In vitro and in vivo testing of inhalable nanoparticles

SINDUSFARMA Brazil (Brazilian Pharmaceutical Association)
Sao Paulo, Brazil, July 2009

38 Dynamic dissolution testing
SOTAX user meeting
June 2009 Horsham, PA

37 In vitro/in vivo Correlations for TCM
Shanghai University for Traditional Chinese Medicine
Shanghai, China, October 2008

36 Applying the BCS to Traditional Medicines
World Foundation for Traditional Chinese Medicine
Shanghai, China 2008

35 Dynamic Dissolution Testing
AAPS Short course
Atlanta, November 2008

34 Developing IVIVC using Dynamic Dissolution and Computer Simulations with Gastro Plus™
SAPS/FDA Dissolution workshop
Arlington, April 2008

33 The Biopharmaceutics Drug Classification System and Quality by Design
Raimar Löbenberg, CSPS meeting,
Banff, 2008

32 Nanotechnology Approaches in Drug Delivery
Raimar Löbenberg, Wilson H Roa, Warren H Finlay and Elmar J Prenner
Merck Frosst Research Day November 2007

31 The Value of Dissolution Testing in Pharmaceutical Development
Raimar Löbenberg
Merck Frosst November 2007

30 Regulatory Aspects of Herbal Medicines in Europe and North America
Raimar Löbenberg
World Federation for TCM, Second annual Meeting, Nanjing China, October 2007

29 Challenges for Chinese Manufacturers on the North America Market
Raimar Löbenberg
Hunan Greenland Plant Resource Development Co Ltd
Changsha, China, October 2007

28 Development of Inhalable Nanoparticles
Raimar Löbenberg, Wilson H Roa, Warren H Finlay and Elmar J Prenner
AAAR Conference, Reno NV September 2007

27 Nanoparticles in Pulmonary Drug Delivery
Raimar Löbenberg, Wilson H Roa, Warren H Finlay and Elmar J Prenner
CIMA Labs, Minneapolis, MN, September 2007

- 26 Inhalable Nanoparticles as drug delivery system
Raimar Löbenberg, Wilson H Roa, Warren H Finlay and Elmar J Prenner
Merck Frosst, (Webinar) August 2007
- 25 In vitro/in vivo correlations based on the Biopharmaceutics Drug Classification System
Raimar Löbenberg
Vertex Inc. (Webinar), August, 2007
- 24 In vitro / In vivo Correlations
Raimar Löbenberg
CRS Conference June 2007
Long Beach, CA
- 23 Nanotechnology Approaches in Drug Delivery
Raimar Löbenberg, Wilson H Roa, Warren H Finlay and Elmar J Prenner
First Summer School, NIPER, India, May 2007
- 22 Nanotechnology Approaches in Drug Delivery
Raimar Löbenberg, Wilson H Roa, Warren H Finlay and Elmar J Prenner
Annual conference of the Korean Society of Pharmaceutical Sciences and Technology
November 30th 2006 Korea
- 21 Inhalable Nanoparticles – What do we need to know?
Raimar Löbenberg
Chosun University Korea, November 28th 2006
- 20 The Biopharmaceutics Drug Classification System: How can it be used to establish in vitro in vivo correlations?
Raimar Löbenberg, Chosun University Korea, November 28th 2006
- 19 Canada's *Natural Health Products Regulations*
Raimar Löbenberg
USP Annual Scientific Meeting, September 2006, Denver, CO
- 18 Scientific Approaches for the Quality Control of Dietary Supplements
Raimar Löbenberg
USP Annual Scientific Meeting, September 2006, Denver, CO
- 17 Nanoparticles as Drug Delivery Platform
Raimar Löbenberg
Shanghai Institute for Pharmaceutical Technology, 2006
- 16 Modern Standardization Methods for Traditional Medicines
Raimar Löbenberg
Shanghai Institute for Pharmaceutical Technology, 2006
- 15 Modern Standardization Methods for Traditional Medicines
Raimar Löbenberg
World Federation of Traditional Medicines: Founding Conference for The Specialty Committee of Traditional Chinese Medicine on Pharmaceutical Products of Traditional Chinese Herbal Drugs
Nanjing, China August 27th 2006

- 14 Computer Aided Formulation Design What is available and what has to be developed
Raimar Löbenberg
May 25th Merck Frosst Kirkland, QC, 2006
- 13 Effusivity and isothermal microcalorimetry in product development
Raimar Löbenberg
Patheon Inc. Mississauga Seminar series February 21st 2006
- 12 Nanoparticles as Drug Delivery Platform
Raimar Löbenberg
Patheon Inc. Mississauga, Seminar series February 21st 2006
- 11 Dissolution Testing and Computer simulations to Predict Oral Absorption
Raimar Löbenberg
Patheon Inc. Mississauga Seminar series February 21st 2006
- 10 Inhalable Nanoparticles as drug delivery platform
Raimar Löbenberg
Department of Biochemistry, University of Calgary, July 2005
- 9 The Biopharmaceutics Drug Classification System applied to Natural Health Products
Raimar Löbenberg
CSPS Workshop on Dissolution technologies, June 2005
- 8 Formulation development and performance tests for Natural Health Products, what can we learn from the pharmaceutical industry?
Raimar Löbenberg
NHP Conference, February 2005 Vancouver
- 7 Medical Marijuana Formulations and the FDA Drug Approval Process
Raimar Löbenberg
Cannasat Inc, Toronto December 2004
- 6 Assessing Bioequivalence using the BCS
Raimar Löbenberg
Global IQ, Edmonton December 2004
- 5 Modern Pharmaceutics: *Drug delivery strategies in vitro models and formulation aspects*
Raimar Löbenberg
Atachem Pharma, November 2004
- 4 Modern Biopharmaceutics: *In vitro* and *in silico* tools to establish *in vitro/in vivo* correlations
Raimar Löbenberg
Merck Frosst Canada April 2004
- 3 Smart Materials: Applications of Nanotechnology in Drug Delivery and Drug Targeting
Raimar Löbenberg
MEMS, NANO and Smart Systems (ICMENS 2003) in July 2003 in Banff
- 2 Biopharmaceutical Classification of Herbal Extracts

Raimar Löbenberg

University of Florida, Department of Pharmaceutical Sciences, August 2002

1 Biopharmaceutics Drug Classification System –Model for Nutraceuticals?

Raimar Löbenberg

Symposium: Nutraceuticals: the importance of herbal medicine.

December 14th 2001, Faculty of Pharmacy, University of Alberta.