Research & Services | Oral Controlled Release Drug Delivery Systems | Research Focus (Yissum)
code: 34-2010-2429
Amnon Hoffman, HUJI, School of Pharmacy, Pharmaceutics
Michael Friedman , HUJI, School of Pharmacy, Pharmaceutics

Development and pharmacokinetic evaluation of oral controlled release drug delivery systems involving in vitro development and further in vivo evaluation in animal models and humans.

Categories	Drug Delivery

Research Capabilities

- The research combines both formulatory development of oral controlled release delivery systems and further detailed pharmacokinetic evaluation in vivo utilizing suitable animal models to validate absorption windows.
- The research is aimed to develop and evaluate oral controlled release delivery systems with direct applicative uses in pharmaceutical industry including dosage forms and IP.
- The research laboratories are equipped with the most of the necessary scientific instruments needed for the execution of all relevant tasks.

Advantages

- Prof. Michael Friedman has many years of experience and is highly specialized in the field of slow release of active agents.
- Prof. Amnon Hoffman is a well established specialist in clinical pharmacokinetics and pharmacodynamics.
- The unique collaboration of the two expert research teams is definitely an added value in development of oral controlled release delivery systems.

Research Background

The purpose of the collaborative research carried out by both research teams is to develop oral controlled release delivery systems. The formulatory and pharmacokinetic – pharmacodynamic expertise provided by the collaboration is aimed to develop an exceptional pharmaceutical products supported by in vivo data.

Researcher and Research Interests

- Prof. Michael Friedman has many years of proved experience and is highly specialized in the field of slow release from various dosage forms. Since 1976 Prof. Friedman serves as a consultant to local and international pharmaceutical companies.
- Prof. Amnon Hoffman’s main research interest is optimization of drug therapy according to pharmacokinetics and pharmacodynamics principles. He has special interests in oral delivery systems. Prof. Hoffman carried out numerous pharmacokinetic - pharmacodynamic studies many of which yielded significant clinical outcomes.

Available Resources

- Trained staff and laboratory equipped with the most of the necessary scientific instruments.
- Dissolution apparatus 7ST, Caleva, USP.

- Analytical equipment - High-performance liquid chromatography (HPLC - UV detector) and Liquid Chromatograph Mass Spectrometer (LC-MS).
- Access to the equipment of the interdepartmentally unit of the Hadassah-Hebrew University.
- Ussing diffusion chamber model for ex-vivo intestinal absorption evaluation

Laboratory Contact

Michael Friedman, Professor, michaelf@ekmd.huji.ac.il, 972-2-6758664

Amnon Hoffman, Professor, amnonh@ekmd.huji.ac.il, 972-2-6757014

Previous experience and work with industry

- Diltiazem – Teva.
- Theotrim – Trima.

Contact for more information:

Itzik Goldwaser ✉, VP, Head of Research Collaborations , +972-2-6586685

Yissum Research Development Company of the Hebrew University of Jerusalem
Hi-Tech Park, Edmond J. Safra Campus, Givat-Ram, Jerusalem P.O. Box 39135, Jerusalem 91390
Israel Telephone: 972-2-658-6688, Fax: 972-2-658-6689