Schering-Plough, Predicting drug absorption in man, January 1989, Miami, FL.

E.R. Squibb & Sons, Intestinal absorption mechanism of captopril, February 1989, Princeton, NJ.

University of Pittsburgh, The effect of gastric emptying and intestinal transit on oral drug absorption, Undergraduate Lecture, March 1989, Pittsburgh, PA.

University of Pittsburgh, Trischool Pharmaceutical Sciences Discussion Group, Predicting drug asorption in man, March 1989, Pittsburgh, PA.

NASA/Aerospace Medical Association Annual Convention, Panel Member, Oral absorption of drugs and the effectiveness of dosage form during space flight, May 1989, Washington, DC.

AAPS Midwest Regional Meeting, *In vitro* and *in vivo* methods for estimating drug absorption (Symposium), May 1989, Chicago, IL.

Benzon Pharma/AS, The oral absorption of peptides, August 1989, Hvidovre, Denmark.

AB Hassle, Predicting oral drug absorption in man, August 1989, Molndal, Sweden.

Food & Drug Administration, Predicting oral absorption of water insoluble drugs, December 1989, Rockville, MD.

University of Iowa, Predicting oral absorption in man: a macroscopic mass balance approach, March 1990, Iowa City, IA.

Allergan Labs., The surfactant aided dissolution of water-insoluble drugs, March 1990, Irvine, CA.

Syntex Research, *In vitro* and *in vivo* methods for predicting drug absorption, March 1990, Palo Alto, CA.

ALZA Corp., Predicting drug absorption in man, March 1990, Palo Alto, CA.

ICI Pharmaceuticals, Predicting oral drug absorption in man, March 1990, Cheshire, England.

University of Manchester, Predicting oral drug absorption in man, March 1990, Manchester, England.

Shionogi & Co., LTD., Predicting oral absorption in man: application to passive and carrier-mediated drugs, April 1990, Osaka, JAPAN.

University of Tokyo, Predicting oral absorption in man: passive and carrier-mediated drugs, April 1990, Tokyo, JAPAN.

Taisho Pharmaceutical Co., Ltd., *In vitro* and *in vivo* methods for predicting bioavailability in man, April 1990, Tokyo, JAPAN.

American College of Clinical Pharmacology 10th Frontiers of Pharmacology--Clinical Pharmacology in Space; Effects of gravity on gastric emptying, intestinal transit, and drug absorption, May 1990, Houston, TX.

American Association of Colleges of Pharmacy, General Session; The dietary requirements of a changing faculty in the 90's, July 1990, Salt Lake City, UT.

American Association of Colleges of Pharmacy, Section of Teachers of Pharmaceutics, AAPS Task Force Report on Academic Excellence in Pharmaceutics, July 1990, Salt Lake City, UT.

Parke-Davis, General strategies for obtaining and optimizing bioavailability after oral administration; Round-Table Discussion, August 1990, Ann Arbor, MI.

ETH-Department of Pharmacy, Intestinal mucosal cell transport and metabolism of peptide-type drugs, September 1990, Zurich, Switzerland.

Glaxo Inc, Predicting drug absorption in man, October 1990, Raleigh, NC.

University of Southern California, School of Pharmacy; Predicting oral absorption in humans, February 1991, Los Angeles, CA.

30th Annual Intl. Industrial Pharmacy Conference--Current Issues in Drugs and Biologics Development; Bioequivalence of oral drugs which do not reach measurable systemic levels, February 1991, University of Texas, Austin, TX.

University of Texas, College of Pharmacy, Predicting drug absorption in man, February 1991, Austin, TX.

Syntex Research, Oral absorption of small peptides, March 1991, Palo Alto, CA.

AAPS Eastern Regional Meeting, Predicting extent of absorption of water-insoluble drugs in humans, June 1991, New Brunswick, NJ.

Controlled Release Society Meeting, Fasted-state variation of gastrointestinal variables: implications for oral drug bioavailability, July 1991, Amsterdam, The Netherlands.

Glaxo Inc. Research Institute, Drug development and regulation in the US or political science at the FDA, October 1991, Research Triangle Park, NC.

ACCP 20th Annual Meeting Symposium, Stereoselective disposition of ibuprofen in the dog after systemic exposure: enatiomeric interaction (D.E. Smith, H-Y Ahn and G.L. Amidon), October 1991, Atlanta, GA.

Extended Duration Orbiter Medical Project (EDOMP)/KRUG Life Sciences; Measuring gastric emptying in a microgravity environment, December 1991, Johnson Space Center, Houston, TX.

New Jersey Discussion Group, Gut approaches to peptide delivery, January 1992, Morris Plains, NJ.

University of Utrecht, Department of Pharmaceutics, Dissolution and absorption of water insoluble drugs, February 1992, Utrecht, The Netherlands.

Uppsala University, Dept of Biopharmaceutics & Pharmacokinetics, Dissolution of insoluble drugs, *in vitro* and *in vivo* considerations, March 1992, Uppsala, SWEDEN.

Swedish Academy of Pharmaceutical Sciences, Oral transport and absorption mechanisms from animals to humans: human bioavailability implications, March 1992, Stockholm, Sweden.

University of Kentucky, The Fourteenth Annual David E. Guttman Memorial Speaker, Oral absorption of peptides and peptidio mimetics, March 1992, Lexington, KY.

Eli Lilly & Company, Oral absorption of peptides and peptidomimetics, May 1992, Indianapolis, IN.

Second Jerusalem Conference on Pharmaceutical Sciences and Clinical Pharmacology; Transport and metabolism of peptides in the gastrointestinal tract, May 1992, Jerusalem, Israel.

Seoul National University; Mucosal cell peptide carrier-mediated transport, June 1992, Seoul, Korea.

Kyoto University, Recent advances in oral peptide delivery, June 1992, Kyoto, Japan.

Nagoya City University, Recent advances in oral peptide delivery, June 1992, Nagoya, Japan.

Taisho International Conference, Theoretical considerations in *in vitro* dissolution and drug product bioavailability, June 1992, Tokyo, Japan.

Sandoz Pharmaceuticals Corp., *In vitro in vivo* correlations: estimating human bioavailability, August 1992, East Hanover, NJ.

AAPS Annual Meeting, Roundtable; Bioequivalence issues of orally administered non-systemically available drugs, November 18, 1992, San Antonio, TX.

Wyeth-Ayerst Research, Predicting drug absorption in humans; selection of new drug candidates, December 1992, Princeton, NJ.

SmithKline Beecham, Oral peptide delivery, July 15-16, 1993, King of Prussia, PA.

Eli Lilly & Company, *In vitro in vivo* correlations in drug absorption: implications for a biopharmaceutics drug classification, July 21-22, 1993, Indianapolis, IN.

University of Florida, College of Pharmacy, Frank A. Duckworth Eminent Scholar Seminar Series, Oral peptide delivery, August 16, 1993, Gainesville, FL.

Boehringer Ingelheim, Oral absorption of water insoluble drugs, November 29, 1993, Ridegefield, CT.

The University of Michigan, College of Pharmacy Seminar; A biopharmaceutics classification for drug product regulation; January 10, 1994, Ann Arbor, MI.

Eli Lilly & Company, A biopharmaceutics drug classification and new drug development, January 25, 1994, Indianapolis, IN.

The University of Minnesota, College of Pharmacy; Oral delivery of peptide and peptidiomimetic drugs, February 10, 1994, Minneapolis, MN.

3M Pharmaceuticals, Oral peptide and peptidiomimetic delivery: prospects for the next 10 years, February 11, 1994, St. Paul, MN.

DuPont Merck, Biopharmaceutics, pharmacokinetics and pharmacodynamics of drugs that are active in the gastrointestinal tract, February 24, 1994, Wilmington, DE.

Hoffmann-LaRoche, Improving absorption of poorly soluble peptide like drugs, March 3, 1994, Nutley, NJ.

ALZA Corporation, Oral absorption of peptide drugs, March 21, 1994, Palo Alto, CA.

Taisho Pharmaceutical Co., Ltd., Biopharmaceutics classification of drugs, March 28, 1994, Tokyo, Japan.

Japanese Pharmaceutical Society Meeting, Plenary Lecture: Oral peptide and peptidomimetic delivery: prospects for the next ten years, March 30, 1994, Tokyo, Japan.

Kanazawa University, Mechanisms of absorption of peptide and peptidomimetic compounds: recent results and prospects for the future, April 1, 1994, Kanazawa, Japan.

Japanese Pharmaceutical Society, Hokuriku Branch, Mechanisms of absorption of peptide and peptidomimetic compounds: recent results and prospects for the future, April 2, 1994, Kanazawa, Japan.

University of Tokyo, Mechanisms of absorption of peptide and peptidomimetic compounds: recent results and prospects for the future, April 5, 1994, Tokyo, Japan.

Sankyo Pharmaceutical Co., Dissolution and absorption of water insouble drugs: a theoretical basis for *in vitro/in vivo* correlation, April 6, 1994, Tokyo, Japan.

Daiichi Pharmaceutical Co., Dissolution and absorption of water insoluble drugs: a theoretical basis for *in vitro/in vivo* correlation, April 6, 1994, Tokyo, Japan.

Yamanouchi Phamaceutical Co., Dissolution and absorption of water insoluble drugs: a theoretical basis for *in vitro/in vivo* correlation, and Mechanisms of absorption of peptide and peptidomimetic compounds: recent results and prospects for the future, April 7, 1994,Shizuoka-ken, Japan.

Shionogi Pharmaceutical Co., A theoretical basis for a biopharmaceutics drug classification for international drug regulation, April 11, 1994, Osaka, Japan.

Second Annual Midwest Users Forum for Population Approaches in Data Analysis; Absorption models, May 12-13, 1994, Parke-Davis, Ann Arbor, MI.

Joint Great Lakes/Central Region ACS Meeting, Using a patent to form a company; what really happens, June 1, 1994, Ann Arbor, MI.

IBC Conference, Improving the oral absorption of peptide and peptidiomimetic compounds, Jul 28-29, 1994, Coronado, CA.

Gordon Research Conference (discussion leader-Drug Bioavailability); Drug transport in the GI tract: factors controlling oral absorption, August 8-12, 1994, New London, NH.

Arris Pharmaceuticals, Predicting drug absorption in humans, October 14, 1994, S. San Francisco, CA.

Chiron Corporation, Oral absorption of peptide and peptidomimetic drugs, October 31, 1994, Emeryville, CA.

University of California San Francisco, School of Pharmacy, Oral absorption of peptide and peptidomimetic drugs, October 31, 1994, San Francisco, CA.

Genentech, Inc., Peptide and peptidomimetic drugs: prospects for oral delivery, November 1, 1994, S.San Francisco, CA.

Syntex Research, Oral drug and prodrug absorption: evaluation and optimization strategies, November 2, 1994, Palo Alto, CA.

Gilead Sciences, Factors controlling and approaches to improving human oral drug absorption, November 3, 1994, Foster City, CA.

Agouron Pharmaceuticals, Inc., Factors controlling human drug absorption, November 4, 1994, San Diego, CA.

AAPS 1994 Annual Meeting, PDD Symposium; Recent results in oral absorption of large peptides, November 10, 1994, San Diego, CA.

Isis Pharmaceuticals, Inc., Drug transport in the gastrointestinal tract: factors controlling drug absorption, November 11, 1994, Carlsbad, CA.

Sandoz Research Institute., Predicting drug absorption in humans: approaches for discovery and development, November 28, 1994, East Hanover, NJ.

Teijin Company, Estimating and optimizing oral drug absorption: from discovery to development of optimized delivery systems, December 7, 1994, Tokyo, Japan.

Taisho Pharmaceutical Co., Oral absorption of peptide and peptidomimetic drugs, December 7, 1994, Tokyo, Japan.

Fujisawa Pharmaceutical Co., Oral absorption of peptide and peptidomimetic drugs, December 8, 1994, Osaka, Japan.

Sumitomo Pharmaceutical Co., Intestinal transport and metabolism of peptide and peptidomimetic drugs, January 30, 1995, Osaka, Japan.

Tanabe Seiyaku Co., Osaka, Intestinal transport and metabolism of peptide and peptidomimetic drugs; A biopharmaceutic drug classification scheme: a rational basis for establishing *in vitro-in vivo* correlations; Human permeability results and oral drug absorption: correlation and predictions, January 31, 1995, Osaka, Japan.

Fujisawa Pharmaceutical Co., Intestinal transport and metabolism of peptide and peptidomimetic drugs, February 1, 1995, Osaka, Japan.

Ono Pharmaceutical Co., Human permeability results and oral drug absorption: correlation and predictions,February 2, 1995, Kyoto, Japan.

Kyoto Pharmaceutical University, Intestinal transport and metabolism of peptide and peptidomimetic drugs, February 3, 1995, Kyoto, Japan.

Nihon Shinyaku, Intestinal transport and metabolism of peptide and peptidomimetic drugs; Human permeability results and oral drug asorption: correlation and predictions, February 3, 1995, Kyoto, Japan.

Kowa Research Institute, A biopharmaceutic drug classification scheme: a rational basis for establishing *in vitro-in vivo* correlations, February 6, 1995, Shizuoka, Japan.

Taisho Pharmaceutical Co., Oral drug delivery considerations in OTC product development , February 7, 1995, Tokyo, Japan.

Kissei Pharmaceutical Co., Ltd., Human permeability results and oral drug absorption: correlation and predictions, February 10, 1995, Tokyo,Japan.

R.W. Johnson Pharmaceutical Research Institute, Oral delivery of peptides and peptidomimetic drugs, February 17, 1995, Raritan, NJ.

SmithKline Beecham, A biopharmaceutics drug classification scheme: implications for drug design and development, March 10, 1995, Philadelphia, PA.

Parke-Davis, Improving the oral absorption of peptide type drugs: application to endothelin antagonists, March 21, 1995, Ann Arbor, MI.

The University of Michigan Medical Center, Basic Science Conference, Peptide transport in the GI tract, March 27, 1995, Ann Arbor, MI.

IBC Conference on Peptidomimetic & Small Molecule Design, The effect of small and large intestinal transit time variability on drug absorption and *in vitro in vivo* correlations, March 29-31, 1995, Philadelphia, PA.

Schering-Plough, Oral absorption of water insoluble drugs, April 5, 1995, Kenilworth, NJ.

Ohio State University, College of Pharmacy, Progress and prospects in oral peptidomimetic delivery, June 19, 1995, Columbus, OH.

Abbott Laboratories, A biopharmaceutics drug classification scheme: implications for *in vitro in vivo* correlation, July 18, 1995 ,N. Chicago, IL.

Chicago IAM Meeting, An *in vivo* perspective on *in vitro* methods for predicting membrane permeability, August 18, 1995, Chicago, IL.

The Royal Danish School of Pharmacy, Biopharmaceutical drug classification scheme; implications for drug regulation, August 28, 1995, Copenhagan, Denmark.

University of Pittsburgh, School of Pharmacy, Factors controlling human drug absorption, September 28, 1995, Pittsburgh, PA.

The University of Michigan, Gene Therapy Seminar Series, Development of adenovirus vectors for gastrointestinal gene therapy, October 19, 1995, Ann Arbor, MI.

AAPS RA Open Session; Biopharmaceutics Classification System, November 8, 1995, Miami FL.

Agouron, Oral delivery of water insoluble drugs, December 7, 1995, San Diego, CA.

PathoGenesis, Colon targeting for local GI delivery, December 8, 1995, Seattle, WA.

Chiron, Estimating absorption from combinatorial libraries, December 11, 1995, San Francisco, CA.

Bristol-Myers Squibb, Predicting oral drug absorption, December 18, 1995, Newark, NJ.

University of Michigan, School of Dentistry, Bioerodible polymers for drug delivery, January 25, 1996, Ann Arbor, MI.

Cephalon, Inc., Predicting oral absorption in humans: from discovery to clinic, February 28, 1996, West Chester, PA.

New Jersey Discussion Group, A biopharmaceutic drug classification scheme: application to immediate and controlled release drug products, April 18, 1996, Brunswick Hilton & Towers, E. Brunswick, NJ.

F. Hoffmann-La Roche Ltd., Predicting drug absorption in humans: discovery to development, May 22, 1996, Basel, Switzerland.

Groupe Lipha, Predicting oral drug absorption in humans: advances in durg discovery, development and regulation, May 27, 1996, Lyon, France.

Groupe de Metabolisme et de Pharmacocinetique (GMP), Prediction of *in vivo* absorption in man using experimental and theoretical approaches, June 5, 1996, Paris, France.

Sanofi Research, Oral drug absorption, advances in discovery, development and regulation, June 6, 1996, France

AAPS Eastern Regional Meeting, Optimizing oral delivery of water soluble drugs, June 13, 1996, New Brunswick, NJ.

NIH & National Toxicology Center, KFDA, A biopharmaceutic drug classification system for international drug regulation, July 13, 1996, Seoul, Korea.

Sam Yang Group R & D Center, A biopharmaceutic drug classification system for international drug regulation, July 15, 1996, Taejon, Korea.

Seoul National University, A biopharmaceutic drug classification system for international drug regulation, July 16, 1996, Seoul, Korea.

Dong-A Pharmaceutical Co., A biopharmaceutic drug classification system for international drug regulation, July 16, 1996, Seoul, Korea.

Eighth Japanese-American Conference on Pharmacokinetics and Biopharmaceutics, Chair—Delivery of Proteins, July 29-30, 1996, Seattle, WA.

3rd Jerusalem Conference on Pharmaceutical Sciences and Clinical Pharmacology; Co-chair, Peptide and Protein Delivery and Absorption; Exploiting transport mechanisms in the gastrointestinal tract for improved oral peptide and protein delivery, Sept 1-6, 1996, Jerusalem, Israel.

Institut de Recherche Jouveinal; Predicting drug absorption in humans: discovery, development and regulatory advances, Oct 15, 1996, Cedex, France.

BioChem Therapeutic, Inc.; Predicting oral drug absorption: discovery, development and regulatory implications; Oct 25, 1996, Montreal, Canada

AAPS Annual Meeting; AAPS/AACP—Grantsmanship Seminar; View from a study section member perspective, Oct 30, 1996, Seattle, WA

Swedish Academy of Pharmaceutical Sciences, Swedish Pharmaceutical Congress; Scheele Lecture—Evolution and Revolution in Biopharmaceutics, Nov 12, 1996, Stockholm, Sweden; Dr. Amidon received the 1996 Scheele Award from the Swedish Academy of Pharmaceutical Scientists for his contributions to the field of oral drug delivery and biopharmaceutics.

Scheele Symposium 1996 on Oral Drug Delivery; Historical perspectives and the future of oral drug delivery, Nov 14, Uppsala, Sweden.

Astra Hassle AB, Predicting oral drug absorption in humans: advances in drug discovery, development and regulation, Nov 15, 1996, Molndal, Sweden

UPSA Labs; Rationale for a biopharmaceutic classification system: current status and future FDA developments, December 9, 1996, Rueil Malmaison, France.

Tables Rondes Roussel UCLAF; Cellular models for epithelial drug transport and strategies for improving oral drug absorption; Dec 10-11, 1996, Paris, France

Institut de Recherches Internationales Servier; Predicting oral drug absorption in humans: implications for drug discovery, drug development and drug regulation, Dec 12, 1996, Cedex, France.

Institut de Recherche Jouveinal; Prodrug strategies for improving oral drug delivery of water soluble and water insoluble drugs, Dec 13, 1996, Cedex, France.

Sookmyung Women's University; The rationale for a biopharmaceutics classification system for drug product regulation, Apr 21, 1997, Seoul, Korea

Pacific Corp. R & D Center; Biopharmaceutic properties of drugs: new tools to facilitate drug discovery and development, Apr 22, 1997, Seoul, Korea

1st Drug Optimization via Retrometabolism Conference; Peptide transporter based prodrug design: opportunities for improving the permeability of a polar drug, May 7, 1997, Amelia Island, FL.

Technological Advances in Drug Delivery Systems (Argentine CRS Chapter); Dissolution and absorption of water insoluble drugs; Oral delivery of gene therapeutics, May 12-14, 1997, Buenos Aires, Argentina.

University of Manchester, Predicting oral absorption in humans, June 10, 1997, Manchester, UK.

Bayer AG, Gastric emptying, intestinal transit, and food effects on oral controlled release dosage form performance, June 12, 1997 Cologne, Germany.

EUFEPS 4th International Conference on Drug Absorption, Drug dissolution and absorption: application to prediction and regulation, June 13-15, 1997, Edinburgh, Scotland.

Japan Society of Drug Delivery System Conference, Predicting oral drug absorption: implications for drug discovery, drug development and drug regulation, July 10-11, 1997, Sapporo, Japan.

Tokyo University, Intestinal peptide transport pathways: new approaches to drug delivery, July 14, 1997, Tokyo, Japan.

Daiichi Pharmaceutical Co., Intestinal peptide transport pathways: new approaches to drug delivery, July 16, 1997, Tokyo, Japan.

Sankyo Pharmaceutical Co., Intestinal peptide transport pathways: new approaches to drug delivery, July 16, 1997, Tokyo, Japan.

Otsuka Pharmaceutical Co., Rationale and implementation of a biopharmaceutics classification system for new drug regulation, July 17, 1997, Tokushima, Japan.

Fujisawa Pharmaceutical Co., Dissolution and absorption of water insoluble drugs: influence of micelles and emulsion particles, July 18, 1997, Osaka, Japan.

Kanazawa University, Intestinal peptide transport pathways: new approaches to drug delivery, July 19, 1997, Kanazawa, Japan.

FASEB Conference, Improving oral absorption: strategies based on peptide transport, July27-Aug 1, 1997, Copper Mt., Colorado.

Astra Hassle, Predicting drug absorption: implications for drug discovery, drug development and drug regulation, August 25, 1997, Goteborg, Sweden.

5th International Congress of FIP, Unravelling the complexities of the oral absorption process: predicting human drug absorption, August 25-September 5, 1997, Vancouver, BC, Canada.

Schering-Plough Research Institute, Predicting human drug absorption: implications for drug discovery, development and regulation, September 24, 1997, Kenilworth, NJ.

Glaxo Wellcome, Predicting drug absorption: implications for drug discovery, development and regulation, October 20,1997, Durham, NC.

Canadian Society for Pharmaceutical Sciences, New standards for bioequivalence: an absorption view, February 13-14, 1998, Ottawa, Canada.

Elan Research Institute, Trinity College, Delivery of peptides and proteins by oral and depot routes, March 30, 1998, Dublin, Ireland.

Bioavailability of Environmental Chemicals Conference, Predicting oral absorption and bioavailability, April 1, 1998, University of Florida, Sarasota, FL.

FIP Bio-International 98 Conference, An alternative approach to bio-study and its limitations(also co-chair of session), May 18-21, 1998, Bethesda, MD.

AAPS Eastern Regional Meeting, President's Address, June 1, 1998, Parsippany, NJ.

Challenges for Drug Delivery and Pharmaceutical Technology Conference, Setting bioequivalence requirements for drug development based on preclinical data: optimizing oral drug delivery systems, June 9-11, 1998, Tokyo, Japan.

Sankyo Pharmaceutical Co., Predicting oral drug absorption: implications for drug discovery, drug development and drug regulation, June 12, 1998, Tokyo, Japan.

American Association of Veterinary Pharmacology & Therapeutics, Predicting oral absorption: animal to human, June 14-18, 1998, Asilomar, CA.

Mylan Pharmaceuticals, Inc., The biopharmaceutics classification system; Drug absorption and the gastrointestinal tract, June 26, 1998, Morgantown, W.VA.

Yamanouchi Pharmaceutical Co., Predicting oral drug absorption: implications for discovery, development and regulation, July 27, 1998, Shizuoka, Japan

Mochida Pharmaceutical Co., Fuji Central res. Lab., Predicting oral drug absorption: implications for discovery, development and regulation, July 28, 1998, Shizuoka, Japan.

Fujisawa Pharmaceutical Co., Predicting oral drug absorption: implications for discovery, develoment and regulation, July 29, 1998, Osaka, Japan.

Okayama University, Predicting drug absorption: advances from drug discovery, drug development and drug regulation, April 28, 1999, Okayama, Japan.

National Taiwan University, School of Pharmacy, Predicting drug absorption: advances from drug discovery, drug development and drug regulation, April 30, 1999, Taipei, Taiwan.

Membrane Transporter Conference, Designing drugs for hPEPT1 transport, August 8-12, 1999, Monte Verita, Ascona, Switzerland.

Akzonobel/NV Organon, Predicting drug absorption: implications for drug discovery, development and regulation, August 31, 1999, Oss, The Netherlands.

Almirall Prodesfarma Pharmaceutical Co., New BA/BE requirements: the Biopharmaceutic Classification System, September 2, 1999, Barcelona, Spain.

University of Valencia, Predicting oral drug absorption: implications for drug discovery, drug development and drug regulation, September 3, 1999 Valencia, Spain.

FIP World Congress, Modern biopharmaceutics: from discovery, development and regulation, September 5-7, 1999, Barcelona, Spain.

The Council for Chemical Research, Tinkering with chemistry for drug delivery, September 26-28, 1999, Baltimore, MD.

BIO-Intrernational '99 Conference (FIP), Dissolution studies as surrogate for bioequivalence, September 28-October 3, 1999, London, England.

Asian Conference and Exhibition of Controlled Release/CRS, Rational, refinement and implementation for a biopharmaceutics classification system for drug product regulation, Nov 29-December 3, 1999, Hong Kong, China.

Tohoku University, Optimizing oral delivery: new technology and pharmacodynamics, January 20, 2000, Sendai, Japan.

Dainippon Pharmaceutical Co., Optimizing oral delivery: new technology and pharmacodynamics, January 24, 2000, Osaka, Japan.

Ono Pharmaceutical Co., Optimizing oral delivery: new technology and pharmacodynamics, January 24, 2000, Osaka, Japan.

Shionogi QualiCapsule, Optimization of oral delivery: new technologies and pharmacodynamics, January 25, 2000, Osaka, Japan.

Kanazawa University, Optimization of oral delivery: new technologies and pharmacodynamics, January 27, 2000, Kanazawa, Japan

Sam Yang Company, Optimization of oral delivery: new technologies and pharmacodynamics, January 31, 2000, Taejeon, Korea.

LG Chemical Co., Optimization of oral delivery: new technologies and pharmacodynamics, January 31, 2000, Taejeon, Korea.

Monsanto Company, Optimizing oral delivery: new technology and pharmacodynamics, March 14, 2000, St. Louis, MO.

Bristol Myers Squibb, Optimizing oral delivery: new technology and pharmacodynamics, April 10, 2000, New Brunswick, NJ.

Millennial World Congress of Pharmaceutical Sciences, *In vitro* cellular systems to study drug transport, April 16-20, 2000, San Francisco, CA.

VI Congress of South American Pharmaceutical Federation (FEFAS), The Biopharmaceutics Classification System, April 24-28, 2000, Montevideo, Uruguay.

INAME – Buenos Aires – May 1, 2000

Canadian Society of Pharmaceutical Scientists (CSPS), Drug Delivery Obstacles, June 9, 2000, Vancouver, BC.

36th Annual DIA Meeting, Improvements in formulation of old and new drugs for ADHD, June 12, 2000, San Diego, CA.

Controlled Release Society Meeting, The biopharmaceutics classification system: in vitro/in vivo correlations and ER dosage forms, July 9, 2000, Paris, France.

V Pharmatech Annual Meeting, Plenary Lecture: Biopharmaceutic Classification System, Aug 1, 2000, Porto Alegre, Brazil.

AAPS/Panama National Pharmacy Meeting, Overview of Biopharmaceutics Classification System, Sept 2, 2000, Panama.

AAPS National Meeting, Implementation of a BCS for drug product regulation: development of new dissolution standards, October 29, 2000, Indianapolis, IN

NM Conference, The relationship between "e", "i", and "π": how to find Bermuda on the map, Nov 4, 2000, Bermuda.

Amigen Pharmaceutical Co., Modern biopharmaceutics: advances in discovery, development and regulation, Nov 21, 2000, Thousand Oaks, CA

CKD Pharmaceuticals, Water insoluble (Class II) drugs: drug delivery and drug regulatory standards, Dec 8, 2000, Seoul, Korea.

Fujisawa Pharmaceutical Co., Predicting absorption of water insoluble drugs, Dec 11, 2000, Osaka, Japan.

Ajinomoto Company, Predicting oral drug absorption, Dec 12, 2000, Kawasaki, Japan.

Daiichi Pharmaceutical Co., Predicting absorption of water insoluble drugs, Dec 13, 2000, Tokyo, Japan.

Tohoku University, New approaches to bioequivalence regulation: BCS and Beyond, Dec 14, 2000, Sendai, Japan.

SEFIG V Congress, Modern bioequivalence requirements: BCS and future extensions, , Feb 4-7, 2001, Valencia, Spain.

Andrx Corp., New bioequivalence standards based on the Biophrmaceutic Classification System, Feb 19, 2001, Ft.Lauderdale, FL.

Pharmaceutical Congress of the Americas, Molecular determinants of oral drug delivery, March 24-29, 2001, Orlando, FL.

Daiichi Pharmaceutical Co., Modern molecular biopharmaceutics: from genes to absorption, Apr 18, 2001, Tokyo, Japan.

Sankyo Pharmaceutical Co., Modern molecular biopharmaceutics: from genes to absorption, April 19, 2001, Japan

Taisho Pharmaceutical Co., Modern molecular biopharmaceutics: from genes to absorption, , Apr 20, 2001, Japan

Otsuka Pharmaceutical Co., Modern molecular biopharmaceutics: from genes to absorption, , Apr 23, 2001, Japan

Sumitomo Pharmaceutical Co, Modern molecular biopharmaceutics: from genes to absorption, April 24, 2001 Japan

Kanazawa University, Modern molecular biopharmaceutics: absorption to genes, May 14, 2001, Kanazawa, Japan.

Fujisawa Pharmaceutical Co., Modern molecular biopharmaceutics: from absorption correlations to gene expression, May 17, 2001, Osaka, Japan.

Uppsala University Honorary PhD, Modern biopharmaceutics: absorption and genes, May 31, 2001, Uppsala, Sweden.

EUFEPS/World Congress, Gastrointestinal dissolution and drug absorption; Conclusions and Closing Remarks, Future perspectives on drug delivery, Jun 19, 2001, Copenhagen, Denmark.

Controlled Release Society—Eurand Award 2001 Special Session, Keynote Speaker, Modern Molecular Biopharmaceutics, June 26, 2001, San Diego, CA.

Mahidol University, The Biopharmaceutic Classification System: extensions to class II and III drugs, Aug 31, 2001, Bangkok, Thailand.

FIP Bio-International Conference, Modern molecular biopharmaceutics: from genes to absorption, Sept 4, 2001, Singapore.

The University of Michigan, College of Pharmacy, The role of science in international pharmaceutical product standards: evolution of bioequivalence standards, Sept 10, 2001, Ann Arbor, MI.

EUFEPS Decennial Anniversary Conference, The biopharmaceutical assessment of NCE candidates, Sept 20, 2001, Strasbourg, France.

Federacion Farmaceutica Centroamericana y del Caribe (FFCC) Conference, Modern bioequivalence requirements: the role of drug product dissolution, Nov 28-30, 2001, Guatemala City,Guatemala

Australasian Pharmaceutical Science Association Conference, History and application of the biopharmaceutical classification system; Speeding preclinical development: how to pick the right molecule, December 9-12, 2001, Melbourne, Australia.

Seoul National University, Modern molecular biopharmaceutics: genes to absorption, Jan 16, 2002, Seoul, Korea.

Fujisawa Pharmaceutical Co., Modern biopharmaceutics: molecular biopharmaceutics to *in vivo* performance, Jan 21, 2002, Osaka, Japan.

Daiichi Pharmaceutical Co., Modern biopharmaceutics: molecular biopharmaceutics to *in vivo* performance, Jan 23, 2002, Osaka, Japan.

University of Southern California/USC Drug Development Rsearch Center, Distinguished Lectures Series, Molecular biopharmaceutics and drug targeting, Feb 11, 2002, Los Angeles, CA.

International Conference on Drug Development (ICDD) Meeting, *In vitro* standards for ensuring drug product performance *in vivo*, Feb 18-21, 2002, Austin, TX.

Health Industry Group Purchasing Association (HIGPA), 2002 National Pharmacy Forum, Pharmaceutical innovations: the road ahead, Feb 20-21, 2002, New Orleans, LA.

USP/Biopharmaceutics Expert Committee, BCS Extension, Feb 27, 2002, Rockville, MD.

Ajinomoto Pharmaceutical Co., Modern biopharmaceutics: from drug discover, development and regulation, Apr 23, 2002, Kawasaki, Japan.

University of Kentucky--Post-Graduate Conference, Keynote speaker: Molecular biopharmaceutics: genes to absorption, May 8-10, 2002, Lexington, Kentucky.

Inhale Therapeutic Systems, Modern molecular biopharmaceutics and targeting, May 27-29, 2002, San Carlos, CA.

Chinese Pharmaceutical Association/AAPS/FIP Joint Conference, Modern drug delivery and development; Biopharmaceutic Classification System in drug development and regulations, Jul15-17, 2002, Beijing, China.

NIGMS Pharmacological Sciences Meeting, Pharmacological sciences—schools of pharmacy, Aug 8-9, 2002, Bethesda, MD.

Fujisawa Pharmaceutical Co., The Biopharmaceutic Classification System extensions and bioequivalence regulations; The importance of evaluating permeability and solubility for drug discovery and optimization of NCEs, Dec 6, 2002, Osaka, Japan.

2nd International Congress on Drug Absorption, Transport and Delivery (Co-Chair): Workshop--New Molecular Technologies in Biopharmaceutics, Jan 22, 2003, Waikiki, Hawaii.

2nd International Congress on Drug Absorption, Transport and Delivery (Co-Chair): Symposium--Molecular Biopharmaceutics: A New Era in Drug Absorption Transport and Delivery, Jan 23-24, 2003, Waikiki, Hawaii.

I Congress of the Portuguese Society of Pharmaceutical Sciences, Molecular Biopharmaceutics and drug targeting: from genes to therapy, Apr 13-16, 2003, Lisbon Portugal.

Curso International Workshop, FIP/AAPS, BCS-concepts and application for biowaiver, June 9-11, 2003, Sao Paulo, Brazil.

Fujisawa Pharmaceutical Co., Modern biopharmaceutics: dissolution, absorption and regulation, Jul 7 2003, Osaka, Japan.

University of Tokyo, Modern biopharmaceutics: dissolution, absorption and regulation, Jul 11 2003, Tokyo, Japan.

American Association of Pharmaceutical Scientists, "Targeted Drug Delivery in Cancer therapy Symposium", Recent advances in prodrug targeting technology, National Meeting, Oct 26-30 2003, Salt Lake City, UT.

Asociacion Farmceutica Mexicana (AFM) Annual Pharmaceutical Sciences Congress, FDA Criteria Concerning Pharmaceuticals—Panel Member, Nov 2-6, 2003, Cancun, Mexico.

Pfizer Inc., Drug targeting using transporters and enzymes: antiviral and anticancer nucleoside prodrugs, Feb 10, 2004, La Jolla, CA.

RTP DMDG Drug Transport Symposium (GSK), Biopharmaceutics Classification System: extensions and international application, Feb 23-25, 2004, Raleigh/Durham, NC.

University of Mainz, Transport, activation and targeting of nucleoside prodrugs, Feb 27, 2004, Mainz, Germany.

5th Intl. Conf. & workshop on cell culture and *in vitro* models for drug absorption and delivery, Molecular biopharmaceutics: a new era, Mar 1, 2004, Saarland University, Saarbrucken, Germany.

Fujisawa Pharmaceutical Co., Modern biopharmaceutics: transport, activation and targeting of nucleoside prodrugs, Mar 12, 2004, Osaka, Japan

Daiichi Pharmaceutical Co., Estimating biopharmaceutical properties of candidate drugs, Mar 15, 2004, Tokyo, Japan.

Purdue University, Modern molecular pharmaceutics: a new era, Apr 13, 2004, W. Lafayette, IN.

EUFEPS Conference, Transporters and enzymes for nucleoside prodrug delivery, Apr 19-21, 2004, Copenhagen, Denmark.

IVAX Pharm Inc., The BCS and bioequivalence: development and future extensions, Apr 26, 2004, Opava, Czech Republic.

Korean Food & Drug Administration, The Biopharmaceutics Classification System: extensions and international applications, May 24, 2004, Seoul, Korea.

Globalization of Pharmaceutics Education Network (GPEN2004)--Short Course 2: Opening/Overview; Lecture--Drug targeting with membrane transporters and enzymes, May 28, 2004, Kyoto, Japan.

Pharmaceutical Sciences World Congress (PSWC2004), Chair of Plenary Lecture 4; Lecture – Biopharmaceutics classification system: genesis and metamorphosis, June 1, 2004, Kyoto, Japan.

FIP/AAPS/CPA Symposium, Session 1 moderator; Lecture: A mechanistic approach for oral drug delivery: predicting oral drug absorption, June 7, 2004, Nanjing, China.

American Chemical Society National Meeting, Membrane transporters and prodrug activating enzymes: modern molecular pharmaceutics, Aug 22, 2004, Philadelphia, PA.

8th International Workshop on Bioavailability & Bioequivalence of Medicaments: BCS and *in vitro* BE; BCS examples and WHO essential drugs, Oct 1-3, 2004, Buenos Aires, Argentina.

Mexican Pharmaceutical Association (AFM), Dissolution as bioequivalence predictor, Oct 2[illegible] 25, 2004, Acapulco, MX.

DRA Minisymposium (honoring Henning Kristensen), A new era in biopharmaceutics: BCS implication from drug discovery to drug product regulation, Oct 27, 2004, Copenhagen, Denmark.

2004 FEFAS Congress, Plenary Lecture—The BCS: implications for *in vitro* bioequivalence (BE); Lecture—BCS examples and WHO essential drugs classification, Oct 29-Nov 1, 2004, Bogota, Columbia.

AAPS/FIP/TUFTAD Workshop, BCS—concepts and application for "biowaiver", Nov 29-30, 2004, Istanbul, Turkey.

Biopharmaceutic Classification System Workshop – Mar 31-Apr 8, 2005, Santiago, Chili.

EUFEPS, 3rd World Conference on Drug Absorption, Transport & Delivery; session leader; lecture: Dissolution bioequivalence and BCS: a new era oral IR product regulation, Apr 18-20, 2005, Barcelona, Spain.

PUBLICATIONS

1. M.A. Schwartz and G.L. Amidon, Reaction of aspirin with amines: potential mechanism for aspirin allergy, J. Pharm. Sci., 55, 1464 (1966).

2. A. Korolkovas, J.A. Burckhalter and G.L. Amidon, Interatomic distances and bond angles of substrates of succinate dehydrogenase: contribution to the chemotherapy of Chagas' disease, Rev. Farm. Bioquim., 9, 1935 (1971).

3. S.H. Yalkowsky, G.L. Flynn and G.L. Amidon, Solubility of nonelectrolytes in polar solvents, J. Pharm. Sci., 61, 983 (1972).

4. P.G. Welling, W.A. Craig, G.L. Amidon and C.M. Kunin, The pharmacokinetics of trimethoprim and sulfamethoxazole in normal subjects and in patients with renal failure, J. Infect. Dis., 126, 5556 (1973).

5. P.G. Welling, W.A. Craig, G.L. Amidon and C.M. Kunin, Pharmacokinetics of cefazolin in normal and uremic subjects, Clin.Pharm.Therap.,15, 344 (1973).

6. G.L. Amidon, Theoretical calculations on an acetic acid, 5-methylimidazole methanol hydrogen bond network: a model charge relay system. J. theor. Biol., 46, 101 (1974).

7.G.L. Amidon, Comparison of theoretical absolute, interaction energies with heats of complexation in carbon tetrachloride, J. Pharm. Sci., 63, 1514 (1974).

8. G.L. Amidon, Theoretical calculations of heats of complexation in the solvent carbon tetrachloride, J. Pharm. Sci., 63, 1520 (1974).

9. G.L. Amidon, Structure and reactivity of the theobrominate and theophyllinate complexes methyl-trans-cinnamate, J. Pharm. Sci., 63, 1524 (1974).

10. G.L. Amidon and S.H. Yalkowsky and S. Leung, Solubility of nonelectrolytes in polar solvents II:solubility of aliphatic alcohols in water, J. Pharm. Sci., 63, 1858 (1974).

11. S.H. Yalkowsky, G.L. Amidon, G. Zografi and G.L. Flynn, Solubility of nonelectrolytes in polar solvents III: alkyl *p*-aminobenzoates in polar and mixed solvents, J. Pharm. Sci., 64, 48 (1975).

12. G.L. Amidon, M.J. Paul and P.G. Welling, Model independent prediction methods in pharmacokinetics: theoretical considerations, Math. Biosci., 25, 259 (1975).

13. J.E. Birnbaum, P.W. Abel, G.L. Amidon and C.K. Buckner, Changes in mechanical events and adenosine 3',5'-monophosphate levels induced by enantiomers of isoproterenol in isolated rat atria and uteri, J. Pharmacol. Exp. Ther., 194, 396 (1975).

14. G.L. Amidon, S.H. Yalkowsky, S.T. Anik and S.C. Valvani, Solubility of nonelectrolytes in polar solvents V: estimation of the solubility of aliphatic monofunctional compounds in water using a molecular surface area approach, J. Phys. Chem., 79, 2239 (1975).

15. S.D. Valvani, S.H. Yalkowsky and G.L. Amidon, Solubility of nonelectrolytes in polar solvents VI: refinements in molecular surface area computations, J. Phys. Chem., 80, 829 (1976).

16. G.L. Amidon and S.T. Anik, A comparison of several molecular topological indexes with molecular surface area in aqueous solubility estimation, J. Pharm. Sci., 65, 801 (1976).

17. S.H. Yalkowsky, S.C. Valvani and G.L. Amidon, Solubility of nonelectrolytes in polar solvents IV: Nonpolar drugs in mixed solvents, J. Pharm. Sci., 65, 1488 (1976).

18. P.G. Welling, L.L. Lyons, R. Elliott and G.L. Amidon, Pharmacokinetics of alcohol following single low doses to fasted and nonfasted subjects, J. Clin. Pharmacol., April, 199 (1977).

19. G.L. Amidon, R.S. Pearlman and S.T. Anik, The solvent contribution to the free energy of protein-ligand interactions, J. theor. Biol., 77, 161 (1979).

20. G.L. Amidon and S.T. Anik, Hydrophobicity of polycyclic aromatic compounds: thermodynamic partitioning analyses, J. Phys. Chem., 84, 970 (1980).

21. G.L. Amidon, G.D. Leesman and R.L. Elliott, Improving intestinal absorption of water-insoluble compounds: a membrane metabolism strategy, J. Pharm. Sci., 69, 1363 (1980).

22. G.L. Amidon, J. Kou, R.L. Elliott and E.N. Lightfoot, Analysis of models for determining intestinal wall permeabilities, J. Pharm. Sci., 69, 1369 (1980).

23. R.L. Elliott, G.L. Amidon and E.N. Lightfoot, A convective mass transfer model for determining intestinal wall permeabilities: laminar flow in a circular tube, J. theor. Biol., 87, 757 (1980).

24. G.L. Amidon, J. Reichert and C.A. Johnson, Adsorption of insulin to the polyvinyl chloride surface of CADP solution containers, Vol. 10, Clinical Dialysis and Transplant Form (1981).

25. G.L. Amidon, J. Taylor and R. Sorkness, A convective diffusion model for estimating drug loss to tubing: sorption of vitamin A, J. Parent. Sci. Technol., 35, 13 (1981).

26. G.L. Amidon and C. Buckner, On the use of a dynamic approach to the estimation of dissociation constants for reversible competitive antagonists, J. Pharmacol. Exp. Therap., 216, 352 (1981).

27. G.L. Amidon and S. Anik, Application of the surface area approach to the correlation and estimation of aqueous solubility and vapor pressure: Alkyl aromatic hydrocarbons, J. Chem. Eng. Data, 26, 28 (1981).

28. P.K. Banerjee and G.L. Amidon, Physicochemical property modification strategies based on enzyme substrate specificities I: Rationale, synthesis and pharmaceutical properties of aspirin derivatives, J. Pharm. Sci., 70, 1299 (1981).

29. P.K. Banerjee and G.L. Amidon, Physicochemical property modification strategies based on enzyme substrate specificities II: α-chymotrypsin hydrolysis of aspirin derivatives, J. Pharm. Sci., 70, 1304 (1981).

30. P.K. Banerjee and G.L. Amidon, Physicochemical property modification strategies based on enzyme substrate specificities III: carboxypeptidase a hydrolysis of aspirin derivatives, J. Pharm. Sci., 70, 1307 (1981).

31. P.G. Welling, P.M. Walter, R.B. Patel, R.H. Barbhaiya, W.A. Porter, G.L. Amidon, T.S. Foster, V.P. Shah, J.P. Hunt and V.K. Prasad, Thiazides VI: Evaluation of marketed 250 mg chlorothiazide tablets, Curr. Ther. Res., 29, 815 (1981).

32. G.L. Amidon and C.K. Buckner, A theoretical model for the use of functional antagonism to estimate dissociation constants for agonists, J. Pharmacol. Methods., 7, 173 (1982).

33. G.L. Amidon and N.A. Williams, A solubility equation for nonelectrolytes in water, Intl. J. Pharmaceut., 11, 249 (1982).

34. G.L. Amidon, M. Chang, D. Fleisher and R. Allen, Intestinal absorption of amino acid derivatives: Importance of the free α-amino group, J. Pharm. Sci., 71, 1138 (1982).

35. A. Selen, G.L. Amidon and P.G. Welling, Pharmacokinetics of probenecid following oral doses to human volunteers, J. Pharm. Sci., 71, 1238 (1982).

36. G.L. Amidon, M. Lee and H. Lee, Intestinal absorption of amino acid derivatives: Structural requirements for membrane hydrolysis, J. Pharm. Sci., 72, 943 (1983).

37. L. Van Campen, G.L. Amidon and G. Zografi, Moisture sorption kinetics for water-soluble substances I: Theoretical considerations of heat transport control, J. Pharm. Sci., 72, 1381 (1983).

38. L. VanCampen, G.L. Amidon and G. Zografi, Moisture sorption kinetics for water-soluble substances II: Experimental verification of heat transport control, J. Pharm. Sci., 72, 1388 (1983).

39. L. VanCampen, G.L. Amidon and G. Zografi, Moisture sorption kinetics for water-soluble substances III: Theoretical and experimental studies in air, J. Pharm. Sci., 72, 1394 (1983).

40. C.A. Johnson, G.L. Amidon, J.E. Reichert and W.K. Porter, Adsorption of insulin to the surface of peritoneal dialysis solution containers, Am. J. Kidney Dis., 3, 224 (1983).

41. N.A. Williams and G.L. Amidon, Excess free energy approach to the estimation of solubility in mixed solvent systems I: Theory, J. Pharm. Sci., 73, 9 (1984).

42. N.A. Williams and G.L. Amidon, Excess free energy approach to the estimation of solubility in mixed solvent systems II: Ethanol-water mixtures, J. Pharm. Sci., 73, 14 (1984).

43. N.A. Williams and G.L. Amidon, Excess free energy approach to the estimation of solubility in mixed solvent systems III: Ethanol-propylene glycol-water mixtures, J. Pharm. Sci., 73, 18 (1984).

44. J.B. Dressman and G.L. Amidon, Radiotelemetric method for evaluating enteric coatings *in vivo*, J. Pharm. Sci., 73, 935 (1984).

45. J.B. Dressman, D. Fleisher and G.L. Amidon, Physicochemical model for dose-dependent drug absorption, J. Pharm. Sci., 73, 1274 (1984).

46. M. Vadnere, G.L. Amidon, S. Lindenbaum and J.L. Haslam, Thermodynamic studies on the gel-sol transition of some pluronic polyols, Intl. J. Pharmaceut., 22, 207 (1984).

47. K.C. Johnson, G.L. Amidon and S. Pogany, Solution kinetics of a water-soluble hydrocortisone prodrug: Hydrocortisone-21-lysinate, J. Pharm. Sci., 74, 87 (1985).

48. J.B. Dressman, G.L. Amidon and D. Fleisher, Absorption potential: estimating the fraction absorbed for orally administyered compounds, J. Pharm. Sci., 74, 588 (1985).

49. G.L. Amidon and J.B. Dressman, Enteric coated aspirin circumventing gastric retention, J. Rheumatology, 12, 387 (1985).

50. G.L. Amidon, Fluid mechanics and intestinal transit, Gastroenterology 88, 858 (1985) (letter to Editor).

51. J.H. Meyer, G.L. Amidon and J.B. Dressman, Hydrodynamic aspects of gastrointestinal (GI) Transit, Jap. J. Smooth Muscle Res., 21, 99 (1985).

52. G.L. Amidon, B.H. Stewart and S. Pogany, Improving the intestinal mucosal cell uptake of water insoluble compounds, J. Cont. Rel., 2, 13 (1985).

53. N. Najib and G.L. Amidon, Gastrointestinal transit time: An *in vitro* analysis of the various parameters controlling the critical flow velocity of particles in a horizontal tube, Drug Develop. Ind. Pharm., 11, 635 (1985).

54. J.H. Meyer, J.B. Dressman, A. Fink and G.L. Amidon, Effect of size and density on canine gastric emptying of nondigestible solids, Gastroenterology, 89, 805 (1985).

55. D.A. Johnson and G.L. Amidon, The effect of enzymatic reaction on dissolution rate: theoretical analysis and experimental test, J. Pharm. Sci., 75, 195 (1986).

56. C.Y. Lui, G.L. Amidon, R.R. Berardi, D. Fleisher, C. Youngberg and J.B. Dressman, Comparison of gastrointestinal pH in dogs and humans: implications on the use of the beagle dog as a model for oral absorption in humans, J. Pharm. Sci., 75, 271 (1986).

57. C.Y. Lui, R.L. Oberle, D. Fleisher and G.L. Amidon, The application of a radiotelemetric system to evaluate the performance of enteric coated and plain aspirin tablets, J. Pharm. Sci., 75, 469 (1986).

58. G.L. Amidon, A.E. Merfeld and J.B. Dressman, Concentration and pH dependency of α-methyldopa absorption in rat intestine, J. Pharm. Pharmacol., 38, 363 (1986).

59. A.E. Merfeld, A.R. Mlodozeniec, M.A. Cortese, J.B. Rhodes, J.B. Dressman and G.L. Amidon, The effect of pH and concentration on α-methyldopa absorption in man, J. Pharm. Pharmacol., 38, 815 (1986).

60. D.P. McNamara and G.L. Amidon, Dissolution of acidic and basic compounds from the rotating disk: influence of convective diffusion and reaction, J. Pharm. Sci., 75, 858 (1986).

61. D. Fleisher, K.C. Johnson, B.H. Stewart and G.L. Amidon, Oral absorption of 21-corticosteroid esters: A function of aqueous stability and intestinal enzyme activity and distribution, J. Pharm. Sci., 75, 934 (1986).

62. B.H. Stewart, G.L. Amidon and R.K. Brabec, Uptake of prodrugs by rat intestinal mucosal cells: Mechanism and pharmaceutical implications, J. Pharm. Sci., 75, 940 (1986).

63. J.H. Meyer, Y. Gu, J. Elashoff, T. Ready, J.B. Dressman and G.L. Amidon, Effects of viscosity and fluid outflow on postcibal gastric emptying, Am. J. Physiol. Soc., 250, G161 (1986).

64. C.A. Youngberg, R.R. Berardi, W.F. Howatt, M.L. Hyneck, G.L. Amidon, J.H. Meyer and J.B. Dressman, Comparison of gastrointestinal pH in cystic fibrosis and healthy subjects, Dig. Dis. Sci., 32, 472 (1987).

65. R.L. Oberle and G.L. Amidon, The influence of variable gastric emptying and intestinal transit rates on the plasma level curve of cimetidine; an explanation for the double peak phenomenon, J. Pharmacok. Biopharm., 15, 529 (1987).

66. P.J. Sinko, M. Hu and G.L. Amidon, Carrier-mediated transport of amino acids, small peptides and their drug analogs, J. Contr. Rel., 6, 115 (1987).

67. N.A. Williams and G.L. Amidon, The estimation of solubility in binary solvents: application of the reduced 3-suffix solubility equation to ethanol-water mixtures, Pharm. Res., 5, 193 (1988).

68. D.A. Johnson and G.L. Amidon, Determination of intrinsic membrane transport parameters from perfused intestine experiments: a boundary layer approach to estimating the aqueous and unbiased membrane permeabilities, J. theor. Biol., 131, 93 (1988).

69. M. Hu, P.J. Sinko, A.L.J. deMeere, D.A. Johnson and G.L. Amidon, Membrane permeability parameters for some amino acids and β-lactam antibiotics: application of the boundary layer approach, J. theor. Biol., 131, 107 (1988).

70. J.H. Meyer, J. Elashoff, V. Porter-Fink, J.B. Dressman and G.L. Amidon, Human postprandial gastric emptying of 1-3 mm spheres, Gastroenterology, 94, 1315 (1988)

71. D.P. McNamara and G.L. Amidon, A reaction plane approach for estimating the effects of buffers on the dissolution rate of acidic drugs, J. Pharm. Sci., 77, 511 (1988).

72. N. Najib, A.R. Mansour and G.L. Amidon, Gastrointestinal transit time: an *in vitro* study of parameters controlling the mean relative residence times of particles in a laminar fluid flowing in a horizontal tube, The Chem. Eng. J., 37, B39 (1988).

73. J.H. Kou, G.L. Amidon and P.I. Lee, pH-Dependent swelling and solute diffusion characteristics of poly-(hydroxyethyl methacrylate-CO-methacrylic acid) hydrogels, Pharm. Res., 5, 592 (1988).

74. P.J. Sinko and G.L. Amidon, Characterization of the oral absorption of β-lactam antibiotics I. Cephalosporins. Determination of intrinsic membrane absorption parameters in the rat intestine in situ, Pharm. Res., 5, 645 (1988).

75. G.L. Amidon, P.J. Sinko and D. Fleisher, Estimating human oral fraction dose absorbed: A correlation using rat intestinal membrane permeability for passive and carrier-mediated compounds, Pharm. Res., 5, 651 (1988).

76. M. Hu and G.L. Amidon, Passive and carrier-mediated intestinal absorption components of captopril, J. Pharm. Sci., 77, 1007 (1988).

77. M. Hu, P. Subramanian, H.I. Mosberg and G.L. Amidon, Use of the peptide carrier system to improve the intestinal absorption of L-α-methyldopa: carrier kinetics, intestinal permeabilities, and *in vitro* hydrolysis of dipeptidyl derivatives of L-α-methyldopa, Pharm. Res., 6, 66 (1989).

78. T.P. Johnston, E.L. Bove, S.F. Bolling, J.A. Boyd, B.L. Ciesliga, G.L. Amidon, F.J. Schoen and R.J. Levy, Controlled release of 1-hydroxyethylidene diphosphonate: *in vitro* assessment and effects on bioprosthetic calcification in sheep tricuspid valve replacements, Intl. J. Pharm., 52, 139 (1989).

79. P.J. Sinko and G.L. Amidon, Characterization of the oral absorption of β-lactam and antibiotics: II. Competitive absorption and peptide carrier specificity, J. Pharm. Sci., 78, 723 (1989).

80. D.I. Friedman and G.L. Amidon, The intestinal absorption mechanism of dipeptide angiotensin converting enzyme ihibitors of the lysyl-proline type: lisinopril and SQ 29,852, J. Pharm. Sci., 78, 995 (1989).

81. D.I. Friedman and G.L. Amidon, Passive and carrier-mediated intestinal absorption components of two angiotensin converting enzyme (ACE) inhibitor prodrugs in rats: enalapril and fosinopril, Pharm. Res., 6, 1043 (1989).

82. C.M. Sinko and G.L. Amidon, Plasticizer-induced changes in the mechanical rate of response of film coatings: an approach to quantitating plasticizer effectiveness, Intl. J. Pharm., 55, 247 (1989).

83. P.J. Sirois, G.L. Amidon, J.H. Meyer, J. Doty and J.B. Dressman, Gastric emptying of nondigestible solids in dogs: a hydrodynamic correlation, Amer.Physiolog.Soc., G65 (1990).

84. A. Tsuji, I. Tamai, M. Nakanishi and G.L. Amidon, Mechanism of absorption of the dipeptide α-methyldopa-phe in intestinal brush-border membrane vesicles, Pharm. Res., 7, 308 (1990).

85. T.P. Johnson, J.A. Boyd, B.L. Ciesliga, F.J. Schoen, G.L. Amidon and R.J. Levy, Controlled release of ethanehydroxy diphosphonate from polyurethane reservoirs to inhibit calcification of bovine pericardium used in bioprosthetic heart valves, Intl. J. Pharm., 59, 95 (1990).

86. J. Kou, D. Fleisher and G.L. Amidon, Modeling drug release from dynamically swelling poly(hydroxyethyl methacrylate-CO-methacrylic acid) hydrogels, J. Cont. Rel., 12, 241 (1990).

87. R.L. Oberle, T.S. Chen, C. Lloyd, G.L. Amidon, J.L. Barnett, C. Owyang and J.H. Meyer, The influence of the interdigestive migrating myoelectric complex on the gastric emptying of liquids, Gastroenterology, 99, 1275 (1990).

88. H.K. Choi, G.L. Flynn and G.L. Amidon, Transdermal delivery of bioactive peptides: the effect of n-decylmethyl sulfoxide, pH and inhibitors on enkephalin metabolism and transport, Pharm. Res., 7, 1099 (1990).

89. D.I. Friedman and G.L. Amidon, Characterization of the intestinal transport parameters for small peptide drugs, J. Cont. Rel., 13, 141 (1990).

90. C.M. Sinko, A.F. Yee and G.L. Amidon, The effect of physical aging on the dissolution rate of anionic polyelectrolytes, Pharm. Res., 7, 648 (1990).

91. M.D. Donovan, G.L. Flynn and G.L. Amidon, The molecular weight dependence of nasal absorption: the effect of absorption enhancers, Pharm. Res., 7, 808 (1990).

92. M.D. Donovan, G.L. Flynn and G.L. Amidon, Absorption of polyethylene glycols 600 through 2000: the molecular weight dependence of gastrointestinal and nasal absorption, Pharm. Res., 7, 863 (1990).

93. D.I. Friedman and G.L. Amidon, Oral absorption of peptides: influence of pH and inhibitors on the intestinal hydrolysis of leu-enkephalin and analogues, Pharm. Res., 8, 93 (1991).

94. J.H. Kou, D. Fleisher and G.L. Amidon, Calculation of the aqueous diffusion layer resistance for absorption in a tube: application to intestinal membrane permeability determination, Pharm. Res., 8, 298 (1991).

95. J.P-F Bai, P. Subramanian, H.I. Mosberg and G.L. Amidon, Structural requirements for the intestinal mucosal cell peptide transporter: the need for N-terminal α-amino group, Pharm. Res., 8, 593 (1991).

96. C.E. Johnson, R.H. Beekman, D.A. Kostyshak, T. Nguyen, D-M Oh and G.L. Amidon, Pharmacokinetics and pharmacodynamics of nifedipine in children with bronchopulmonary dysplasia and pulmonary hypertension, Pediatric Res., 29, 500 (1991).

97. C.M. Sinko, A.F. Yee and G.L. Amidon, Prediction of physical aging in controlled-release coatings: the application of the relaxation coupling model to glassy cellulose acetate, Pharm.Res., 8, 698 (1991).

98. H-K Choi, G.L. Amidon, G.L. Flynn, Some general influences of n-decylmethyl sulfoxide on the permeation of drugs across hairless mouse skin, J. Invest. Dermatol., 96, 822 (1991).

99. P.J. Sinko, G.D. Leesman and G.L. Amidon, Predicting fraction dose absorbed in humans using a macroscopic mass balance approach, Pharm. Res., 8, 979 (1991).

100. J.H. Kou, D. Fleisher and G.L. Amidon, Release of phenylpropanolamine from dynamically swelling poly(hydroxyethyl methacrylate-to-nethacrylic acid) hydrogels, Cosmet.Pharm.Appl.Polym. [Proc. Am.Chem.Soc.Syp.Polym.Cosmet.Pharm.Appl], 201-8 (1991).

101. H.Y. Ahn, G.L. Amidon and D.E. Smith, Stereoselective systemic disposition of ibuprofen enantiomers in the dog, Pharm.Res., 8, 1186 (1991).

102. N. Janiczek, H.N. Bockbrader, T. Chang, G.L. Amidon and D.E. Smith, Stereoselective high-performance liquid chromatographic assay for pirmenol enantiomers in dog plasma, J.Chromatogr., 571, 179 (1991).

103. C.Y. Lui, G.L. Amidon and A. Goldberg, Intranasal absorption of flurazepam, midasolam and triasolam in dogs, J. Pharm. Sci., 80, 1125 (1991).

104. G.L. Amidon, G.A. DeBrincat, N. Najib, Effects of gravity on gastric emptying, intestinal transit, and drug absorption, J. Clin. Pharmacol., 31, 968 (1991).

105. J.S. Chu, G.L. Amidon, N.D. Weiner and A.H. Goldberg, Mixture experimental design in the development of mucoadhesive gel formulation, Pharm. Res., 8, 1401 (1991).

106. J.S. Chu, R. Chandrasekharan, G.L. Amidon, N.D. Weiner and A.H. Goldberg, Viscometric study of polyacrylic acid systems as mucoadhesive sustained-release gels, Pharm. Res., 8, 1408 (1991).

107. J-H Guo, R.E. Robertson and G.L. Amidon, Influence of physical aging on mechanical properties of polymer free films: the prediction of long-term aging effects on the water permeability and dissolution rate of polymer film-coated tablets, Pharm. Res., 8, 1500 (1991).

108. J.P-F Bai, M. Hu, P. Subramanian, H.I. Mosberg and G.L. Amidon, Utilization of peptide carrier system to improve the intestinal absorption: targeting prolidase as a prodrug-converting enzyme, J. Pharm. Sci., 81, 113 (1992).

109. P.E. Luner and G.L. Amidon, Equilibrium and kinetic factors influencing bile sequestrant efficacy, Pharm.Res., 9, 670 (1992).

110. S.P. Schwendeman, G.L. Amidon, M.E. Meyerhoff and R.J. Levy, Modulated drug release using iontophoresis through heterogeneous cation-exchange membranes: membrane preparation and influence of resin cross-linkage, Macromolecules, 25, 2531 (1992).

111. B.E. Bleske, E.W. Warren, T.L. Rice, M.J. Shea, G.L. Amidon and P. Knight, Comparison of intravenous and intranasal administration of epinephrine during CPR in a canine model, Annals of Emergency Medicine, 21, 1125 (Sept 1992).

112. D-M Oh, P.J. Sinko and G.L. Amidon, Characterization of the oral absorption of several aminopenicillins: determination of intrinsic membrane absorption parameters in the rat intestine *in situ*, Intl.J.Pharm., 85, 181 (1992).

113. J-H Guo, R.E. Robertson and G.L. Amidon, Thermodynamic aspects of the disappearance of antiplasticization in slightly plasticized polymer films at high temperature, J. Pharm. Sci., 82, 1229 (1992).

114. J.P-F Bai and G.L.Amidon, Structural specificity of mucosal-cell transport and metabolism of peptide drugs: implication for oral peptide drug delivery, Pharm.Res., 9, 969 (1992).

115. J.S. Chu, D.M. Yu, G.L. Amidon, N.D. Weiner and A.H. Goldberg, Viscoelastic properties of polyacrylic acid gels in mixed solvents, Pharm.Res., 9, 1659 (1992).

116. D-M Oh, R.L. Curl and G.L. Amidon, Estimating the fraction dose absorbed from suspensions of poorly soluble compounds in humans: a mathematical model, Pharm.Res., 10, 264 (1993).

117. P.J. Sinko, G.D. Leesman and G.L. Amidon, Mass balance approaches for estimating the intestinal absorption and metabolism of peptides and analogue: theoretical development and applications, Pharm.Res., 10, 271 (1993).

118. H. Yuasa, G.L. Amidon and D.Fleisher, Peptide carrier-mediated transport in intestinal brush border membrane vesicles of rats and rabbits: cephradine uptake and inhibition, Pharm.Res., 10, 400 (1993).

119. J-H Guo, R.E. Robertson and G.L. Amidon, An investigation into the mechanical and transport properties of aqueous latex films: A new hypothesis for the film-forming mechanism of aqueous dispersion system, Pharm.Res., 10, 405 (1993).

120. S.Y. Lin, G.L. Amidon, N.D. Weiner and A.H. Goldberg, Viscoelasticity of anionic polymers and their mucociliary transport on the frog palate, Pharm.Res., 10, 411 (1993).

121. P.E. Luner and G.L. Amidon, Description and simulation of a multiple mixing tank model to predict the effect of bile sequestrants on bile salt excretion, J.Pharm.Sci., 82, 311 (1993).

122. D-M Oh, P.J. Sinko and G.L. Amidon, Characterization of the oral absorption of some b-lactams: effect of the α-amino side chain group, J.Pharm.Sci., 82, 897 (Sept 1993).

123. S.P. Schwendeman, G.L. Amidon and R.J. Levy, Determinants of the modulated release of antiarrhythmic drugs by iontophoresis through polymer membranes, Macromolecules, 26, 2264 (1993).

124. S.Y. Lin, G.L. Amidon, N.D. Weiner and A.H. Goldberg, Viscoelasticity of cellulose polymers and mucociliary transport on frog palates, Intl.J.Pharm., 95, 57 (1993).

125. I-D Lee, U. Fagerholm, H. Lennernas and G.L. Amidon, A study of hydrodynamic characteristics in human intestine applying residence time distribution analysis. Urtti Arto Ed. In: Symposium on methods to overcome biological barriers in drug delivery. Kuopio University Publications A Pharm.Sci., 10, p.73, (1993).

126. P. Langguth, H.P. Merkle and G.L. Amidon, Oral absorption of peptides: the effect of absorption site and enzyme inhibition on the systemic availability of metkephamid, Pharm.Res., 11, 528 (1994).

127. H. Yuasa, D. Fleisher, G.L. Amidon, Noncompetitive inhibition of cephradine uptake by enalapril in rabbit intestinal brush border membrane vesicles: an enalapril specific inhibitory binding site on the peptide carrier, J.Pharmacol.& Exp.Therap., 269, 1107 (1994).

128. P. Langguth, K.M. Lee, H. Spahn-Langguth and G.L. Amidon, Variable gastric emptying and discontinuities in drug absorption profiles: dependence of rates and extent of cimetidine absorption on motility phase and pH, Biopharm. & Drug Disp., 15, 719 (1994).

129. D.M. Yu, G.L. Amidon, N.D. Weiner and A.H. Goldberg, Viscoelastic properties of poly(ethylene oxide) solution, J.Pharm.Sci., 83, 1443 (1994).

130. S.P. Schwendeman, G.L. Amidon, V. Labhasetwar and R.J. Levy, Modulated drug release using iontophoresis through heterogeneous cation-exchange membranes 2: influence of cation-exchanger content on membrane resistance and characteristic times, J.Pharm.Sci., 83, 1482 (1994).

131. D-M Oh and G.L. Amidon, Prediction of drug-drug interaction during oral absorption of carrier-mediated compounds in humans, Arch.Pharm.Res., 17, 364 (1994).

132. G.L. Amidon and H.J. Lee, Absorption of peptide and peptidomimetic drugs, in: The Annu. Rev. Pharmacol. Toxicol., Vol 34, Arthur K. Cho, Ed., Annual Reviews Inc. (1994) pp. 321-341.

133. D.M. Yu, G.L. Amidon, N.D. Weiner, D. Fleisher and A.H. Goldberg, The role of rheological properties in mucociliary transport by frog palate ciliated model, Pharm. Res., 11, 1785 (1994).

134. H. Lennernas, J.R. Crison and G.L. Amidon, Permeability and clearance views of drug absorption: A commentary, J.Pharm.Biopharm., 23, 333 (1995).

135. J.E. Polli and G.L. Amidon, *In vitro* characterization of sodium glycocholate binding to cholestyramine resin, J.Pharm.Sci., 84, 55 (1995).

136. G.L. Amidon, H. Lennernas, V.P Shah and J.R. Crison, A theoretical basis for a biopharmaceutic drug classification: the correlation of *in vitro* drug product dissolution and *in vivo* bioavailability, Pharm. Res., 12, 413 (1995).

137. D-M Oh, G.L. Amidon and W. Sadee, Functional expressions of endogenous dipeptide transporter and exogenous proton/peptide cotransporter in Xenopus Oocytes, Arch.Pharm.Res., 18,12 (1995).

138. V. Mummaneni, G.L. Amidon and J.B. Dressman, Gastric pH influences the appearance of double peaks in the plasma concentration-time profiles of cimetidine after oral administraion in Dogs, Pharm.Res., 12, 780 (1995).

139. B.E. Bleske, L.S. Welage, S.Rose, G.L. Amidon and M.J. Shea, The effect of dosage release formulations on the pharmacokinetics of propranolol stereoisomers in humans, J.Clin. Prmacol.,35, 374 (1995).

140. H-K Choi, G.L. Flynn and G.L. Amidon, Percutaneous absorption and dermal delivery of cylosporin A, J.Pharm.Sci., 84, 581 (1995).

141. Y. Taki, T. Sakane, T. Nanai, H. Sezaki, G.L. Amidon, P. Langguth and S. Yamashita, Gastrointestinal absorption of peptide drug: quantitative evaluation of the degradation and the permeation of metkephamid in rat small intestine, JPET, 274, 373 (1995).

142. S-F Su and G.L. Amidon, Investigation into the intestinal metabolism of [D-Ala^1] peptide-T amide: implication for oral drug delivery, BBA, 1245, 62 (1995).

143. J.E. Polli and G.L. Amidon, Mathematical model and dimensional analysis of glycocholate binding to cholestyramine resin: implications for *in vivo* resin performance, J.Pharm.Sci., 84, 1446 (1995).

144. W. Sadee, V. Drubbisch and G.L. Amidon, Biology of membrane transport proteins, Pharm.Res 12, 1823 (1995).

145. E. Lipka, I-D Lee, P. Langguth, H.Spahn-Langguth, E. Mutschler and G.L. Amidon,

Celiprolol double peak occurrence and gastric motility: nonlinear mixed effects modeling of bioavailability data obtained in dogs, J.Pharm.Biopharm., 23, 267 (1995).

146. D-M Oh, R.L. Curl, C-S Yong and G.L. Amidon, Effect of micronization on the extent of drug absorption from suspensions in humans, Arch.Pharm.Res., 18, 427 (1995).

147. L. Yu, E. Lipka, J.R. Crison, and G.L. Amidon, Transport approaches to the biopharmaceutical design of oral drug delivery systems: prediction of intestinal absorption, in Adv. Drug Del. Rev., 19, 359 (1996).

148. E. Lipka, J.Crison and G.L. Amidon, Transmembrane transport of peptide type compounds: prospects for oral delivery, J.Cont.Rel., 39, 121 (1996).

149. J.E. Polli, J.R. Crison, and G.L. Amidon, Novel approach to the analysis of *in vitro-in vio* relationships, J.Pharm.Sci., 85, 753 (1996).

150. J.R. Crison, V.P. Shah, J.P. Skelly and G.L. Amidon, Drug dissolution into micellar solutions: development of a convective diffusion model and comparison to the film equilibrium model with application to surfactant facilitated dissolution of carbamazepine, J.Pharm.Sci., 85, 1005 (1996).

151. L.X. Yu, J.R. Crison and G.L. Amidon, Compartmental transit and dispersion model analysis of small intestinal transit flow in humans, Intl.J.Pharm., 140, 111 (1996).

152. E. Walter, S. Janich, B.J. Roessler, J.M. Hilfinger and G.L. Amidon, HT29-MTX/Caco-2 cocultures as an *in vitro* model for the intestinal epithelium: *in vitro - in vivo* correlation with permeability data from rat and humans, J.Pharm.Sci., 85, 1070 (1996).

153. K-M.Y. Covitz, G.L. Amidon and W. Sadee, Human dipeptide transporter, hPEPT1, stably transfected into Chinese hamster ovary cells, Pharm.Res., 13, 1631 (1996).

154. M.Desai,V.Labhasetwar,G.L.Amidon and R.J. Levy, Gastrointestinal uptake of biodegradable microparticles: effect of particle size, Pharm.Res. 13, 1838 (1996).

155. E. Walter, T. Kissel and G.L. Amidon, The intestinal peptide carrier: a potential transport system for small peptide derived drugs, Adv.Drug Del.Rev., 20, 33 (1996).

156. J.R. Crison, N.D. Weiner and G.L. Amidon, Dissolution media for *in vitro* testing of water insoluble drugs: effect of surfactant purity and electrolyte on *in vitro* dissolution of carbamazepine in aqueous solutions of sodium lauryl sulftate, J.Pharm.Sci. 86, 384 (1997).

157. P. Langguth, V. Bohner, J. Heizmann, H.P. Merkle, S. Wolffram, G.L. Amidon and S. Yamashita, The challenge of proteolytic enzymes in intestinal peptide delivery, J.Cont.Rel., 46, 39 (1997).

158. E. Walter, M.A. Croyle, B.L.Davidson, B.J. Roessler, J.M. Hilfinger and G.L. Amidon, Adenovirus mediated gene transfer to intestinal epithelial cells as a potential approach for oral delivery of peptides and proteins, J.Cont.Rel. 46, 75 (1997).

159. C-L Cheng, D.E. Smith, P.L. Carver, S. R. Cox, P.B. Watkins, D.S. Blake, C.A. Kauffman, K.M. Meyer, G.L. Amidon and P.L. Stetson, Steady-state pharmacokinetics of delavirdine in HIV-positive patients: effect on erythromycin breath test, Clin.Pcol.Ther., 61, 531 (1997).

160. N. Takamatsu, L.S. Welage, N.M. Idkaidek, D-Y Liu, P. I-D Lee, Y. Hayashi, J.K. Rhie, H. Lennernas, J.L. Barnett, V.P. Shah, L. Lesko and G.L. Amidon, Human intestinal permeability

of piroxicam, propranolol, phenylalanine and PEG 400 determined by jejunal perfusion, Pharm.Res., 14, 1127 (1997).

161. H. Lennernas, I-D Lee, U. Fagerholm and G.L. Amidon, A residence-time distribution-analysis of the hydrodynamics within the intestine in man during a regional single-pass perfusion with Loc-I-Gut: *in vivo* permeability estimation, J.Pharm.Pharmacol., 49, 682 (1997).

162. E. Walter, M.A. Croyle, B.J. Roessler and G.L. Amidon, The absence of accessible vitronectin receptors in differentiated tissue hinders adenoviral-mediated gene transfer to the intestinal epithelium *in vitro*, Pharm.Res., 14, 1216 (1997).

163. M.P. Desai, V. Labhasetwar, E. Walter, R.J. Levy and G.L. Amidon, The mechanism of uptake of biodegradable microparticles in Caco-2 cells is size dependent, Pharm.Res., 14, 1568 (1997).

164. T.J. Cook, G.L. Amidon and V.C. Yang, Polypeptides for controlled release applications: synthesis and preliminary characterization and release studies, Intl.J.Pharm., 159, 197 (1997).

165. J.R. Crison and G.L. Amidon, Predicting absorption of water insoluble compounds and other "difficult" molecules, Bull.Tech.Gattefosse, 90, 21 (1997).

166. J.R. Crison, E. Lipka, J.S. Kim and G.L. Amidon, Lipid-filled hard gelatin capsules as novel drug delivery systems with application to nifedipine, Bull. Tech., Gattefosse, 90, 75 (1997).

167. C.L. Bowe, L. Mokhtarzadeh, P. Venkatesan, S. Babu, H.R. Axelrod, M.J. Sofia, R. Kakarla, T.Y. Chan, J.S. Kim, H.J. Lee, G.L. Amidon, S.Y. Choe, S. Walker and D. Kahne, Design of compounds that increase the absorption of polar molecules, Proc.Natl.Acad.Sci., 94, 12218 (1997).

168. J.B.Dressman, G.L. Amidon, C.Reppas and V.P. Shah, Dissolution testing as a prognostic tool for oral drug absorption: immediate release dosage forms, Pharm.Res., 15, 11 (1998).

169. J.K. Rhie, Y. Hayashi, L.S. Welage, J. Frens, R.J. Wald, J.L. Barnett, G.E. Amidon, L. Putcha and G.L. Amidon, Drug marker absorption in relation to pellet size, gastric motility and viscous meals in humans, Pharm.Res., 15, 233 (1998).

170. E. Lipka, H. Spahn-Langguth, E. Mutschler and G.L. Amidon, *In vivo* non-linear intestinal permeability of celiprolol and propranolol in conscious dogs: evidence for intestinal secretion, EJPS, 6, 75 (1998).

171. N.M. Idkaidek, G.L. Amidon, D.E. Smith, N.M. Najib and M.M. Hassan, Determination of the population pharmacokinetic parameters of sustained release and enteric coated oral formulations, and the suppository formulation of diclofenac sodium by simultaneous data fitting using NONMEM, Biopharm. & Drug Disp., 19, 169 (1998).

172. M.A. Croyle, E. Walter, S. Janich, B.J. Roessler and G.L. Amidon, Role of integrin expression in adenovirus-mediated gene delivery to the intestinal epithelium, Human Gene Therapy, 9, 561 (1998).

173. M.A. Croyle, M Stone, G.L. Amidon and B.J. Roessler, *In vitro* and *in vivo* assessment of adenovirus 41 as a vector for gene delivery to the intestine, Gene Ther., 5, 645 (1998)

174. H-k Han, R. L.A. de Vrueh, J.K. Rhie, K-M.Y. Covitz, P.L. Smith, C-P Lee, D-M Oh, W. Sadee and G.L. Amidon, 5'-Amino acid esters of antiviral nucleosides, acyclovir, and AZT are absorbed by the intestinal hPEPT1 peptide transporter, Pharm.Res., 15, 1154 (1998).