

Steven E. Marx BS, MS, PharmD, R.Ph.

Professional objective is to lead a health economics and outcomes research team in a challenging and inspiring organization where I may utilize and develop my economic, clinical, and leadership skills in meeting the expanding challenges and opportunities of today's global health care market.

Summary of Major Areas of Experience:

- Twelve-years experience in global health economics and outcomes research in the pharmaceutical industry area.
- Sixteen-years practical experience of health economics and outcomes research in a real-world health-systems environment.
- Twenty one-years experience in leading clinical and economic teams, successfully directing as many as twenty-six employees with over a twelve million dollar budget.
- Advance training in health economics, research methodology, econometric modeling, patient reported outcomes, registries, and retrospective database analysis.
- Solid knowledge and experience of drug development process, outcomes research, and global market access and reimbursement environment.
- Recognized and respected world wide through professional society activities and publications.

Key personal attributes include:

- Encourages an open environment and knowledge sharing,
- Builds the organization and inspires people,
- Sets vision and strategy, and
- Drives for results with sound character and integrity.

Experience leader, with proven health economic & outcomes research accomplishments, solid communication and interpersonal skills, and strong organizational and negotiating skills.

Curriculum vitae

Steven E. Marx BS, MS, PharmD, R.Ph.

Director, Global Health Economics & Outcomes Research, Abbott

Clinical Assistant Professor, University of Illinois, College of Pharmacy

Clinical Assistant Professor, Midwestern University, College of Pharmacy

PERSONAL DATA

Office: Abbott
200 Abbott Park Road, AP30-3
Abbott Park, Illinois 60064
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Residence: 1533 W. Oakmont Road
Hoffman Estates, Illinois 60169
(847) 843-2126 marx.s@sbcglobal.net

Pharmacy Licensure: Illinois, Missouri, Michigan

EDUCATION

August 1994 – April 2000 University of Illinois – Chicago
Doctorate in Pharmacy

August 1983 – August 1990 University of Missouri – Kansas City
Masters of Science, Pharmaceutical Science
Economic & organizational behavioral emphasis

June 1982 – June 1983 Bronson Methodist Hospital, Kalamazoo, Michigan
ASHP Accredited Residency
With a clinical and administrative emphasis

September 1979 – August 1982 University of Missouri – Kansas City
Bachelor of Science in Pharmacy Degree

RELEVANT COURSE STUDIES/TRAINING

May 1999	Quality of Life, Health Status, and Outcomes Assessments
May 1999	Retrospective Data Analyses
May 2000	Statistical Considerations in Pharmacoeconomic Evaluations
May 2000	Advance Decision Analysis
Jun 2000	Cost-effectiveness Analysis for Medical Technology and Pharmaceuticals, Harvard
May 2001	Elements in Pharmaceutical Pricing and Pharmacoeconomics
May 2001	Understanding the UK's NICE (National Institute of Clinical Excellence) Protocol
May 2002	Introduction to Pharmacoepidemiology
May 2002	Advance Retrospective Database Analyses
May 2003	Advance Statistical Methods for Retrospective Database Analyses
Nov 2003	Health-Related Quality of Life Educational Series
Dec 2003	Econometrics Educational Series
May 2004	Old and New Utility Measures in Health Economics and Outcomes Research
May 2005	Markov Modeling - Structure and Design of a Model
May 2006	Patient Registries: Overview and Applications
May 2006	Bayesian Analysis: Advanced
May 2007	Discrete Event Simulations for Economic Analysis
August 2007	Using DES to Deliver Product's Value Message, Arena Software Training

PROFESSIONAL EXPERIENCE

August 1996 – Present

**Director, Global Health Economics & Outcomes Research (HEOR), Abbott
Global Pharmaceutical Research & Development**

Clinical Assistant Professor, University of Illinois, College of Pharmacy
Clinical Assistant Professor, Midwestern University, College of Pharmacy

Responsibilities included: driving strategies to research, develop, implement, coordinate and/or conduct Global Health Economics & Outcomes Research studies from Phase II to Phase IV. In collaboration with clinical, brand, governmental, market access, and managed care teams, develops and updates strategic global HEOR plans. Responsible for the design and analyses of cost-effectiveness and outcomes studies, writing of reports, and presenting information to internal/external customers, as well as the development of the economic models that will justify the appropriate level of pricing and reimbursement from third party payers worldwide. Accomplishments: Directed two full-time employees to drive strategies for multiple therapeutic areas: renal, cardiovascular, metabolic, anesthesia and pain therapeutics. First FDA/DDMAC reviewed and accepted pharmacoeconomic model based on FDAMA Section 114 that successfully gained, maintained, and increased Abbott anesthesia business. Incorporated patient reported outcomes into prospective clinical trials, conducted retrospective observational longitudinal studies to differentiate product's long-term morbidity outcomes and health care resource utilization, developed global economic models, global HEOR development plans, and worldwide reimbursement dossiers.

July 1987 - August 1996

Director of Pharmacy Services, Condell Medical Center

Chairman, Metropolitan Chicago Healthcare Counsel Buying Group
Clinical Assistant Professor, University of Illinois, College of Pharmacy
Clinical Assistant Professor, Midwestern University, College of Pharmacy

Responsibilities included: directed 26 full-time employees, managed 12 million dollar budget, driving strategies for all pharmaceutical care services. Nine years experience as a primary decision maker for formulary inclusion; serving on the Health-System Pharmacy & Therapeutics Committee and Chairman of the Metropolitan Chicago Healthcare Council Pharmaceutical Buying Group. Accomplishments: implement disease management program, health technology assessments, intergraded computerized system, decentralized services, automated dispensing system as well as antibiotic monitoring, renal and pharmacokinetic service, pharmacists' intervention program, health economic evaluations, collaborative medication rounds, and successfully JCAHO accreditation of pharmacy services.

February 1986 – July 1987

Pharmacy Supervisor, Evanston Hospital Pharmacy

Responsibilities included: preparing new drug evaluations for formulary consideration, conducting drug use evaluations of drug on formulary, managing the day-to-day operations of the department during the evening and night shifts, interviewing, training, department scheduling, performance evaluations and disciplinary actions and clinical monitoring.

June 1984 – February 1986

Clinical Pharmacist, Lakeside Hospital Pharmacy
UMKC College of Pharmacy Clinical Associate Professor

Responsibilities included: decentralized unit-dose drug distribution, parenteral admixtures, inventory control, nursing continuing education, pharmacokinetics, patient information, member of code blue team, and other special projects such as preparing drug evaluations for formulary review, implementing a pharmacy computer system and ACLS trainer.

October 1983 – February 1986

Senior Hospital Pharmacist, Truman Medical Center Pharmacy
UMKC College of Pharmacy Clinical Associate Professor

Responsibilities included: decentralized unit-dose drug distribution, IV admixtures, hyperalimentation, nutritional support, chemotherapy quality assurance monitoring as well as therapeutic drug monitoring, patient education, rounding drug information and teaching.

SERVICE

PROFESSIONAL EDITORIAL ACTIVITIES

Author and Reviewer, of Illinois Council of Health-Systems Pharmacists, Pharmacy Technician Certification Examination, 1995 - 1996

Editor Board Member, International Society for Pharmacoeconomics & Outcomes Research CONNECTIONS news journal, 1996 - 1998

Editor in Chief, International Society for Pharmacoeconomics & Outcomes Research CONNECTIONS news journal, 1998 to 2008

Reviewer, of Abstracts for the American Society of Health-System Pharmacists Summer and Mid-Year Meetings 1998 to present

Author, of American Society of Health-Systems Pharmacists Clinical Skills Competition Questions 1999

Editor, for PharmPrep, Cardiovascular Chapter, a comprehensive, case-based approach for preparing for the NAPLEX® examination, First Edition, 2001

Author and Editor, of PharmPrep, Infectious Disease Section, a comprehensive, case-based approach for preparing for the NAPLEX® examination, First Edition, 2001

Author, of Lexicon Book of terms, International Society for Pharmacoeconomics & Outcomes Research, First Edition 2000

Reviewer, of Abstracts for the International Society for Pharmacoeconomics & Outcomes Research Annual and International Meetings 2001 to present

Editor, of PharmPrep, Cardiovascular Chapter, a comprehensive, case-based approach for preparing for the NAPLEX® examination, Second Edition, 2003

Author, of PharmPrep, Infectious Disease Section, a comprehensive, case-based approach for preparing for the NAPLEX® examination, Second Edition, 2003

Author and Reviewer, of Lexicon Book of Terms, the International Society for Pharmacoeconomics & Outcomes Research, Second Edition 2004

Editorial Advisory Board Member, of Value in Health Journal, 2004 to present

Editor, of PharmPrep, Cardiovascular Chapter, a comprehensive, case-based approach for preparing for the NAPLEX® examination, Third Edition, 2006

Author, of PharmPrep, Infectious Disease Section, a comprehensive, case-based approach for preparing for the NAPLEX® examination, Third Edition, 2006

PROFESSIONAL AFFILIATIONS – International

International Society for Pharmacoeconomics & Outcomes Research
1997/08 Editor-in-Chief/member of Newsletter Committee
1997/02 Member of Fellowship/Educational Committee
2007/08 Member of Quality Improvement of Cost Effectiveness Research

PROFESSIONAL AFFILIATIONS – National

American Society of Health-System Pharmacists
2005/06 Advisory Panel on Population-Based Medication Use (Presidential Appointment)
2002/04 Council Members of Professional Affairs (Presidential Appointment)
1993/08 Elected Illinois Delegate/Alternate Delegate
1991/92 State Chapter Grants Program Selection Panel (Presidential Appointment)

PROFESSIONAL AFFILIATIONS – State

Illinois Council of Health-System Pharmacists
2005/07 Chairman, House of Delegates
1994/05 Elected Director/Member of Governmental Affairs
1993/99 Chairman Technician Checking Technician Task Force
1995/98 Member of Pharmacy Practice Act Task Force
1993/94 Chairman on Strategic Planning Committee
1993/94 Chairman of Nomination Committee
1990/93 President Elect/President/Immediate Past President
1987/90 Elected Director, Chapter & Public Affairs

Chicago Chapter, International Society for Pharmacoeconomics & Outcomes Research
2007- Present Active Member

HONORS and AWARDS

DISTINGUISHED SERVICE AWARD, International Society for PharmacoEconomics and Outcomes Research, 2008
Bronze Medal Winner for Renal Long Range Plan Strategy, Abbott 2007
Recognition Award for Affiliate Teambuilding Workshop, Abbott 2006
Recognition Award, Abbott 2005
PRESIDENT'S AWARD, Illinois Council of Health-Systems Pharmacists, 2003
DISTINGUISHED SERVICE AWARD, International Society for PharmacoEconomics and Outcomes Research, 2002
BEST BOOK AWARD, from Association Trends, for PharmPrep, 2002
CORPORATE OFFICER AWARD, ABBOTT mACC™, Abbott Laboratories 2000
RECOGNITION AWARD, Abbott Laboratories 1999
VALUED LEADERSHIP FOR INNOVATION, Abbott Laboratories 1997
HEALTH-SYSTEM PHARMACIST OF THE YEAR, Illinois Council of Health-System Pharmacists 1997
OUTSTANDING COMMITTEE CHAIRMAN, Illinois Council of Health-System Pharmacists 1994
WHO'S WHO, Gidford Book of Professionals 1993
COMMUNITY SPIRIT AWARD, United Way 1990, 1991, 1992
PRESIDENT'S AWARD, Illinois Council of Health-System Pharmacists 1992
LEADERSHIP AWARD, Bristol Myers Squibb 1992
OUTSTANDING ACCOMPLISHMENTS IN PHARMACY, Merck Sharp & Dohme 1991

PUBLICATIONS

Books

Lexicon, Book of Terms, International Society for Pharmacoeconomics & Outcomes Research, Contributing Author: **Marx SE**, First Edition, 1998

PharmPrep, American Society of Health-System Pharmacists, Cardiovascular Chapter: Section Editor; and Cardiovascular & Infectious Disease Chapters, Author and Reviewer: **Marx SE**, First Edition, 2001

PharmPrep, American Society of Health-System Pharmacists, Cardiovascular Chapter: Section Editor; and Cardiovascular & Infectious Disease Chapters, Author and Reviewer: **Marx SE**, Second Edition, 2003

Health Care Cost, Quality and Outcomes, International Society for Pharmacoeconomics & Outcomes Research, Contributing Author & Reviewer: **Marx SE**, First Edition, 2003

PharmPrep, American Society of Health-System Pharmacists, Cardiovascular Chapter: Section Co-Editor; and Cardiovascular & Infectious Disease Chapters, Author & Reviewer: **Marx SE**, Third Edition, 2006

Publications

The Lack of Pharmacoeconomic Studies in Pain Management. **Marx SE**. Analgesia April 1998.

Summary of the Importance of Universal Coverage. International Society for Pharmacoeconomics & Outcomes Research **Marx SE** ISPOR CONNECTIONS 2000;6(5):7

What Important to Future Users of Health Economics. International Society for Pharmacoeconomics & Outcomes Research **Marx SE** ISPOR CONNECTIONS 2000;6(5):8

Bridging the gap between users and producers of health economic studies. International Society for Pharmacoeconomics & Outcomes Research **Marx SE** ISPOR CONNECTIONS 2002;8(1):12.

Review of Health Spending Projections For 2001-2011 and The Latest Outlook and In Search of Value: An International Comparison of Cost Access, and Outcomes. **Marx SE** ISPOR CONNECTIONS 2002;8(2):11.

Hemodialysis patients receiving paricalcitol experience fewer hospitalizations and hospital days compared to patients receiving calcitriol. **Marx SE**, Amdahl M, Mathes A, Ng D, Melnick JZ, Sprague S. Journal of American Society of Nephrology 2002;13:224A-225A

Changes (switches) in vitamin D therapy associated with clinical and sociodemographical characteristics of hemodialysis patients, Mathes A, Amdahl M, Ng D, Thompson D, **Marx SE**, Melnick JZ, & Lindberg J. Journal of American Society of Nephrology 2002;13:401A

A technology assessment of health related quality of life instruments (questionnaires) utilized in chronic kidney disease. Mathes A, Ibrahim S, Vishal G, McNutt B, **Marx S**. Annual Meet Int Soc Technol Assess Health Care Int Soc Technol Assess Health Care Meet. 2003; 19: abstract no. 189.

Cost savings may be realized when treating hemodialysis (HD) patients with paricalcitol (ZEM) compared to calcitriol (CAL). **Marx SE**, Mathes A, Koch C, Melnick JZ, Kommala D, Dobrez D, Sprague S. Journal of American Society of Nephrology, 2003;15:862A.

Paricalcitol-Treated Patients Experience Improved Hospitalization Outcomes Compared with Calcitriol-Treated Patients in Real-World Clinical Settings, Dobrez D, Mathes A, Amdahl M, **Marx SE**, Melnick JZ, & Sprague S. Nephrology Dialysis & Transplant 2004;19:1174-1181

Paricalcitol in the Treatment of Secondary Hyperparathyroidism: Reductions in Hospitalizations and Costs. Schumock GT, Aruda JA, **Marx SE**, Melnick JZ, Sterz R, Williams LA. Nephrology News Issues 2006 120(12);73.

Examination of Outcomes and Costs of Care Among Patients with Chronic Kidney Disease and Secondary Hyperparathyroidism Kalantar-Zadeh K, **Marx SE**, Schumock GT, Bocuzzi SJ, Blount A, Sterz R, Melnick JZ, Williams LA. Journal of American Society of Nephrology 2006;17:647A.

Health-economic Comparison of Paricalcitol, Calcitriol and Alfacalcidol for the Treatment of Secondary Hyperparathyroidism. Rosery H, Bergemann R, **Marx SE**, Boehnke A, Melnick JZ, Sterz R, Williams LA. Clinical Drug Investigations. 2006;26(11):629-38.

Great Research or Lack of Training. **Marx SE**, Wong P, Priori S. ISPOR Connections 2007;13(2);19-20.

Systematic Overview of the Psychometric Properties of the Brief Pain Inventory in Malignant and Non-Malignant Pain. Vo PG, **Marx SE**, Best A, Lockhart E. Value in Health 2007;10(3);176A.

A Retrospective Matched Cohort Study of the Burden of Secondary Hyperparathyroidism (SHPT) in Predialysis Patients Without Vitamin D Receptor (VDR) Activator Therapy. **Marx SE**, Kalantar-Zadeh K, Schumock GT, Melnick JZ, Sterz R, Joyce A, Smith P, Sacks N, Blakesley V. Value in Health 2007;10(3) 104-5.

Pharmacoeconomic analysis of paricalcitol and calcitriol in the treatment of secondary hyperparathyroidism in hemodialysis: impact of hospitalisations and survival. Schumock GT, Arruda JA, **Marx SE**, Sterz R, Melnick JZ, Williams LA. Journal of Medical Economics 2007;10(4):393-409.

The Impact of Secondary Hyperparathyroidism on Disease Progression, Health Resource Utilization and Costs in Predialysis Chronic Kidney Disease Patients. Schumock GT, Andress D, **Marx SE**, Sterz R, Joyce A, Kalantar K. Current Medical Research & Opinion 2008 24;3037-2048.

A Retrospective Matched Cohort Study of the Health Economic Impact of Secondary Hyperparathyroidism in Predialysis Diabetic Patients. Schumock GT, Andress D, **Marx SE**, Sterz R, Joyce A, Kalantar K. (Manuscript in process)

A Chronic Kidney Disease Markov Model Comparing Paricalcitol to Calcitriol for Secondary Hyperparathyroidism: A US Perspective. Nuijten M, Andress D, **Marx SE**, Sterz R. (Manuscript in process)

Health Economic Evaluation of Paricalcitol Compared to Non-Selective Vitamin D Receptor Activators (VDRAs): United Kingdom (UK) Perspective. Nuijten M, **Marx SE**, Sterz R, Curry A. (Manuscript in process)

Abstracts/Posters

Hemodialysis patients receiving paricalcitol experience fewer hospitalizations and hospital days compared to patients receiving calcitriol. **Marx SE**, Amdahl M, Mathes A, Ng , Melnick JZ, & Sprague. American Society of Nephrology, Renal Week, Philadelphia, Pennsylvania, November 2002.

Changes (switches) in vitamin D therapy associated with clinical and sociodemographical characteristics of hemodialysis patients, Mathes A, Amdahl M, Ng D, Thompson D, **Marx SE**, Melnick JZ, & Lindberg J. American Society of Nephrology, Renal Week, Philadelphia, Pennsylvania, November 2002.

Pharmacoeconomics of dexmedetomidine versus propofol in the sedation of the mechanically ventilated ICU patient: A decision analysis and modified delphi survey. Chalfin D, Durtschi A, **Marx SE**. American Thoracic Society, May 2003

Is cisatracurium cost-effective for neuromuscular blockade in the ICU? A markov computer simulation study. International Society for Pharmacoeconomics & Outcomes Research, Macario A, **Marx SE**, & Chow C. American Society of Anesthesiologists, October 2003.

Hemodialysis (HD) patients receiving paricalcitol (Par) experience less days in the hospital compared to patients who receive calcitriol (CAL) and no vitamin D (noD). Tian J, Dobrez D, Amdahl M, **Marx SE**, Echlin D, Melnick JZ, Sprague S. American Society of Nephrology, Renal Week, San Diego, California, November 2003.

Cost savings may be realized when treating hemodialysis (HD) patients with paricalcitol (ZEM) compared to calcitriol (CAL). **Marx SE**, Mathes A, Koch C, Melnick JZ, Kommala D, Dobrez E, & Sprague S. American Society of Nephrology, Renal Week, San Diego, California, November 2003

A Technology Assessment of Health Related Quality of Life (HRQoL) Instruments (Questionnaires) Utilized in Chronic Kidney Disease. Mathes A, Ibrahim S, Goyal V, McNutt B, **Marx SE** International Society of Technology Assessment in Health Care, Canmore, Canada, June 2003

Paricalcitol (Zemplar®) Therapy Was Associated With Fewer Days in the Hospital Than Either Calcitriol Therapy or No Vitamin D in Chronic Hemodialysis (HD) Patients Melnick JZ, Dobrez D, Amdahl M, Tian J, Echlin D, **Marx SE**, Williams LA. American Society of Nephrology, Renal Week, St. Louis, Missouri, November 2004

Association of Vitamin D therapy, Serum PTH and Ca X P Product with Morbidity Risk in Hemodialysis (HD) Patients. Tian J, Amdahl M, Hall, **Marx SE**, Melnick JZ, Williams LA. (Abstract/Poster)

Evaluation of Annualized Dosing Ratio of Paricalcitol to Calcitriol in Hemodialysis Patients. **Marx SE**, Brown L, Ashraf T, Melnick JZ, Williams LA, Sprague S. American Society of Nephrology, Renal Week, St. Louis, Missouri, November 2004

Dose of paricalcitol inversely associated with risk of hospitalizations Melnick JZ, Brown L, **Marx SE**, Tian J, Williams LA. Annual Dialysis Conference, Tampa, Florida, March 2005

Paricalcitol in the Treatment of Secondary Hyperparathyroidism: Reductions in Hospitalizations and Costs. Schumock GT, Aruda JA, **Marx SE**, Melnick JZ, Sterz R, Williams LA. Kidney Dialysis Economic Conference, Baltimore, MD, October 2006.

Examination of Outcomes and Costs of Care Among Patients with Chronic Kidney Disease and Secondary Hyperparathyroidism Kalantar-Zadeh K, **Marx SE**, Schumock GT, Bocuzzi SJ, Blount A, Sterz R, Melnick JZ, Williams LA. American Society of Nephrology, Renal Week, San Diego, California, November 2006

Impact of Secondary Hyperparathyroidism and VDR (Vitamin D Receptor) Therapy on Chronic Kidney Disease Progression. Kalantar-Zadeh K, **Marx SE**, Schumock GT, Bocuzzi SJ, Blount A, Sterz R, Melnick JZ, Williams LA. International Society of Nephrology Meeting, Barcelona, Spain, October 2006.

A Retrospective Matched Cohort Study of the Burden of Secondary Hyperparathyroidism (SHPT) in Predialysis Patients Without Vitamin D Receptor (VDR) Activator Therapy. Kalantar-Zadeh K, Schumock GT, **Marx SE**, Melnick JZ, Sterz R, Joyce A, Smith P, Sacks N, Blakesley V. World Congress of Nephrology, Rio de Janeiro, Brazil, April 24, 2007.

Systematic Overview of the Psychometric Properties of the Brief Pain Inventory in Malignant and Non-Malignant Pain. Vo PG, **Marx SE**, Best A, Lockhart E. International Society for Pharmacoeconomics & Outcomes Research Annual Meeting, Arlington, Virginia, May 21, 2007.

A Retrospective Matched Cohort Study of the Burden of Secondary Hyperparathyroidism (SHPT) in Predialysis Patients Without Vitamin D Receptor (VDR) Activator Therapy. **Marx SE**, Kalantar-Zadeh K, Schumock GT, Melnick JZ, Sterz R, Joyce A, Smith P, Sacks N, Blakesley V. International Society for Pharmacoeconomics & Outcomes Research Annual Meeting, Arlington, Virginia, May 22, 2007.

A Retrospective Matched Cohort Study of the Burden of Secondary Hyperparathyroidism (SHPT) in Predialysis Diabetic Patients Without Vitamin D Receptor (VDR) Activator Therapy. Kalantar-Zadeh K, Schumock GT, **Marx SE**, Melnick JZ, Sterz R, Joyce A, Smith P, Sacks N, Blakesley V. Endocrine Society Meeting, Toronto, Canada, June 5, 2007.

A Retrospective Matched Cohort Study of the Burden of Secondary Hyperparathyroidism (SHPT) in Predialysis Diabetic Patients Without Vitamin D Receptor (VDR) Activator Therapy. **Marx SE**, Kalantar-Zadeh K, Schumock GT, Melnick JZ, Sterz R, Joyce A, Smith P, Sacks N, Blakesley V. American Society of Health-System Pharmacists annual Meeting, San Francisco, California, June 26, 2007.

Health Economic Evaluation of Paricalcitol Compared to Non-Selective Vitamin D Receptor Activators (VDRAs): United Kingdom (UK) Perspective. Nuijten M, **Marx SE**, Sterz R, Curry A. American Society of Nephrology, Renal Week, San Francisco, California, November 4, 2007.

Effects of 12-Hour, Extended-Release Hydrocodone/Acetaminophen on Pain-Related Physical Function, Work Productivity, and Sleep Quality: A 56-Week, Open-Label Study. Webster D, Herrington D, Corser B, Rapoport R, Dikranian A, Thomas J, Vo P, Best A, **Marx S**, Jain R. American Academy of Pain Medicine 2008, Orlando

Effects of 12-Hour, Extended-Release Hydrocodone/Acetaminophen on Pain-Related Work Productivity: A Subanalysis from a 56-Week, Open-Label Study. Webster D, Herrington D, Corser B, Rapoport R, Dikranian A, Thomas J, Vo P, **Marx S**, Best A, Jain R. American Academy of Pain Medicine 2008, Orlando

Subject's and Physician's Global Assessment of Chronic Low-Back Pain Status After Treatment With 12-Hour Extended-Release Hydrocodone/Acetaminophen Tablets: A 3-Week Open-Label, 12-Week Randomized Double-Blinded Placebo-Controlled Withdrawal Trial. Coddling C, Levinsky D, Hale M, Thomas JW, Vo P, **Marx S**, Lockhart E, Jain R. American Pain Society, May 10, 2008 Tampa, Florida

Assessment of Disability Level and Sleep Interference in Moderate to Severe Chronic Low-Back Pain Patients Treated with 12-Hour Extended-Release Hydrocodone/Acetaminophen Tablets: A Phase-3 Withdrawal Trial Coddling C, Levinsky D, Hale M, Thomas JW, Vo P, **Marx S**, Lockhart E, Jain R. American Pain Society, May 10, 2008 Tampa, Florida

Long-term impact of pain-related work productivity among low back pain patients taking 12-hour extended-release hydrocodone/acetaminophen tablets. Webster d, Herrington D, Corser B, Rapoport R, Dikranian A, Thomas J, Vo P, **Marx S**, Best A. World Congress of Pain August 17-22, 2008 Glasgow, Scotland

Impact of productivity while at work (presenteeism) among osteoarthritis patients taking 12-hour extended-released hydrocodone/acetaminophen tablets at 56 weeks. Herrington D, Webster D, Corser B, Rapopot R, Dikranian A, Thomas J, Vo P, **Marx S**, Best A. World Congress of Pain August 17-22, 2008 Glasgow, Scotland

Effects of 12-hour extended-released hydrocodone/acetaminophen on arthritis status and quality of life in patients with osteoarthritis: a 12-week, randomized placebo controlled study. Spierings ELH, Altman R, Dikranian A, Milas J, Thomas J, Best A, Vo P, **Marx S**, Jain R. World Congress of Pain August 17-22, 2008 Glasgow, Scotland

Comparison of costs between paricalcitol and doxercalciferol in hemodialysis patients. **Marx S**, Wu-Wong R, Andress D, Audhya P. Submitted to National Kidney Foundation December 2008

Comparison of parathyroidectomies with paricalcitol or cinacalcet for the treatment of secondary hyperparathyroidism in hemodialysis patients. Walton SW, Schumock G, **Marx SE**, Audhya P, Anfress D. Submitted to National Kidney Foundation December 2008

Unpublished Manuscripts

Cancer patients achieve an increase in quality of life when treated with oral transmucosal fentanyl citrate (OTFC) for breakthrough pain in comparison to immediate release morphine sulfate capsules. Paramore, Halpern M, **Marx SE**, December 1998

Evaluating the New ICU Sedative, Dexmedetomidine: Conceptualizing and Assessing the Impact of Post-Operative Sedation on Patient Care. Retzinger J, Brod, Sassaman, Durtschi A, Jorden, **Marx SE** October 2002

Is Cisatracurium Cost-Effective for Neuromuscular Blockade in the ICU? A markov computer simulation study. International Society for Pharmacoeconomics & Outcomes Research, Macario A, Chow C, **Marx SE**, Dexter. January 2004

Reimbursement Dossiers

Core Value Dossier, Europe, Zemplar Injection, **Marx SE**, Sterz R, November 2004

Academy of Managed Care Pharmacists USA Dossier: Zemplar Capsules, **Marx SE**, October 2005

Core Value Dossier, Europe, Zemplar Capsules. **Marx SE**, Sterz R, May 2006

Reimbursement Submission for Turkey, Zemplar Capsules, **Marx SE**, Sterz R, February 2006

Reimbursement Submission for Scotland, Zemplar Capsules, Ryland, Curry A, **Marx SE**, May 2006

Reimbursement Submission for Sweden, Zemplar Injection, **Marx SE**, Sterz R, March 2006

Pricing & Reimbursement Strategy for Spain, Zemplar Capsules, **Marx SE**, Sterz R, May 2006

Core Value Dossier Zemplar Capsules & Injection, **Marx SE**, Sterz R, March 2007

Reimbursement Submission for Australia, Zemplar Injection, **Marx SE**, Sterz RS, Schulz M, April 2007

Reimbursement Submission for Columbia, Zemplar Injection & Capsules, **Marx SE**, Sterz RS, Guarin D, July 2007

Reimbursement Submission for Korea, Zemplar Injection, **Marx SE**, Sterz RS, Yang J, July 2007

Academy of Managed Care Pharmacists USA Dossier: Zemplar Capsules & Injection, **Marx SE**, October 2007

Reimbursement Submission for Korea, Zemplar Capsules, **Marx SE**, Sterz RS, Yang J, December 2007

Reimbursement Submission for Austria, Zemplar Capsules, **Marx SE**, Sterz RS, Haider-Salaberger I, September 2008

Invited Lectures and Presentations

Formulary Review: Antihemophilic Factor VIII Class Review and Therapeutic Substitution Recommendation. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1987

Pharmacy Intravenous Admixture Service. Hospital Administration. Condell Medical Center, Libertyville, Illinois 1987

Unit-Dose Medication Dispensing System. Hospital Administration. Condell Medical Center, Libertyville, Illinois 1987

Food and Drug Interactions, Grayslake Cooperative Services, Grayslake, Illinois, April 1988

Formulary Review: Benzodiazepine Class Review and Therapeutic Substitution Recommendation. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1988

Aminoglycoside Monitoring by Pharmacists, Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, June 1989

Aminoglycoside Monitoring by Pharmacists, Medical Executive Committee, Condell Medical Center, Libertyville, Illinois, June 1989

Formulary Review: Generic Substitution Class Review & Recommendation. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1989

Decentralized Pharmacy Service, Hospital Administration, Condell Medical Center, Libertyville, Illinois, June 1989

Early Detection of Resistant Anti-microbial Therapy, Illinois Council of Health-System Pharmacists, September 1990

Formulary Review: Second & Third Generation Cephalosporins Class Review and Therapeutic Substitution Recommendation. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1990

Pharmaceutical Market of New Medications in Health-Systems, Searle, Skokie, Illinois, May 1992, June 1992

Formulary Review H2 Antagonists Class Review and Therapeutic Substitution Recommendation. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1993

Formulary Review: Methicillin Resistant Staphylococcus Aureus (MRSA) and Appropriate Antibiotic Monitoring by Pharmacists. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1994

Formulary Review Fluoroquinolones Class Review and Therapeutic Substitution Recommendation. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1994

Formulary Review Macrolides Class Review. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1994

Automated Medication Dispensing Systems. Hospital Administration. Condell Medical Center, Libertyville, Illinois 1994

Formulary Review: HMG-CoA Reductase Inhibitors Class Review and Therapeutic Substitution Recommendation. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1995

Collaborative Medication Rounds, Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1996

Collaborative Medication Rounds, Medical Executive Committee, Condell Medical Center, Libertyville, Illinois, 1996

Formulary Review: SSRI Class Review. Pharmacy & Therapeutics Committee, Condell Medical Center, Libertyville, Illinois, 1996

PharmacoEconomics, An Investment in Healthcare Capital, Northern Illinois Society of Health-System Pharmacists, Chicago, Illinois, April 1997

Evolution of PharmacoEconomics & Outcomes Research. University of Illinois, Chicago, Illinois, April 1998.

A-Trak Anesthesia Resource Utilization & Outcomes Assessment Program, American Society of Anesthesia, Nashville, Tennessee, October 1998

Controlled Substance Laws, Abbott Laboratories, Abbott Park, Illinois, January 1999

Abbott mACC Presentation, Abbott Laboratories, National Sales Meeting, Las Vegas, Nevada, February 2000

Abbott mACC Presentation, Abbott Laboratories, Peri-Operative Specialist Training, Lake Forest, Illinois, August 2000

PharmacoEconomics & Outcomes Research, The Third Hurdle. Abbott Laboratories, Abbott Park, Illinois, June 2001

Using Decision Tree Software to Assist Outcomes Decisions. Illinois Council of Health-System Pharmacists Annual Meeting, Oakbrook, IL September 14, 2001

Health Care Resource Preparedness Post 911, Illinois Council of Health-System Pharmacists, Oakbrook, Illinois, September 2001

Abbott mACC Presentation, Abbott Laboratories, Peri-Operative Specialists Training, Lake Forest, Illinois, February 2002

Feasibility of Developing a Pharmacoeconomic model for deep vein thrombosis for abbokinase. Abbott Laboratories, Abbott Park, Illinois, May 2002.

Decision Analysis, Modeling in a World of Uncertainty, Midwestern University, Downers Grove, Illinois, August 2002

The Dialysis Clinic Outcomes Study (DCOS). A population-based retrospective observational study in hemodialysis patients on vitamin D therapy. Preliminary Report, Lake Forest, June 2002

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