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Dr. Duh, Chief Epidemiologist at Analysis Group, specializes in real-world evidence (RWE) generation for product registration, post-approval safety studies, and health economics and outcomes research (HEOR) of pharmaceuticals, vaccines, and regenerative biotherapeutics. She has led multiple projects for new molecular entity approvals and product label expansion applications to the US Food and Drug Administration (FDA) and European Medicines Agency (EMA), as well as health technology assessment (HTA) research for submissions to national payers such as the Centers for Medicare and Medicaid Services (CMS) in the US and the UK's National Institute for Health and Care Excellence (NICE). Her extensive research has appeared in over 315 peer-reviewed publications.

Her work also extends to pharmaceutical liability litigation and securities fraud litigation related to adverse drug events that allegedly led to product recalls, market withdrawals, black box warnings, and FDA limited access programs.

Dr. Duh is also an adjunct in the biostatistics department at the Harvard T.H. Chan School of Public Health. She served as a chairperson of drug safety and epidemiology for the Drug Information Association (DIA) and was an adjunct assistant professor of pharmacoeconomics and pharmacoepidemiology at Massachusetts College of Pharmacy and Allied Health Sciences. Dr. Duh was appointed to an expert panel convened by the Foundation for the National Institutes of Health's (FNIH's) Observational Medical Outcomes Partnership (OMOP). She has served as a peer reviewer for several journals, including *PharmacoEconomics*, the *American Journal of Health-System Pharmacy*, *Chest*, *Pharmacoepidemiology and Drug Safety*, the *American Journal of Kidney Diseases*, and *Therapeutics and Clinical Risk Management*. Dr. Duh is also an elected member of the American Society of Hematology and a member of the American Society of Clinical Oncology, the International Society of Pharmacoepidemiology, and the International Society of Pharmacoeconomics and Outcomes Research (ISPOR).

EDUCATION

- | | |
|------|---|
| 1996 | Sc.D., pharmacoepidemiology, biostatistics, and health policy and management, Harvard School of Public Health |
| 1992 | M.P.H., chronic disease epidemiology and public health, Yale School of Medicine |
| 1990 | B.S., pharmacy, Kaohsiung Medical College, Taiwan |

EMPLOYMENT

- 2001–Present Analysis Group, Inc.
Managing Principal (Partner) and Chief Epidemiologist (2009–Present)
Vice President (2003–2009)
Senior Associate (2001–2002)
- 1999–2001 Ingenix Pharmaceutical Services
Senior Associate Epidemiologist
- 1999 Astra Pharmaceuticals, L.P.
Pharmacoepidemiologist
- 1997–1999 AstraZeneca R&D
Pharmacoepidemiology Consultant
- 1996–1997 Astra USA, Inc.
Clinical Scientist/Project Manager
- 1996–1997 Drug Information Association
Epidemiology Session Chairperson
- 1992–1996 Harvard School of Public Health
Research Fellow in Pharmacoepidemiology Program

PROFESSIONAL AFFILIATIONS

Department of Biostatistics, Harvard T.H. Chan School of Public Health

Department Research Associate (2023–Present)

Visiting Scholar (2012–2023)

Department of Epidemiology, Harvard T.H. Chan School of Public Health

Guest Lecturer (2007–2012, 2015)

Massachusetts College of Pharmacy and Allied Health Science

Adjunct Assistant Professor of Pharmacoepidemiology and Pharmacoeconomics (1996–1999)

American Society of Hematology (ASH)

Elected Member

International Society for Pharmacoeconomics and Outcomes Research (ISPOR)

Member

International Society for Pharmacoepidemiology (ISPE)

Member

JOURNAL PEER REVIEWER

Various Peer-Reviewed Journals

American Journal of Hospital-System Pharmacy
American Journal of Kidney Diseases
The American Journal of Managed Care
The British Journal of Haematology
CHEST
CNS Neuroscience & Therapeutics
Critical Care
Expert Review of Pharmacoeconomics and

Outcomes Research
Managed Care Interface
Nephrology Dialysis Transplantation
Pediatric Pulmonology
Pharmacoeconomics
Pharmacoepidemiology and Drug Safety
Therapeutics and Clinical Risk Management

JOURNAL PUBLICATIONS

1. Duh MS, Shepard MJ, Wilberger JE, Bracken MB. The effectiveness of surgery on the treatment of acute spinal cord injury and its relation to pharmacological treatment. *Neurosurgery*. 1994 08; 35(2): 240-248; discussion 248-249.
2. Duh MS, Walker Am, Ayanian JZ. Interpretation of the Weight Matrix in an Artificial Neural Network. *Am J Epidemiol*. 1998: 1112-1122.
3. Duh MS, Walker AM, Pagano M, Kronlund K. Prediction and cross-validation of neural networks versus logistic regression: using hepatic disorders as an example. *Am J Epidemiol*. 1998 02; 147(4): 407-413.
4. Duh MS, Walker AM, Ayanian JZ. Epidemiologic interpretation of artificial neural networks. *Am J Epidemiol*. 1998 06; 147(12): 1112-1122.
5. Duh MS, Walker AM, Kronlund KH, Jr. Descriptive epidemiology of acute liver enzyme abnormalities in the general population of central Massachusetts. *Pharmacoepidemiol Drug Saf*. 1999 07; 8(4): 275-283.
6. Duh MS, Walker AM, Lindmark B, Laties AM. Association between intraocular pressure and budesonide inhalation therapy in asthmatic patients. *Ann Allergy Asthma Immunol*. 2000 11; 85(5): 356-361.
7. Corwin HL, Gettinger A, Pearl RG, Fink MP, Levy MM, Abraham E, MacIntyre NR, Shabot MM, Duh MS, Shapiro MJ. The CRIT Study: Anemia and blood transfusion in the critically ill--current clinical practice in the United States. *Crit Care Med*. 2004 01; 32(1): 39-52.
8. Shorr AF, Duh MS, Kelly KM, Kollef MH. Red blood cell transfusion and ventilator-associated pneumonia: A potential link? *Crit Care Med*. 2004 03; 32(3): 666-674.
9. Duh MS, Lefebvre P, Fastenau J, Piech CT, Waltzman RJ. Assessing the clinical benefits of erythropoietic agents using area under the hemoglobin change curve. *Oncologist*. 2005 06; 10(6): 438-448.
10. Duh MS, L Mark T. Cost-effectiveness of epoetin alfa and darbepoetin alfa in patients with chemotherapy-related anemia. *Expert Rev Pharmacoecon Outcomes Res*. 2005 08; 5(4): 383-394.
11. Ben-Hamadi R, Duh MS, Aggarwal J, Henckler A, McKenzie RS, Tak Piech C. The cost-effectiveness of weekly epoetin alfa relative to weekly darbepoetin alfa in patients with chemotherapy-induced anemia. *Curr Med Res Opin*. 2005 10; 21(10): 1677-1682.

12. Campos SM, Duh MS, Lefebvre P, Rosberg J. Benefits associated with an early hemoglobin response to epoetin alfa therapy in the treatment of chemotherapy-related anemia. *J Natl Compr Canc Netw*. 2005 11; 3(6): 807-816.
13. Gosselin A, McKenzie R, Lefebvre P, Mody S, Piech C, Duh MS. Dose-conversion ratio for epoetin alfa and darbepoetin alfa in chemotherapy patients with anemia and cancer. *P AND T*. 2006; 31(10): 594.
14. Sands BE, Duh MS, Cali C, Ajene A, Bohn RL, Miller D, Cole JA, Cook SF, Walker AM. Algorithms to identify colonic ischemia, complications of constipation and irritable bowel syndrome in medical claims data: development and validation. *Pharmacoepidemiol Drug Saf*. 2006 01; 15(1): 47-56.
15. Smith M, Boyce S, Moyneur E, Duh MS, Raut M, Brandman J. Assessing the risk of clinical fracture in men with non-metastatic prostate cancer receiving gonadotropin-releasing hormone agonist therapy. *J Urol*. 2006 01; 175(1): 136-139.
16. Fowler JF, Ghosh A, Sung J, Emani S, Chang J, Den E, Thorn D, Person J, Duh MS. Impact of chronic hand dermatitis on quality of life, work productivity, activity impairment, and medical costs. *J Am Acad Dermatol*. 2006 03; 54(3): 448-457.
17. Clancy TE, Sengupta TP, Paulus J, Ahmed F, Duh MS, Kulke MH. Alkaline phosphatase predicts survival in patients with metastatic neuroendocrine tumors. *Dig Dis Sci*. 2006 05; 51(5): 877-884.
18. Mincey BA, Duh MS, Thomas SK, Moyneur E, Marynchenko M, Boyce SP, Mallett D, Perez EA. Risk of cancer treatment-associated bone loss and fractures among women with breast cancer receiving aromatase inhibitors. *Clin Breast Cancer*. 2006 06; 7(2): 127-132.
19. Fowler JF, Duh MS, Chang J, Person J, Thorn D, Raut M, Ghosh A, Den E, Emani S. A survey-based assessment of the prevalence and severity of chronic hand dermatitis in a managed care organization. *Cutis*. 2006 06; 77(6): 385-392.
20. Duh MS, Mody SH, Scott McKenzie R, Lefebvre P, Gosselin A, Tak Piech C. Dosing patterns and costs of erythropoietic agents in patients with chronic kidney disease not on dialysis in managed care organizations. *Clin Ther*. 2006 09; 28(9): 1443-1450.
21. Lefebvre P, Gosselin A, McKenzie RS, Mody SH, Piech CT, Duh MS. Dosing patterns, treatment costs, and frequency of physician visits in adults with cancer receiving erythropoietic agents in managed care organizations. *Curr Med Res Opin*. 2006 09; 22(9): 1623-1631.
22. Duh MS, Latypova A, Greenberg P. Impact and treatment of anemia in the elderly: clinical, epidemiological and economic perspectives. *Expert Rev Pharmacoecon Outcomes Res*. 2006 10; 6(5): 577-590.
23. Duh MS, Mody SH, McKenzie RS, Lefebvre P, Gosselin A, Bookhart BK, Piech CT. Dosing patterns and treatment costs of erythropoietic agents in elderly patients with pre-dialysis chronic kidney disease in managed care organisations. *Drugs Aging*. 2006 12; 23(12): 969-976.
24. Lefebvre P, Duh MS, Buteau S, Bookhart B, Mody SH. Medical costs of untreated anemia in elderly patients with predialysis chronic kidney disease. *J Am Soc Nephrol*. 2006 12; 17(12): 3497-3502.

25. Lefebvre P, *Duh MS*, Mody SH, Bookhart B, Piech CT. The economic impact of epoetin alfa therapy on delaying time to dialysis in elderly patients with chronic kidney disease. *Dis Manag.* 2007 02; 10(1): 37-45.
26. Andermann F, *Duh MS*, Gosselin A, Paradis PE. Compulsory generic switching of antiepileptic drugs: high switchback rates to branded compounds compared with other drug classes. *Epilepsia.* 2007 03; 48(3): 464-469.
27. Oh WK, Proctor K, Nakabayashi M, Evan C, Tormey LK, Daskivich T, Antras L, Smith M, Neary MP, *Duh MS*. The risk of renal impairment in hormone-refractory prostate cancer patients with bone metastases treated with zoledronic acid. *Cancer.* 2007 03; 109(6): 1090-1096.
28. Zilberberg MD, Carter C, Lefebvre P, Raut M, Vekeman F, *Duh MS*, Shorr AF. Red blood cell transfusions and the risk of acute respiratory distress syndrome among the critically ill: a cohort study. *Crit Care.* 2007 06; 11(3): R63.
29. *Duh MS*, Andermann F, Paradis PE, Weiner J, Manjunath R, Cremieux PY. The economic consequences of generic substitution for antiepileptic drugs in a public payer setting: the case of lamotrigine. *Dis Manag.* 2007 08; 10(4): 216-225.
30. Vekeman F, McKenzie RS, Lefebvre P, Watson SH, Mody SH, Piech CT, *Duh MS*. Dose and cost comparison of erythropoietic agents in the inpatient hospital setting. *Am J Health Syst Pharm.* 2007 09; 64(18): 1943-1949.
31. Fowler JF, *Duh MS*, Rovba L, Buteau S, Pinheiro L, Lobo F, Sung J, Doyle JJ, Swensen A, Mallett DA, Kosicki G. The direct and indirect cost burden of atopic dermatitis: an employer-payer perspective. *Manag Care Interface.* 2007 10; 20(10): 26-32.
32. Moyneur E BB, Mody SH, Fournier A, Mallet D, *Duh MS*. Medical and work loss burden of pre-dialysis chronic kidney disease and related anemia: An employer's perspective. *J Health Prod.* 2007 10; 309.
33. Chen L, Antras L, *Duh MS*, Levy N, Neary M, O'Brien ME, von Pawel J. Psychometric validation of the Patient Symptom Assessment in Lung Cancer instrument for small cell lung cancer. *Curr Med Res Opin.* 2007 11; 23(11): 2741-2752.
34. *Duh MS*, Mody S, Laliberté F, McKenzie R, Bookhart B, Lefebvre P. Drug utilization and costs of erythropoietic-stimulating agents in chronic kidney disease patients not receiving dialysis. *Manag Care Interface.* 2007 12; 20 (12): 14-19.
35. Sikand H, Decter A, Greco T, Watson SH, Kang YJ, Mody SH, Piech CT, *Duh MS*, Naeem A. Cost analytic model to determine the least costly inpatient erythropoiesis stimulating therapy regimen. *Ann Pharmacother.* 2008 01; 42(1): 16-23.
36. *Duh MS*, Weiner JR, White LA, Lefebvre P, Greenberg PE. Management of anaemia: a critical and systematic review of the cost effectiveness of erythropoiesis-stimulating agents. *Pharmacoeconomics.* 2008 01; 26(2): 99-120.

37. Moyneur E, Bookhart BK, Mody SH, Fournier AA, Mallett D, *Duh MS*. The economic impact of pre-dialysis epoetin alpha on health care and work loss costs in chronic kidney disease: an employer's perspective. *Dis Manag*. 2008 02; 11(1): 49-58.
38. *Duh MS*, Mody SH, Lefebvre P, Woodman RC, Buteau S, Piech CT. Anaemia and the risk of injurious falls in a community-dwelling elderly population. *Drugs Aging*. 2008 04; 25(4): 325-334.
39. *Duh MS*, Reynolds Weiner J, Lefebvre P, Neary M, Skarin AT. Costs associated with intravenous chemotherapy administration in patients with small cell lung cancer: a retrospective claims database analysis. *Curr Med Res Opin*. 2008 04; 24(4): 967-974.
40. Weiner JR, Toy EL, Sacco P, *Duh MS*. Costs, quality of life and treatment compliance associated with antibiotic therapies in patients with cystic fibrosis: a review of the literature. *Expert Opin Pharmacother*. 2008 04; 9(5): 751-766.
41. LeLorier J, *Duh MS*, Paradis PE, Latremouille-Viau D, Lefebvre P, Manjunath R, Sheehy O. Economic impact of generic substitution of lamotrigine: projected costs in the US using findings in a Canadian setting. *Curr Med Res Opin*. 2008 04; 24(4): 1069-1081.
42. LeLorier J, *Duh MS*, Paradis PE, Lefebvre P, Weiner J, Manjunath R, Sheehy O. Clinical consequences of generic substitution of lamotrigine for patients with epilepsy. *Neurology*. 2008 05; 70(22 Pt 2): 2179-2186.
43. Moyo V, Lefebvre P, *Duh MS*, Yektashenas B, Mundle S. Erythropoiesis-stimulating agents in the treatment of anemia in myelodysplastic syndromes: a meta-analysis. *Ann Hematol*. 2008 07; 87(7): 527-536.
44. Fowler JF, *Duh MS*, Rovba L, Buteau S, Pinheiro L, Lobo F, Sung J, Doyle JJ, Swensen A, Mallett DA, Kosicki G. The impact of psoriasis on health care costs and patient work loss. *J Am Acad Dermatol*. 2008 11; 59(5): 772-780.
45. Faught E, *Duh MS*, Weiner JR, Guerin A, Cunnington MC. Nonadherence to antiepileptic drugs and increased mortality: findings from the RANSOM Study. *Neurology*. 2008 11; 71(20): 1572-1578.
46. Laliberté F, Bookhart B, Corral M, Vekeman F, *Duh MS*, Bailey R, Lefebvre P. Impact of anemia on hospitalization rates and costs in a diabetic and a hypertensive cohort of chronic kidney disease patients. *J Manage Care Med*. 2009; 12(3): 41-50.
47. Mundle S, Lefebvre P, Vekeman F, *Duh MS*, Rastogi R, Moyo V. An assessment of erythroid response to epoetin alpha as a single agent versus in combination with granulocyte- or granulocyte-macrophage-colony-stimulating factor in myelodysplastic syndromes using a meta-analysis approach. *Cancer*. 2009 02; 115(4): 706-715.
48. Vekeman F, McKenzie RS, Bookhart BK, Laliberte F, *Duh MS*, Tak Piech C, Lefebvre P. Drug utilization and cost considerations of erythropoiesis stimulating agents in oncology patients receiving chemotherapy: observations from a large managed-care database. *J Med Econ*. 2009 03; 12(1): 1-8.

49. Faught RE, Weiner JR, Guerin A, Cunnington MC, Duh MS. Impact of nonadherence to antiepileptic drugs on health care utilization and costs: findings from the RANSOM study. *Epilepsia*. 2009 03; 50(3): 501-509.
50. Laliberte F, Bookhart BK, Vekeman F, Corral M, Duh MS, Bailey RA, Piech CT, Lefebvre P. Direct all-cause health care costs associated with chronic kidney disease in patients with diabetes and hypertension: a managed care perspective. *J Manag Care Pharm*. 2009 05; 15(4): 312-322.
51. Vekeman F, Bookhart BK, White J, McKenzie RS, Duh MS, Piech CT, Lefebvre P. Impact of limiting erythropoiesis-stimulating agent use for chemotherapy-induced anemia on the United States blood supply margin. *Transfusion (Paris)*. 2009 05; 49(5): 895-902.
52. Diel IJ, Weide R, Koppler H, Antras L, Smith M, Green J, Wintfeld N, Neary M, Duh MS. Risk of renal impairment after treatment with ibandronate versus zoledronic acid: a retrospective medical records review. *Support Care Cancer*. 2009 06; 17(6): 719-725.
53. Duh MS, Paradis PE, Latremouille-Viau D, Greenberg PE, Lee SP, Durkin MB, Wan GJ, Rupnow MF, LeLorier J. The risks and costs of multiple-generic substitution of topiramate. *Neurology*. 2009 06; 72(24): 2122-2129.
54. Paradis PE, Latremouille-Viau D, Moore Y, Mishagina N, Lafeuille MH, Lefebvre P, Gaudig M, Duh MS. Projected economic impact of clinical findings of generic entry of topiramate on G4 European countries. *Curr Med Res Opin*. 2009 07; 25(7): 1793-1805.
55. Duh MS, Dial E, Choueiri TK, Fournier AA, Antras L, Rodermund D, Neary MP, Oh WK. Cost implications of IV versus oral anti-angiogenesis therapies in patients with advanced renal cell carcinoma: retrospective claims database analysis. *Curr Med Res Opin*. 2009 08; 25(8): 2081-2090.
56. Heaney ML, Toy EL, Vekeman F, Laliberte F, Dority BL, Perlman D, Barghout V, Duh MS. Comparison of hospitalization risk and associated costs among patients receiving sargramostim, filgrastim, and pegfilgrastim for chemotherapy-induced neutropenia. *Cancer*. 2009 10; 115(20): 4839-4848.
57. Duh MS, Cahill KE, Paradis PE, Cremieux PY, Greenberg PE. The economic implications of generic substitution of antiepileptic drugs: a review of recent evidence. *Expert Opin Pharmacother*. 2009 10; 10(14): 2317-2328.
58. Duh MS, Gosselin A, Luo R, Lohoues H, Lewis BE, Crawley JA. Impact of compliance with proton pump inhibitors on NSAID treatment. *Am J Manag Care*. 2009 10; 15(10): 681-688.
59. Duh MS, Fulcher NM, White LA, Jayawant SS, Ramamurthy P, Moynour E, Ong SH. Costs associated with cardiovascular events in patients with hypertension in US managed care settings. *J Am Soc Hypertens*. 2009 11; 3(6): 403-415.
60. Weide R, Koppler H, Antras L, Smith M, Chang MP, Green J, Wintfeld N, Neary MP, Duh MS. Renal toxicity in patients with multiple myeloma receiving zoledronic acid vs. ibandronate: a retrospective medical records review. *J Cancer Res Ther*. 2010 01; 6(1): 31-35.

61. Raptis A, Duh MS, Wang ST, Dial E, Fanourgiakis I, Fortner B, Paley C, Mody-Patel N, Corral M, Scott J. Treatment of transfusional iron overload in patients with myelodysplastic syndrome or severe anemia: data from multicenter clinical practices. *Transfusion (Paris)*. 2010 01; 50(1): 190-199.
62. Signorovitch JE, Duh MS, Sengupta A, Gu A, Grant R, Raut M, Mody SH, Schein J, Fisher AC, Ng D. Hospital visits and costs following outpatient treatment of CAP with levofloxacin or moxifloxacin. *Curr Med Res Opin*. 2010 02; 26(2): 355-363.
63. Michna E, Duh MS, Korves C, Dahl JL. Removal of opioid/acetaminophen combination prescription pain medications: assessing the evidence for hepatotoxicity and consequences of removal of these medications. *Pain Med*. 2010 03; 11(3): 369-378.
64. Choueiri TK, Duh MS, Clement J, Brick AJ, Rogers MJ, Kwabi C, Shah K, Percy AG, Antras L, Jayawant SS, Chen K, Wang ST, Luka A, Neary MP, McDermott D, Oh WK. Angiogenesis inhibitor therapies for metastatic renal cell carcinoma: effectiveness, safety and treatment patterns in clinical practice-based on medical chart review. *BJU Int*. 2010 05; 105(9): 1247-1254.
65. Labiner DM, Paradis PE, Manjunath R, Duh MS, Lafeuille MH, Latremouille-Viau D, Lefebvre P, Helmers SL. Generic antiepileptic drugs and associated medical resource utilization in the United States. *Neurology*. 2010 05; 74(20): 1566-1574.
66. Toy EL, Gallagher KF, Stanley EL, Swensen AR, Duh MS. The economic impact of exacerbations of chronic obstructive pulmonary disease and exacerbation definition: a review. *COPD*. 2010 06; 7(3): 214-228.
67. Helmers SL, Paradis PE, Manjunath R, Duh MS, Lafeuille MH, Latremouille-Viau D, Lefebvre P, Labiner DM. Economic burden associated with the use of generic antiepileptic drugs in the United States. *Epilepsy Behav*. 2010 08; 18(4): 437-444.
68. Duh MS, Vekeman F, Korves C, Lefebvre P, Dial E, Latremouille-Viau D, Wei RS, Stangle BE, Lafeuille MH, Michna E, Greenberg PE. Risk of hepatotoxicity-related hospitalizations among patients treated with opioid/acetaminophen combination prescription pain medications. *Pain Med*. 2010 11; 11(11): 1718-1725.
69. Scharre DW, Vekeman F, Lefebvre P, Mody-Patel N, Kahler KH, Duh MS. Use of antipsychotic drugs in patients with Alzheimer's disease treated with rivastigmine versus donepezil: a retrospective, parallel-cohort, hypothesis-generating study. *Drugs Aging*. 2010 11; 27(11): 903-913.
70. Mease PJ, Zimetbaum PJ, Duh MS, Vekeman F, Guerin A, Boerstoeel-Streefland M, Jiang W, Lefebvre P. Epidemiologic Evaluation of Cardiovascular Risk in Patients Receiving Milnacipran, Venlafaxine, or Amitriptyline: Evidence from French Health Data (February). *Ann Pharmacother*. 2011 02: 179-188.
71. Porta C, Paglino C, Imarisio I, Canipari C, Chen K, Neary M, Duh MS. Safety and treatment patterns of multikinase inhibitors in patients with metastatic renal cell carcinoma at a tertiary oncology center in Italy. *BMC Cancer*. 2011 03; 11: 105.
72. Toy EL, Beaulieu NU, McHale JM, Welland TR, Plauschinat CA, Swensen A, Duh MS. Treatment of COPD: relationships between daily dosing frequency, adherence, resource use, and costs. *Respir Med*. 2011 03; 105(3): 435-441.

73. Vekeman F, LaMori JC, Laliberte F, Nutescu E, *Duh MS*, Bookhart BK, Schein J, Dea K, Olson WH, Lefebvre P. Risks and cost burden of venous thromboembolism and bleeding for patients undergoing total hip or knee replacement in a managed-care population. *J Med Econ*. 2011 04; 14(3): 324-334.
74. Helmers SL, *Duh MS*, Guerin A, Sarda SP, Samuelson TM, Bunker MT, Olin BD, Jackson SD, Faught E. Clinical and economic impact of vagus nerve stimulation therapy in patients with drug-resistant epilepsy. *Epilepsy Behav*. 2011 10; 22(2): 370-375.
75. Lafeuille MH, *Duh MS*, Zhang J, Wertz D, Gu T, Swensen A, Lefebvre P. Concomitant asthma medication use in patients receiving omalizumab: results from three large insurance claims databases. *J Asthma*. 2011 11; 48(9): 923-930.
76. Elfiky AA, Cho DC, McDermott DF, Rosenberg JE, Fortner B, Antras L, Chen K, *Duh MS*, Jayawant SS, Oh WK, Atkins MB, Choueiri TK. Predictors of response to sequential sunitinib and the impact of prior VEGF-targeted drug washout in patients with metastatic clear-cell renal cell carcinoma. *Urol Oncol*. 2011 11; 29(6): 756-763.
77. Cella D, Pickard AS, *Duh MS*, Guerin A, Mishagina N, Antras L, Neary MP, McCann L, Hodge R, Sternberg CN. Health-related quality of life in patients with advanced renal cell carcinoma receiving pazopanib or placebo in a randomised phase III trial. *Eur J Cancer*. 2012 02; 48(3): 311-323.
78. Vekeman F, LaMori JC, Laliberte F, Nutescu E, *Duh MS*, Bookhart BK, Schein J, Dea K, Olson WH, Lefebvre P. In-hospital risk of venous thromboembolism and bleeding and associated costs for patients undergoing total hip or knee arthroplasty. *J Med Econ*. 2012 02; 15(4): 644-653.
79. Jordan LB, Vekeman F, Sengupta A, Corral M, Guo A, *Duh MS*. Persistence and compliance of deferoxamine versus deferasirox in Medicaid patients with sickle-cell disease. *J Clin Pharm Ther*. 2012 04; 37(2): 173-181.
80. Jensen JT, Lefebvre P, Laliberte F, Sarda SP, Law A, Pocoski J, *Duh MS*. Cost burden and treatment patterns associated with management of heavy menstrual bleeding. *J Womens Health (Larchmt)*. 2012 05; 21(5): 539-547.
81. Korves C, Eldar-Lissai A, McHale J, Lafeuille MH, Hwa Ong S, *Duh MS*. Resource utilization and costs following hospitalization of patients with chronic heart failure in the US. *J Med Econ*. 2012 05; 15(5): 925-937.
82. Lefebvre P, Laliberte F, Nutescu EA, *Duh MS*, LaMori J, Bookhart BK, Olson WH, Dea K, Schein J, Kaatz S. All-cause and potentially disease-related health care costs associated with venous thromboembolism in commercial, Medicare, and Medicaid beneficiaries. *J Manag Care Pharm*. 2012 06; 18(5): 363-374.
83. Lafeuille MH, Vekeman F, Wang ST, Kerrigan M, Menditto L, *Duh MS*. Lifetime costs to Medicare of providing care to patients with chronic lymphocytic leukemia. *Leuk Lymphoma*. 2012 06; 53(6): 1146-1154.

84. Feinberg BA, Jolly P, Wang ST, Fortner B, Scott J, Gilmore J, Neary MP, *Duh MS*. Safety and treatment patterns of angiogenesis inhibitors in patients with metastatic renal cell carcinoma: evidence from US community oncology clinics. *Medical Oncology*. 2012 06; 29(2): 786-794.
85. Lafeuille MH, Dean J, Zhang J, *Duh MS*, Gorsh B, Lefebvre P. Impact of omalizumab on emergency-department visits, hospitalizations, and corticosteroid use among patients with uncontrolled asthma. *Ann Allergy Asthma Immunol*. 2012 07; 109(1): 59-64.
86. Laliberte F, Nelson WW, Lefebvre P, Schein JR, Rondeau-Leclaire J, *Duh MS*. Impact of daily dosing frequency on adherence to chronic medications among nonvalvular atrial fibrillation patients. *Adv Ther*. 2012 08; 29(8): 675-690.
87. Helmers SL, *Duh MS*, Guerin A, Sarda SP, Samuelson TM, Bunker MT, Olin BD, Jackson SD, Faught E. Clinical outcomes, quality of life, and costs associated with implantation of vagus nerve stimulation therapy in pediatric patients with drug-resistant epilepsy. *Eur J Paediatr Neurol*. 2012 09; 16(5): 449-458.
88. Manjunath R, Paradis PE, Parise H, Lafeuille MH, Bowers B, *Duh MS*, Lefebvre P, Faught E. Burden of uncontrolled epilepsy in patients requiring an emergency room visit or hospitalization. *Neurology*. 2012 10; 79(18): 1908-1916.
89. Choueiri TK, McDermott D, *Duh MS*, Sarda SP, Neary MP, Oh WK. Costs associated with angiogenesis inhibitor therapies for metastatic renal cell carcinoma in clinical practice: results from a medical chart review study. *Urol Oncol*. 2012 11; 30(6): 848-855.
90. Johnson SJ, Sorg RA, Borker RD, *Duh MS*. Chemotherapy Treatment Patterns in Elderly Patients Initially Diagnosed with Advanced Ovarian Cancer. *Clinical Ovarian and Other Gynecologic Cancer*. 2012 12; 5(2): 67-77. e1.
91. Garrison LP, Jr., Wang ST, Huang H, Ba-Mancini A, Shi H, Chen K, Korves C, Dhawan R, Cakana A, van de Velde H, Corzo D, *Duh MS*. The cost-effectiveness of initial treatment of multiple myeloma in the U.S. with bortezomib plus melphalan and prednisone versus thalidomide plus melphalan and prednisone or lenalidomide plus melphalan and prednisone with continuous lenalidomide maintenance treatment. *Oncologist*. 2013 01; 18(1): 27-36.
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LAW PUBLICATIONS

1. The Role of Epidemiology in Drug Safety Litigations, with Paul E. Greenberg and Jennifer Weiner, Food & Drug Law Institute, *Update*, Nov.–Dec. 2007, 31–34.
2. Drug Safety and Risk Management Practice, with Paul E. Greenberg and Lucia Antras, Food & Drug Law

Institute, *Update*, May–June, 2008, 35–38.

3. What Attorneys Should Know About FDA’s MedWatch Data, with Pierre Y. Cremieux, Paul E. Greenberg, and Brian Ellman, *Law360*, January 29, 2014.
4. Learning From Social Media For Adverse Event Reporting, with Brian Ellman, Marc Van Audenrode, Paul Greenberg, and Pierre Cremieux., *Law360*, May 23, 2017.

HONORS

- 1992 Yale University: National Collaborative Spinal Cord Study Training Award
- 1992 Yale University: Scholarship Award for Distinctive Doctoral Applicant
- 1994 Harvard University: Teaching Fellow (honorary award)
- 1992–1996 Harvard University: Pharmacoepidemiology Teaching and Training Award

INVITED SPEECHES

- 2003 Application of pharmacoepidemiology to drug safety litigation, Pharmacoepidemiology Seminar Series, Harvard T.H. Chan School of Public Health, Boston, MA
- 2006 A new dimension of disease burden – Work absenteeism and presenteeism, Health Economics and Outcomes Research Seminar Series, Harvard T.H. Chan School of Public Health, Boston, MA
- 2009 Courtroom pharmacoepidemiology: Application of pharmacoepidemiology to drug safety litigation, Department of Epidemiology Seminar Series, Harvard T.H. Chan School of Public Health, Boston, MA
- 2011 Applications of Epidemiology to Risk Evaluation and Mitigation Strategies (REMS) and Drug Safety Litigation, seminars on drug safety and comparative effectiveness, Harvard T.H. Chan School of Public Health, Boston, MA
- 2014 Pharmacovigilance and pharmacoepidemiology in pharmaceutical litigation, lunch seminar presented to Covington & Burling LLP, Washington, DC
- 2015 Pharmacovigilance and Social Media Data, Department of Epidemiology Seminar Series, Harvard T.H. Chan School of Public Health, Boston, MA
- 2017 The Role of Biostatistician and Epidemiologist in Mitigating Risk of Share Price Decline, lunch seminar presented to Mintz, Levin, Cohn, Ferris, Glovsky, and Popeo, PC (Mintz Levin)
- 2018 Risks and Rewards of Accelerated FDA Pathways, panelist, seminar sponsored by Mintz Levin, Boston, MA
- 2019 Lightning Talk, Department of Biostatistics Seminar Series, Harvard T.H. Chan School of Public Health, Boston, MA
- 2023 How Do Drugs Get Approved Faster Using RWE and AI? panelist, 26th Annual Milken

Institute Global Conference, Beverly Hills, CA

- 2023 Bias Introduced by COVID-19 Related Healthcare Disruptions in Safety and Effectiveness Studies, International Conference on Pharmacoepidemiology (ICPE) 2023, Halifax, Nova Scotia, Canada
- 2024 Regulatory Challenges in RWE, panelist, Precision Medicine World Conference (PMWC) 2024, Santa Clara, CA
- 2024 Statistical Methods for FDA-Mandated Vaccine Safety Surveillance: Case Study of Pfizer-BioNTech COVID-19 Vaccine, Department of Biostatistics Colloquium Seminar Series, Harvard T.H. Chan School of Public Health, Boston, MA