

January 7, 2020

## Peter F. Thall

### Curriculum Vitae

#### Contact Information

Department of Biostatistics  
PO Box 301402, Unit 1411  
1400 Pressler Street  
M.D. Anderson Cancer Center  
Houston, Texas 77030

office           FCT4.6014  
phone           713 794 4162  
email           [rex@mdanderson.org](mailto:rex@mdanderson.org)  
webpage       <http://odin.mdacc.tmc.edu/~pfall/>

#### Education

1971	BS, Mathematics	Michigan State University
1973	MS, Statistics	Florida State University
1975	PhD, Statistics and Probability	Florida State University

#### Professional Experience

Biometry Intern, 1973  
Department of Statistics, Biology Division  
Oak Ridge National Laboratory  
Oak Ridge, Tennessee

Assistant Professor, 1975-1980  
Program in Mathematical Sciences  
The University of Texas at Dallas  
Richardson, Texas

Assistant Professor, 1980-1984  
Associate Professor, 1984 -1990  
Department of Statistics  
George Washington University  
Washington, DC

Statistician  
The Biostatistics Center, Department of Statistics  
George Washington University  
Diabetes Control and Complications Trial, 1982  
National Cooperative Gallstone Study, 1983

Special Assistant to the Chief, 1986-1987  
Biometric Research Branch

Cancer Therapy Evaluation Program  
Division of Cancer Treatment  
National Cancer Institute, Bethesda, MD

Visiting Lecturer, 1997  
Medical and Pharmaceutical Statistics Research Unit  
Department of Applied Statistics  
University of Reading, United Kingdom

Associate Professor, 1991-1998  
Professor, 1998 – 2000  
Department of Biomathematics  
The University of Texas M.D. Anderson Cancer Center

Professor, 2000 – present  
Department of Biostatistics  
The University of Texas M.D. Anderson Cancer Center

Adjunct Professor, 2013 – 2015  
Department of Statistics, Rice University

Visiting Research Scientist, 2016  
INSERM Unit 1138, Data Science and Personalized Medicine  
French National Institute for Health and Medical Research  
Paris, France

## **Honors and Awards**

All University Competitive Fellow, Florida State University, 1971

Anise J. Sorrell Professor, Endowed Chair, M.D. Anderson Cancer Center, 2004-Present

Fellow, Society for Clinical Trials, 2014

Fellow, American Statistical Association, 2015

Owen Award, San Antonio Chapter, American Statistical Association, 2014

Statistical Papers with Invited Discussions

- *Journal of the American Statistical Association*, 2012
- *Journal of the American Statistical Association*, 2016
- *Biometrics*, 2019

Invited Keynote Addresses

- Innovative Methods Program for Advancing Clinical Trials (IMPACT), Cary, NC, 2014
- International Society for Clinical Biostatistics, Annual Meeting, Leuven, Belgium, 2019

## **Editorial Boards**

Associate Editor, *Statistics in Medicine*, 1994-2005

Associate Editor, *Journal of the National Cancer Institute*, 1995-1997

Associate Editor, *Biometrics*, 2003-2008

Associate Editor, *Clinical Trials*, 2003-Present

Associate Editor, *Statistics in Biosciences*, 2008-2018

Associate Editor, *Biometrics*, 2017 - Present

## **M.D. Anderson Institutional Activities**

Search Committee for Chief, Section of Biostatistics and Clinical Biostatistics Center, 1993-1994

Institutional Research Support Committee, 1994-1997

Chair, Mid-Tenure Review Committee for J. Jack Lee, PhD 1995

Achievement Award Subcommittee, Clinical Research Category, 1998

Chair, Biostatistics Department Faculty Recruitment Committee, 1999-2000.

Study Section Review Committee for Clinical, Translational and Population-based Projects, Institutional Research Grants Program, 2002-2008

Multidisciplinary Research Advisory Committee, 2004-2007

Chair, Mid-Tenure Review Committee for Guosheng Yin, PhD, 2006.

Institutional Research Grants Program, 2002-2008

Statistical Computing Committee, Biostatistics Department, 2012 – 2014

Reviewer, Startup Funds Proposal, MDACC Research Administration, January 2013

Mid-Tenure Review Committee for M. Guindani, PhD, 2013

Chair, Mid-Tenure Review Committee for B. Hobbs, PhD, 2014

Multidisciplinary Research Advisory Committee, 2014 – 2017

Mid-Tenure Review Committee for D. Fuentes, PhD, 2016

Biostatistician, Nanobiotix Strategic Alliance, Dept of Radiation Oncology, 2019

Biostatistician, Protocol PA-13-0786, Zhongxing Liao, PI, Dept of Radiation Oncology, 2019

### **External Committees and Activities**

External Grant Proposal Reviewer, National Cancer Institute, NIH, 1993.

External Advisory Committee, “Growth Control in Multiple Myeloma” (B. Barlogie, P.I.)  
Myeloma Institute for Research and Therapy, Arkansas Cancer Research Center, 2000-2006.

Data Safety Monitoring Board, “ReoPro Retavase Reperfusion of Stroke Safety Study – Imaging Evaluation” NINDS (S. Warach, P.I.) 2002-2007.

Data Safety Monitoring Board, “An Adaptively Randomized Trial of Gemcitabine 1200 mg/m<sup>2</sup> versus Gemcitabine 900 mg/m<sup>2</sup> + Docetaxel for Unresectable Soft Tissue Sarcoma.” Connective Tissue Oncology Society, (R. Maki, P.I.), 2002-2005.

Liposomal Topotecan Advisory Board, GlaxoSmithKline, 2003.

Co-Chair, “Better Clinical Studies”, Science–Centric Session, National Cancer Institute, Sarcoma Progress Review Group, Philadelphia, PA, 2003.

External Advisory Board, Head and Neck Cancer SPORE, Winship Cancer Institute, Emory University (D. Shin, PI; F. Khuri, Co-PI), 2006.

External Advisory Board, Epithelial Ovarian Cancer Program Project Grant, Memorial Sloan Kettering Cancer Center (D. Spriggs, PI), 2005 – 2010.

Special Emphasis Panel/Scientific Review Group, National Institute of Neurological Diseases and Stroke, NIH, Washington, D.C., 2007

Data Safety Monitoring Board, “A Phase II Trial of IT-101 for Advanced Ovarian Cancer,” Calando Pharmaceuticals, 2008 – 2009.

Special Emphasis Panel/Scientific Review Group 2010/01 ZHL1 CSR-D (F1), National Heart, Lung, and Blood Institute, RFA-HL-10-007: Prematurity and Respiratory Outcomes Program. Bethesda, MD, November 23, 2009.

Data Safety Monitoring Board, “Multi-institutional Trial of Allogeneic Bone Marrow Transplantation for Hematologic Malignancies using HLA-matched Related or Unrelated Donors with Fludarabine and IV Busulfan as Pre-transplant Conditioning followed by Post-transplant Immunosuppression with High Dose Cyclophosphamide,” 2010 – 2011.

AML Working Group, Lymphoma Steering Committee, National Cancer Institute, NIH, Bethesda, MD, October 4, 2010

Androgen Receptor Signaling in Prostate Cancer: Translating Biology into Clinical Practice.  
Invited speaker and participant. Prostate Cancer Task Force, Genitourinary Steering Committee,  
National Cancer Institute, NIH, Dec 6-7, 2010.

Media Expert, American Statistical Association, 2008 – Present

Program Chair for Section on Bayesian Statistical Science, 2013 Joint Statistical Meetings, American  
Statistical Association, 2012 - 2013

Member, ENAR Regional Advisory Board, International Biometric Society, 2013 – 2015.

Member, NINDS Preclinical Assessment Network (SPAN) Special Emphasis Panel/Scientific Review  
Group 2019/05 ZNS1 SRB-D (03), March 18-19, 2019

Biostatistical Reviewer, NINDS and NHLBI, SIREN Emergency Clinical Trial Network, grant proposal  
for a phase II multicenter double-blind placebo controlled trial to establish ketogenic formula dose  
specifications to safely induce ketosis in established refractory status epilepticus (RSE), December  
20, 2019.

## Research Funding

### Grants and Contracts

<p>2 P30 CA016672 43 (Pisters) NIH/NCI Cancer Center Support Grant (CCSG) - Biostatistics Resource Group (BRG) Major goals: The Biostatistics Resource Group provides biostatistical expertise and quantitative research resources in support of all CCSG programs at MDACC. PID858033 Role: Biostatistician</p>	<p>9/4/1998-6/30/2024 \$629,456</p>	<p>1.2 calendar</p>
<p>5R01CA061508-24 (Shpall) NIH/NCI Hematopoietic Progenitor Cells - Cord Blood Major goals: To study the biology and reconstitution potential of hematopoietic progenitors with a major focus on megakaryocyte expansion. PID4002 Role: Co-Investigator</p>	<p>4/1/2016-3/31/2021 \$237,500</p>	<p>1.2 calendar</p>
<p>5R01CA211044-04 (Rezvani) NIH/NCI Off-the-shelf engineered NK cells for the treatment of AML Major goals: To develop novel cell based therapies to harness the antileukemic potential of NK cells against AML, and to further enhance their effector function by both redefining their specificity and/or enhancing their potency. PID4378 Role: Collaborator</p>	<p>12/20/2016-11/30/2021 \$228,750</p>	<p>0.6 calendar</p>
<p>5P50CA140388-09 (Logothetis/Thompson) NIH/NCI MD Anderson Cancer Center Prostate Cancer SPORE Core 2: Biostatistics and Bioinformatics</p>	<p>9/1/2016-8/31/2021 \$186,470</p>	<p>0.6 calendar</p>

Major goals: To provide comprehensive biostatistics and bioinformatics expertise to ensure statistical integrity and optimize data analysis for the studies in the SPORE. PID4999

Role: Co-Investigator

6555-18 (Rezvani) 10/1/2017-9/30/2020 0.12 calendar  
 Leukemia and Lymphoma Society \$180,018

Immunotherapy for Multiple Myeloma Using Off-the-Shelf Cord Blood Derived NK Cells.

Major goals: To improve the tumor-free survival of patients with advanced or refractory MM.

PID5767

Role: Co-Investigator

CS2017-00054748-LG (Taniguchi) 12/7/2017-12/6/2020 0.12 calendar  
 Galera Therapeutics, Inc. \$154,760

Fast Track: An Adaptive Phase I/II Dose Escalation Trial of Stereotactic Body Radiation Therapy in Combination with Radiomodulating Agent GC4419 in Locally Advanced Pancreatic AdenoCarcinoma

Major goals: To compare genomic changes based on whole exome sequencing, and transcriptome sequencing from pre- and post-SBRT core biopsy samples. PID6237

Role: Biostatistician

FP00008548 (Daher) 7/1/2019-6/30/2020 0.12 calendar  
 Society for Immunotherapy of Cancer \$99,999

CIS checkpoint deletion in cord blood derived iC9.CAR19.IL-15 NK cells to treat B-cell hematologic malignancies

Major goals: To determine if CISH KO can improve the anti-tumor activity of iC9/CAR.19/IL-15-NK cells in a preclinical murine model of B-cell lymphoma, without causing toxicity.

Role: Co-Investigator

MKMS-SLS-MHG-2019-01 (Daher) 7/1/2019-6/30/2022 0.12 calendar  
 DKMS Stiftung Leben Spenden \$91,020

CIS checkpoint deletion in cord blood derived iC9.CAR19.IL-15 NK cells for the treatment of B-cell hematologic malignancies

Major goals: To determine if CISH KO can improve the anti-tumor activity of iC9/CAR.19/IL-15-NK cells in a preclinical murine model of B-cell lymphoma, without causing toxicity. / FP00007397

PID7839

Role: Co-Investigator

5P01CA148600-08 (Shpall / Bollard) 9/22/2011-8/31/2023 2.4 calendar  
 NIH/NCI \$65,000

Novel Cord Blood-Derived Cellular Therapies

Major goals: To boost the effectiveness of cord blood for both of these purposes, to a level that would make it the treatment of choice for greater numbers of individuals with leukemia, lymphoma and other hematologic disorders. PID7301

Role: Core B Director

FP00006446 (Lin) 7/1/2019-6/30/2020 0.12 calendar  
 Conquer Cancer Foundation \$49,998

Treatment of Multiple Myeloma with CAR-NK and TIGIT blockade

Major goals: Hypothesize that NK anti-myeloma activity will be enhanced by genetically engineering CB-derived NK cells to target BCMA and by blocking the immune checkpoint TIGIT. /

PID7966

Role: Biostatistician

**Completed (past 3 years)**

- |  |  |                      |
|--|--|----------------------|
| <p>5R01CA083932 16 Thall (PI)<br/>NIH/NCI<br/>Statistical Methods for Complex Cancer Trials<br/>Major goals: To provide practical models and methods for the design, conduct, and analysis of complex clinical trials not accommodated by conventional trial designs. PID4111<br/>Role: Principal Investigator</p> | <p>7/1/2013-4/30/2019<br/>\$97,000</p>   | <p>2.4 calendar</p>  |
| <p>4P01 CA148600 06 Shpall (PI)<br/>NIH/NCI<br/>Improving Cord Blood Transplantation (Core B-Biostatistics)<br/>To provide statistical support for all projects, including related data and computing components. PID4408<br/>Role: Core Leader</p>  | <p>9/22/2011-8/31/2018<br/>\$927,330</p> | <p>0.36 calendar</p> |
| <p>710499-80-116532-21 Orłowski (PI)<br/>MDACC<br/>High-Risk Multiple Myeloma Moon Shot Flagship 2<br/>Immunologic strategies to achieve minimal residual disease in high-risk multiple myeloma. Fund 116532.<br/>Role: Co-Investigator</p>  | <p>9/1/2016-8/31/2017<br/>\$530,000</p>  | <p>0.12 calendar</p> |

**Selected Consulting**

- Chesapeake and Potomac Telephone Company, Alexandria, VA, 1983
- Georgetown University School of Nursing, Washington, DC, 1984.
- Logistics Management Institute, Bethesda, MD, 1989.
- Novartis Pharmaceuticals, Basel, Switzerland and Morristown, NJ, 1996-2004.
- Orphan Medical, Minnetonka, MN, 2002-2003.
- ESP Pharmaceuticals, Edison, NJ, 2004.
- Applied Molecular Evolution, San Diego, CA, 2004
- Chiron Corporation, Emeryville, CA, 2005.
- Scian Services, Toronto, Canada, 2006.
- Hoffman-LaRoche, Nutley, NJ 2008-2009
- Fertility Center of Las Vegas, Las Vegas, NV, 2009

Takeda Oncology Company, Millenium Pharmaceuticals, Boston, MA, 2010

Cytel Corporation, Cambridge, MA, 2012 – 2014

AstraZeneca, Waltham, MA, 2016

## Publications

### Books

**Thall PF**, editor. *Recent Advances in Clinical Trial Design and Analysis*. Boston: Kluwer Academic Publishers, 1995.

Yuan Y, Nguyen HQ, **Thall PF**. *Bayesian Designs for Phase I-II Clinical Trials*. Chapman & Hall/CRC Biostatistics Series, 2016.

**Thall PF**. *Statistical Remedies for Medical Researchers*. Springer Series in Pharmaceutical Statistics, 2020. In press.

### Papers Published in Statistical Journals

1. Kullback S, **Thall PF**. An information-theoretic proof of the integral representation theorem. *J. Combinatorics, Information and System Sciences* 2: 97-103, 1977.
2. Ammann LP, **Thall PF**. On the structure of regular infinitely divisible point processes. *Stochastic Processes and Their Applications* 6: 87-94, 1977.
3. Ammann LP, **Thall PF**. Random measures with aftereffects. *Annals of Probability* 6: 216-230, 1978.
4. Ammann LP, **Thall PF**. Count distributions, orderliness and invariance of Poisson cluster processes. *J Applied Probability* 16: 261-273, 1979.
5. **Thall PF**. Huber-sense robust M-estimation of a scale parameter with application to the exponential distribution. *J American Statistical Assoc* 74: 147-152, 1979.
6. **Thall PF**. Cluster shock models. *J Applied Probability* 18: 104-111, 1981.
7. Kimeldorf G, **Thall PF**. A joint characterization of the multinomial distribution and the Poisson process. *J Applied Probability* 20: 202-208, 1981.
8. **Thall PF**. A theorem on regular infinitely divisible Cox processes. *Stochastic Processes and Their Applications* 16: 205-210, 1983.
9. **Thall PF**, Lachin JM. Assessment of stratum-covariate interactions in Cox's proportional hazards regression model. *Statistics in Medicine* 5:73-83, 1986.



10. **Thall PF**. Mixed Poisson likelihood regression models for longitudinal interval count data. *Biometrics* 44: 197-209, 1988.
11. **Thall PF**, Simon R, Ellenberg SS, Shrager R. Optimal two-stage designs for clinical trials with binary response. *Statistics in Medicine* 71: 571-579, 1988.
12. **Thall PF**, Simon R, Ellenberg SS. Two-stage selection and testing designs for comparative clinical trials. *Biometrika* 75: 303-310, 1988.
13. **Thall PF**, Lachin JM. Analysis of recurrent events: nonparametric methods for random interval count data. *J American Statistical Assoc* 83: 339-347, 1988.
14. **Thall PF**, Simon R, Ellenberg SS. A two-stage design for choosing among several experimental treatments and a control in clinical trials. *Biometrics* 45: 537-547, 1989.
15. Halperin M, Hamdy M, **Thall PF**. Distribution-free confidence intervals for a parameter of Wilcoxon-Mann-Whitney type for ordered categories and progressive censoring. *Biometrics* 45: 509-521, 1989.
16. **Thall PF**, Simon R. Incorporating historical control data in planning Phase II clinical trials. *Statistics in Medicine* 9: 215-228, 1990.
17. **Thall PF**, Vail SC. Some covariance models for longitudinal count data with overdispersion. *Biometrics* 46: 657-671, 1990.
18. **Thall PF**, Simon R, Grier, DA. Test-based variable selection via cross-validation. *J Computational and Graphical Stat* 1: 41-61, 1992.
19. **Thall PF**. Score tests in the two-way layout of counts. *Communications in Statistics: Theory and Methods* 21: 3017-3036, 1992.
20. **Thall PF**, Estey EH. A Bayesian strategy for screening cancer treatments prior to Phase II clinical evaluation. *Statistics in Medicine* 12: 1197-1211, 1993.
21. Simon R, **Thall PF**, Ellenberg SS. New designs for the selection of treatments to be tested in randomized clinical trials. *Statistics in Medicine* 13: 417-429, 1994.
22. **Thall PF**, Simon R. Practical Bayesian guidelines for phase IIB clinical trials. *Biometrics* 50: 337-349, 1994.
23. Ensign LG, Gehan EA, Kamen DS, **Thall PF**. An optimal three-stage design for phase II clinical trials. *Statistics in Medicine* 13:1727-1736, 1994.
24. **Thall PF**, Simon R. A Bayesian approach to establishing sample size and monitoring criteria for phase II clinical trials. *Controlled Clinical Trials* 15:463-481, 1994.
25. **Thall PF**, Simon R, Estey EH. Bayesian sequential monitoring designs for single-arm clinical trials with multiple outcomes. *Statistics in Medicine* 14:357-379, 1995.

26. **Thall PF**, Jacoby D, Zimmerman SO. Estimating genomic category probabilities from fluorescent *in situ* hybridization counts with misclassification. *J Royal Statistical Society, Series C (Applied Statistics)* 45:431-446, 1996.
27. Staniswalis JG, **Thall PF**, Salch J. Semiparametric regression analysis for recurrent event interval counts. *Biometrics* 53:1334-1353, 1997.
28. **Thall PF**, Russell KT, Simon RM. Variable selection in regression via repeated data splitting. *J Computational and Graphical Stat*, 6:416-434, 1997.
29. **Thall PF**, Russell KT. A strategy for dose finding and safety monitoring based on efficacy and adverse outcomes in phase I/II clinical trials. *Biometrics* 54:251-264, 1998.
30. Shen Y, **Thall PF**. Parametric likelihoods for multiple non-fatal competing risks and death. *Statistics in Medicine*, 17:999-1016, 1998.
31. **Thall PF**, Sung H-G. Some extensions and applications of a Bayesian strategy for monitoring multiple outcomes in clinical trials. *Statistics in Medicine*, 17:1563-1580, 1998.
32. **Thall PF**, Lee JJ, Tseng C-H, Estey EH. Accrual strategies for phase I trials with delayed patient outcome. *Statistics in Medicine*, 18:1155-1169, 1999.
33. Stallard N, **Thall PF**, Whitehead J. Decision theoretic designs for phase II clinical trials with multiple outcomes. *Biometrics*, 55:971-977, 1999.
34. **Thall PF**, Cheng S-C. Treatment comparisons based on two-dimensional safety and efficacy alternatives in oncology trials. *Biometrics*, 55:746-753, 1999.
35. **Thall PF**, Simon RM, Shen Y. Approximate Bayesian evaluation of multiple treatment effects. *Biometrics*, 56:213-219, 2000.
36. **Thall PF**, Millikan R, Sung, H-G. Evaluating multiple treatment courses in clinical trials. *Statistics in Medicine*, 19: 1011-1028, 2000.
37. **Thall PF**, Cheng S-C. Optimal two-stage designs for clinical trials based on safety and efficacy. *Statistics in Medicine*, 20:1023-1032, 2001.
38. **Thall PF**, Sung H-G, Choudhury A. Dose-finding based on feasibility and toxicity in T- cell infusion trials. *Biometrics*, 57:914-921, 2001.
39. Staniswalis JG, **Thall PF**. An explanation of generalized profile likelihoods. *Statistics and Computing*, 11:293-298, 2001.
40. Stallard N, **Thall PF**. Decision-theoretic designs for pre-phase II screening trials in oncology. *Biometrics*, 57:1089-1095, 2001.
41. **Thall PF**. Bayesian clinical trial design in a cancer center. *Chance*. 14:23-28, 2001 (Invited)

42. **Thall PF**, Sung H-G, Estey EH. Selecting therapeutic strategies based on efficacy and death in multi-course clinical trials. *J American Statistical Assoc*, 97:29-39, 2002.
43. Cheung YK, **Thall PF**. Monitoring the rates of composite events with censored data in phase II clinical trials. *Biometrics*, 58:89-97, 2002.
44. **Thall PF**. Ethical issues in oncology biostatistics. *Statistical Methods in Medical Research*. 11:429-448, 2002. (Invited)
45. **Thall PF**, Inoue LYT, Martin T. Adaptive decision making in a lymphocyte infusion trial. *Biometrics*, 58:560-568, 2002.
46. Inoue LYT, **Thall PF**, Berry, DA. Seamlessly expanding a randomized phase II trial to phase III. *Biometrics*, 58:823-831, 2002.
47. **Thall PF**, Wathen JK, Bekele BN, Champlin RE, Baker LO, Benjamin RS. Hierarchical Bayesian approaches to phase II trials in diseases with multiple subtypes. *Statistics in Medicine*, 22: 763-780, 2003.
48. **Thall PF**, Millikan RE, Mueller P, Lee S-J. Dose-finding with two agents in phase I oncology trials. *Biometrics*, 59:487-496, 2003.
49. Bekele BN, **Thall PF**. Dose-finding based on multiple toxicities in a soft tissue sarcoma trial. *J American Statistical Assoc*, 99:26-35, 2004.
50. **Thall PF**, Cook JD. Dose-finding based on efficacy-toxicity trade-offs. *Biometrics*, 60:684-693, 2004.
51. Braun TM, Yuan Z, **Thall PF**. Determining a maximum tolerated schedule of a cytotoxic agent. *Biometrics*, 61:335-343, 2005.
52. **Thall PF**, Wathen JK. Covariate-adjusted adaptive randomization in a sarcoma trial with multi-stage treatments. *Statistics in Medicine*, 24:1947-1964, 2005.
53. **Thall PF**, Wooten LH, Tannir N. Monitoring event times in early phase clinical trials: some practical issues. *Clinical Trials*. 2:467-478, 2005.
54. Cheung YK, Inoue LYT, Wathen JK and **Thall PF**. Continuous Bayesian adaptive randomization based on event times with covariates. *Statistics in Medicine*, 25:55-70, 2006.
55. **Thall PF**, Cook JD, Estey EH. Adaptive dose selection using efficacy-toxicity trade-offs: illustrations and practical considerations. *J Biopharmaceutical Statistics*. 16:623-638, 2006. (Invited)
56. **Thall PF**, Wooten LH, Shpall EJ. A geometric approach to comparing treatments for rapidly fatal diseases. *Biometrics*, 62:193-201, 2006.

57. Braun TM, **Thall PF**, Nguyen H, de Lima M. Simultaneously optimizing dose and schedule of a new cytotoxic agent. *Clinical Trials*, 4:113-124, 2007.
58. **Thall PF**. Some geometric methods for constructing decision criteria based on two-dimensional parameters. *J Statistical Planning and Inference*. 138:516-527, 2007 (Invited)
59. **Thall PF**, Wooten LH, Logothetis CJ, Millikan R, Tannir NM. Bayesian and frequentist two-stage treatment strategies based on sequential failure times subject to interval censoring. *Statistics in Medicine*. 26:4687-4702, 2007.
60. **Thall PF**. A review of phase 2-3 clinical trial designs. *Lifetime Data Analysis*. 14:37-53, 2008. (Invited)
61. Morita S, **Thall PF**, Mueller P. Determining the effective sample size of a parametric prior. *Biometrics*. 64:595-602, 2008.
62. Wathen JK, **Thall PF**, Cook, JD, Estey EH. Accounting for patient heterogeneity in phase II clinical trials. *Statistics in Medicine*. 27:2802-2815, 2008.
63. Bekele BN, Ji Y, Shen Y, **Thall PF**. Monitoring late onset toxicities in phase I trials using predicted risks. *Biostatistics*. 9:442-457, 2008.
64. **Thall PF**, Nguyen H, Estey EH. Patient-specific dose-finding based on bivariate outcomes and covariates. *Biometrics*. 64:1126-1136, 2008.
65. Wathen JK, **Thall PF**. Bayesian adaptive model selection for optimizing group sequential clinical trials. *Statistics in Medicine*. 27:5586-5604, 2008.
66. Morita S, **Thall PF**, Bekele BN, Mathew P. A Bayesian hierarchical mixture model for platelet derived growth factor receptor phosphorylation to improve estimation of progression-free survival in prostate cancer. *J Royal Statistical Society, Series C (Applied Statistics)* 59:19-34, 2010.
67. Houede N, **Thall PF**, Nguyen H, Paoletti X, Kramar A. Utility-based optimization of combination therapy using ordinal toxicity and efficacy in phase I/II trials. *Biometrics*. 66:532-540, 2010.
68. Morita S, **Thall PF**, Mueller P. Evaluating the impact of prior assumptions in Bayesian biostatistics. *Statistics in Biosciences*. 2:1-17, 2010.
69. **Thall PF**. Bayesian models and decision algorithms for complex early phase clinical trials. *Statistical Science*. 25:227-244, 2010. (Invited).
70. **Thall PF**, Liu D, Berrak SG, Wolff JE. Defining and ranking effects of individual agents based on survival times of cancer patients treated with combination chemotherapies. *Statistics in Medicine*. 30:1777-1794, 2011.
71. **Thall PF**, Szabo A, Nguyen HQ, Amlie-Lefond CM, Zaidat OO. Optimizing the concentration and bolus of a drug delivered by continuous infusion. *Biometrics*. 67:1638-1646, 2011.

72. **Thall PF**, Nguyen HQ, Wang X, Wolff JE. A hybrid geometric phase II-III clinical trial design based on treatment failure time and toxicity. *J Statistical Planning and Inference*. 142:944-955, 2012.
73. Yuan Y, **Thall PF**, Wolff J. Estimating progression-free survival in pediatric brain tumor patients when some progression statuses are unknown. *J Royal Statistical Society, Series C (Applied Statistics)*. 61:135-149, 2012.
74. **Thall PF**, Nguyen HQ. Adaptive randomization to improve utility-based dose-finding with bivariate ordinal outcomes. *J Biopharmaceutical Statistics* 22:785-801, 2012.
75. Wang L, Rotnitzky A, Lin X, Millikan R, **Thall PF**. Evaluation of viable dynamic treatment regimes in a sequentially randomized trial of advanced prostate cancer. *J American Statistical Assoc.* 107:493-520, (with discussion), 2012.
76. Morita S, **Thall PF**, Mueller P. Prior effective sample size in conditionally independent hierarchical models. *Bayesian Analysis*. 7:591-614, 2012.
77. **Thall PF**. Bayesian adaptive dose-finding based on efficacy and toxicity. *J Statistical Research*. 14:187-202, 2012. (Invited)
78. Wahed AS, **Thall PF**. Evaluating joint effects of induction-salvage treatment regimes on overall survival in acute leukemia. *J Royal Statistical Society, Series C (Applied Statistics)*. 62:67-83, 2013.
79. **Thall PF**, Nguyen HQ, Braun TM, Qazilbash M. Using joint utilities of the times to response and toxicity to adaptively optimize schedule-dose regimes. *Biometrics*. 69:673-682, 2013.
80. Jin I-H, Liu S, **Thall PF**, Yuan Y. Using data augmentation to facilitate conduct of phase I/II clinical trials with delayed outcomes. *J American Statistical Assoc.* 109:525-536, 2014.
81. **Thall PF**, Nguyen HQ, Zohar S, Maton P. Optimizing sedative dose in preterm infants undergoing treatment for respiratory distress syndrome. *J American Statistical Assoc.* 109:931-943, 2014.
82. Wang L, Shen J, **Thall PF**. An adaptive Lasso for identifying interactions in the Cox model with the heredity constraint. *Statistics and Probability Letters*. 93:126-133, 2014.
83. **Thall PF**, Herrick RC, Nguyen HQ, Venier JJ, Norris JC. Using effective sample size for prior calibration in Bayesian phase I-II dose-finding. *Clinical Trials*. 11:657-666, 2014.
84. Graziani R, Guindani M, **Thall PF**. Bayesian nonparametric estimation of targeted agent effects on biomarker change to predict clinical outcome. *Biometrics* 71:188-197, 2015.
85. Lee J, **Thall PF**, Ji Y, Muller P. Bayesian dose-finding in two treatment cycles based on the joint utility of efficacy and toxicity. *J American Statistical Assoc.* 110:711-722, 2015.
86. Huang X, Choi S, Wang L, **Thall PF**. Optimization of multi-stage dynamic treatment regimes utilizing accumulated data. *Statistics in Medicine*. 34:3424-3443, 2015.

87. Hobbs B, **Thall PF**, Lin S. Bayesian group sequential clinical trial design using total toxicity burden and progression-free survival. *J Royal Statistical Society, Series C (Applied Statistics)*. 65:273-297, 2016.
88. Lee J, **Thall PF**, Ji Y, Mueller P. A practical decision-theoretic phase I-II design for ordinal outcomes in two cycles. *Biostatistics*. 17:304-319, 2016.
89. Xu Y, Mueller P, Wahed A, **Thall PF**. Bayesian nonparametric estimation for dynamic treatment regimes with sequential transition times. *J American Statistical Assoc. (with discussion)*. 111:921-950, 2016.
90. Murray TA, **Thall PF**, Yuan Y. Utility-based designs for randomized comparative trials with discrete outcomes. *Statistics in Medicine*. 35:4285-4305, 2016.
91. **Thall PF**, Nguyen HQ, Zinner RG. Parametric dose standardization for two-agent combinations in a phase I-II trial with ordinal outcomes. *J Royal Statistical Society, Series C (Applied Statistics)*. 66:201-224, 2017.
92. Morita S, **Thall, PF**, Takeda K. A simulation study of methods for selecting subgroup-specific doses in phase I trials. *Pharmaceutical Statistics*. 16:143-156, 2017.
93. Chapple AG, Vannucci M, **Thall PF**, Lin SH. Bayesian variable selection for a semi-competing risks model with three hazard functions. *Computational Statistics and Data Analysis*. 112:170-185, 2017.
94. Murray TA, **Thall PF**, Yuan Y, McAvoy S, Gomez, DR. Robust treatment comparison based on utilities of semi-competing risks in non-small-cell lung cancer. *J American Statistical Assoc*. 112:11-23, 2017.
95. Xu Y, **Thall PF**, Mueller P, Mehran RJ. A decision-theoretic comparison of treatments to resolve air leaks after lung surgery based on nonparametric modeling. *Bayesian Analysis*. 12(3):639-652, 2017.
96. Mueller P, Xu Y, **Thall PF**. Clinical trial design as a decision problem. *Applied Stochastic Models in Business and Industry*. Invited, special issue in honor of Kathryn Chaloner. 33:296-301, 2017.
97. Wathen JK, **Thall PF**. A simulation study of outcome adaptive randomization in multi-arm clinical trials. *Clinical Trials*. 14:432-440, 2017.
98. **Thall PF**, Mueller P, Xu Y, Guindani M. Bayesian nonparametric statistics: A new toolkit for discovery in cancer research. *Pharmaceutical Statistics*. 16:414-423, 2017.
99. Murray TA, Yuan Y, **Thall PF**, Elizondo JA, Hofstetter WL. A utility-based design for randomized comparative trials with ordinal outcomes and prognostic subgroups. *Biometrics*. 74:1095-1103, 2018.
100. Murray TA, Yuan Y, **Thall PF**. A Bayesian machine learning method for optimizing dynamic treatment regimes. *J American Statistical Assoc*. 113:523, 1255-1267, 2018.

101. Chapple AG, **Thall PF**. Subgroup-specific dose finding in phase I clinical trials based on time to toxicity allowing adaptive subgroup combination. *Pharmaceutical Statistics*. 17:734-749, 2018.
102. **Thall PF**, Ursino M, Baudouin V, Alberti C, Zohar S. Bayesian treatment comparison using parametric mixture priors computed from elicited histograms. *Statistical Methods in Medical Research*. 28:404-418, 2019.
103. Lee J, **Thall PF**, Rezvani K. Optimizing natural killer cell doses for heterogeneous cancer patients based on multiple event times. *J Royal Statistical Society, Series C (Applied Statistics)*. 68:461-474, 2019.
104. Xu Y, **Thall PF**, Hua W, Andersson B. Bayesian nonparametric survival regression for optimizing precision dosing of intravenous busulfan in allogeneic stem cell transplantation. *J Royal Statistical Society, Series C*. 68:809-828, 2019.
105. Boulet S, Ursino M, **Thall PF**, Jannot A-S, Zohar S. Bayesian variable selection based on clinical relevance weights in small sample studies - Application to colon cancer. *Statistics in Medicine*. 38:2228-2247, 2019.
106. Lee J, **Thall PF**, Lin SH. Joint Bayesian semiparametric regression analysis of recurrent adverse events and survival in esophageal cancer patients. *Annals of Applied Statistics*. 13:221-247, 2019.
107. Chapple AG, **Thall PF**. A hybrid phase I-II/III clinical trial design allowing dose re-optimization in phase III. *Biometrics* 75:371-381. (with discussion 382-388), Rejoinder 389-391, 2019.
108. Boulet S, Ursino M, **Thall PF**, Landi B, Lepere C, Pernot S, Bergun A, Taib J, Zaanani A, Zohar S, Jannot A-S. Integration of elicited expert information via a power prior in Bayesian variable selection: application to colon cancer data. *Statistical Methods in Medical Research*. In press.
109. Lin R, **Thall PF**. Yuan, Y. An adaptive trial design to optimize dose--schedule regimes with delayed outcomes. *Biometrics*. In press.
110. **Thall PF**. Bayesian cancer clinical trial designs with subgroup-specific decisions. *Contemporary Clinical Trials*. (Invited). In press.

### Invited Discussions

111. **Thall PF**. Discussion of "A hybrid selection and testing procedure with curtailment for comparative clinical trials" by Buzaianu and Chen. *Sequential Analysis*. 28:41-43, 2009.
112. **Thall PF**. Discussion of "Analysis of forensic DNA mixtures with artefacts" by Cowell, Graverson, Lauritzen, and Mortera. *J Royal Statistical Society, Series C (Applied Statistics)*. 64:1-48, 2015.
113. **Thall PF**. Discussion of "Statistical modelling of citation exchange between statistics journals" by Varin, Cattelan, and Firth. *J Royal Statistical Society, Series A*. 179:1-63, 2016

114. **Thall PF.** Discussion of “Beyond subjective and objective in statistics” by Gelman and Hennig. *J Royal Statistical Society, Series A.* 180:1-31, 2017.
115. **Thall PF.** Interview, in ‘Dynamic treatment regimes, past, present, and future: A conversation with experts’ by EB Laber and M Davidian, *Statistical Methods in Medical Research*, 26:1605-1610, 2017.
116. **Thall PF.** Discussion of ‘Optimal treatment allocations in space and time for on-line control of an emerging infectious disease’ by Laber, et al. *J Royal Statistical Society, Series C (Applied Statistics)*. 67:743-789, 2018.
117. **Thall PF.** Discussion of “From start to finish: a framework for the production of small area official statistics” by Tzavidis, et al. *J Royal Statistical Society, Series A*, 181:927-979, 2018.

#### **Papers Published in Medical Journals**

118. Estey EH, **Thall PF**, Kantarjian H, O'Brien S, Koller CA, Beran M, Gutterman J, Deisseroth A, Keating M. Treatment of newly diagnosed acute myelogenous leukemia with GM-CSF prior to and during continuous-infusion high dose ARA-C (CHDAC) + daunorubicin: Comparison to patients without GM-CSF. *Blood* 79: 2246-2255, 1992.
119. Estey EH, **Thall PF**, Andreeff M, Beran M, Kantarjian H, O'Brien S, Escudier S, Robertson LE, Koller C, Kornblau S. Use of granulocyte colony-stimulating factor before, during, after fludarabine + ara-C induction therapy of newly-diagnosed AML or MDS: comparison with fludarabine + ara-C without G-CSF. *J Clinical Oncology* 12: 671-678, 1994.
120. Levin VA, Maor MH, **Thall PF**, Bruner J, Sawaya R, Kyritsis AP, Leeds N, Woo S, Rodriguez L, Gleason MJ. Phase II study of accelerated fractionation radiation therapy with carboplatin followed by PCV chemotherapy for the treatment of glioblastoma multiforme. *Int J Radiation Oncology and Biological Physics* 33:357-364, 1995.
121. Kornblau SM, **Thall PF**, Huh YO, Estey EH, Andreeff M. Analysis of CD7 expression in acute myelogenous leukemia: Martingale residual plots combined with ‘optimal’ cutpoint analysis reveals absence of prognostic significance. *Leukemia* 9:1735-1741, 1995.
122. Hammoud MA, Sawaya R, Shi W, **Thall PF**, Leeds NE. Prognostic significance of preoperative MRI scans in glioblastoma multiforme. *J Neuro-oncology* 27:65-73, 1996.
123. Estey EH, **Thall PF**, Mehta K, Rosenblum M, Brewer T Jr, Simmons V, Cabanillas F, Kurzrock R, Lopez-Berestein G. Alterations in tretinoin pharmacokinetics following administration of liposomal all-trans retinoic acid. *Blood* 87:3650-3654, 1996.
124. **Thall PF**, Simon RM, Estey EH. New statistical strategy for monitoring safety and efficacy in single-arm clinical trials. *J Clinical Oncology* 14:296-303, 1996.
125. Estey EH, **Thall PF**, Pierce S, Kantarjian H, Keating M. Treatment of newly diagnosed acute promyelocytic leukemia without cytarabine. *J Clinical Oncology* 15:483-490, 1997.



126. Przepiorka D, Anderlini P, Ippoliti C, Khouri I, Fietz T, **Thall PF**, Mehra R, Giralt S, Gajewski J, Deisseroth AB, Cleary K, Champlin R, van Besien K, Andersson B, Korbling M. Allogeneic blood stem cell transplantation in advanced hematologic cancers. *Bone Marrow Transplantation* 19:455-460, 1997.
127. Van Besien K, **Thall PF**, Korbling M, Pugh WC, Khouri I, Mehra R, Giralt S, Anderlini P, Amin K, Mirza N, Seong D, Gajewski J, Hester J, Andersson B, Cabanillas F, Champlin R, Przepiorka D. Allogeneic transplantation for recurrent or refractory non-Hodgkin's lymphoma with poor prognostic features after conditioning with thiotepa, busulfan, cyclophosphamide. Experience in 42 consecutive patients. *Biology of Blood and Marrow Transplantation* 3:150-156, 1997.
128. Estey EH, **Thall PF**, Beran M, Kantarjian H, Pierce S, Keating M. Effect of diagnosis (refractory anemia with excess blasts, refractory anemia with excess blasts in transformation, or acute myeloid leukemia [AML]) on outcome of AML-type chemotherapy. *Blood* 90:2969-2977, 1997.
129. Estey EH, **Thall PF**, Pierce S, Kantarjian H, Keating M, Freireich E. Association between increased body mass index and a diagnosis of acute promyelocytic leukemia in patients with acute myeloid leukemia. *Leukemia* 11:1661-1664, 1997.
130. Seong D, **Thall PF**, Kantarjian H, Talpaz M, Swankowski J, Xu J, Shen Y, Glassman A, Ramagli L, Siciliano M. Philadelphia chromosome-positive myeloid cells in the peripheral blood of chronic myelogenous leukemia patients: Comparison with the frequency detected in cycling cells of the bone marrow. *Clinical Cancer Research*, 4:861-867, 1998.
131. Wright-Browne V, Schnee AM, Jenkins MA, **Thall PF**, Aggarwal BB, Talpaz M, Estrov Z. Serum cytokine levels in infectious mononucleosis at diagnosis and convalescence. *Leukemia and Lymphoma*, 30:583-589, 1998.
132. Price KJ, **Thall PF**, Kish SK, Shannon VR, Andersson BS. Prognostic indicators for blood and marrow transplant patients admitted to an intensive care unit. *American J Respiratory Critical Care Medicine*, 158:876-884, 1998.
133. Estrov Z, **Thall PF**, Talpaz M, Estey EH, Kantarjian HM, Andreeff M, Harris D, Van Q, Walterscheid M, Kornblau SM. Caspase 2 and Caspase 3 protein levels as predictors of survival in acute myelogenous leukemia. *Blood*, 92:3090-3097, 1998.
134. Przepiorka D, Khouri I, **Thall PF**, Mehra R, Lee M-S, Ippoliti C, Giralt S, Gajewski J, van Besien K, Andersson B, Korbling M, Deisseroth A, Champlin R. Thiotepa, busulfan and cyclophosphamide as a preparative regimen for allogeneic transplantation for advanced chronic myelogenous leukemia. *Bone Marrow Transplantation*, 23:977-981, 1999.
135. Estey EH, **Thall PF**, Pierce S., Cortes J, Beran M, Kantarjian H., Keating MJ, Andreeff M, Freireich, E. Randomized phase II study of Fludarabine +Cytosine Arabinoside+ Idarubicin +/- All Trans Retinoic Acid +/- Granulocyte-colony stimulating factor in poor prognosis newly diagnosed acute myeloid leukemia and myelodysplastic syndrome. *Blood*, 93:2478-2484, 1999.

136. Estey EH, **Thall PF**, Reed P, Dong Q, Kantarjian H, Pierce S, Keating M. Treatment of newly diagnosed AML, RAEB-t or RAEB with lisofylline or placebo in addition to chemotherapy. *Leukemia*, 13:850-854, 1999.
137. Kornblau S, **Thall PF**, Estrov Z, Walterscheid M, Patel S, Theriault A, Keating MJ, Kantarjian H, Estey E, Andreeff M. The prognostic impact of BCL2 protein expression in acute myelogenous leukemia varies with cytogenetics. *Clinical Cancer Research*, 5:1758-1766, 1999.
138. Gershenson DM, Morris M, Burke TW, Levenback C, Wolf J, Lee JJ, **Thall PF**, Atkinson EN, Silva EG, Wharton JT. A phase I trial of intravenous melphalan, paclitaxel, cisplatin plus granulocyte colony-stimulating factor in patients with suboptimal advanced epithelial ovarian cancer or peritoneal cancer. *Cancer*, 86:2291-2300, 1999.
139. Albitar M, Dong Q, Saunder D, Lucas L, Kaabi L, Zaldivar E, **Thall PF**. Evaluation of automated leukocyte differential counts in a cancer center. *Laboratory Hematology*, 5:10-14, 1999.
140. Faderl S, **Thall PF**, Kantarjian HM, Talpaz M, Pierce S, Harris D, Van Q., Estrov Z. Caspase 2 and Caspase 3 as predictors of complete remission survival in adults with acute lymphoblastic leukemia. *Clinical Cancer Research*, 5:4041-4047, 1999.
141. **Thall PF**, Estey EH and Sung, H-G. A new statistical method for dose-finding based on efficacy and toxicity in early phase clinical trials. *Investigational New Drugs*, 17:155-167, 1999.
142. Dougherty TB, Porsche VH, **Thall PF** Maximum tolerated dose of nalmefene in patients receiving epidural fentanyl and dilute bupivacaine for postoperative analgesia. *Anesthesiology*, 92:1010-1016, 2000.
143. Estey EH, Shen Y, **Thall PF** Effect of time to complete remission on subsequent survival and disease-free survival time in AML, RAEB-t, RAEB. *Blood*, 95:72-77, 2000.
144. Seong C-M, Giralt S, Kantarjian H, Xu J, Swankowski J, Hayes K, Glassman AB, Khouri I, Korbling M, **Thall PF**, Siciliano MJ, Champlin RE. Early detection of relapse by hypermetaphase FISH after allogeneic bone marrow transplantation for chronic myelogenous leukemia. *J Clinical Oncology*, 18:1831-1836, 2000.
145. Giralt S, **Thall PF**, Khouri I, Wang X, Braunschweig I, Ippolitti C, Claxton D, Donato M, Bruton J, Cohen A, Davis M, Andersson BS, Anderlini P, Gajewski J, Kornblau S, Andreeff M, Przepiorka D, Ueno NT, Mouldrem J, Champlin R. Melphalan and purine analog containing preparative regimens, less intensive conditioning for patients with hematologic malignancies undergoing allogeneic progenitor cell transplantation. *Blood* 97:631-637, 2001.
146. Estey EH, **Thall PF**, Cortes JE, Giles FJ, O'Brien S, Pierce SA, Wang X, Kantarjian HM, Beran M. Comparison of idarubicin + ara-C-, fludarabine + ara-C-, topotecan + ara-C-based regimens in treatment of newly diagnosed AML, RAEB-T, or RAEB. *Blood* 98:3575-3583, 2001.
147. Tseng JE, Glisson BS, Khuri FR, Shin DM, Myers JN, El-Naggar AK, Roach JS, Ginsberg LE, **Thall PF**, Wang X, Teddy S, Lawhorn KN, Zentgraf RE, Steinhaus GD, Pluda JM, Abbruzzese JL, Hong

WK, Herbst RS. Phase II study of the anti-angiogenesis agent thalidomide in recurrent or metastatic squamous cell carcinoma of the head and neck. *Cancer*, 92:2364-2373, 2001.

148. Faderl S, **Thall PF**, Estrov Z. Time to platelet recovery predicts outcome of patients with de novo acute lymphoblastic leukemia who have achieved a complete remission. *British J Hematology*, 117:869-874, 2002.
149. Estey EH, **Thall PF**, Giles FJ, Wang XM, Cortes JE, Beran M, Pierce SA, Thomas DA, Kantarjian HM. Gemtuzumab ozogamicin with or without interleukin 2 in patients 65 years of age or older with untreated AML and high-risk MDS: comparison with idarubicin + continuous-infusion high-dose cytosine arabinoside. *Blood*, 99:4343-4349, 2002.
150. Andersson BS, **Thall PF**, Madden T, Couriel D, Wang X, Tran HT, Anderlini P, de Lima M, Gajewski J, Champlin RE. Busulfan systemic exposure relative to regimen-related toxicity and acute graft vs. host disease; defining a therapeutic window for IVBuCy2 in chronic myelogenous leukemia. *Biology of Blood and Marrow Transplantation*, 8:477-485, 2002.
151. Daliani DD, Papandreou CN, **Thall PF**, Wang X, Perez C, Oliva R, Pagliaro L, Amato R. A pilot study of thalidomide in patients with progressive metastatic renal cell carcinoma. *Cancer*, 95:758-765, 2002.
152. Papandreou CN, Daliani DD, **Thall PF**, Tu S-M, Wang X, Reyes A, Troncoso P, Logothetis L. Results of a phase II study with doxorubicin, etoposide, and cisplatin in patients with fully characterized small-cell carcinoma of the prostate. *J Clinical Oncology*, 20:3072-3080, 2002.
153. Weiner JR, Windham TC, Estrella VC, Parikh NU, **Thall PF**, Deavers MT, Bast RC, Mills GB, Gallick GE. Activated src protein tyrosine kinase is overexpressed in late-stage human ovarian cancers. *Gynecologic Oncology*, 88:73-79, 2003.
154. Millikan R, **Thall PF**, Lee S-J, Jones D, Cannon MW, Kuebler JP, Wade III J, Logothetis CJ. Randomized multicenter phase II trial of two multicomponent regimens in androgen independent prostate cancer. *J Clinical Oncology*, 21:878-883, 2003.
155. Shaw PH, Gilligan D, Wang XM, **Thall PF**, Corey SJ. Ex vivo expansion of megakaryocyte precursors from umbilical cord blood CD34+ cells in a closed liquid culture system. *Biology of Blood and Marrow Transplantation*, 9:151-156, 2003.
156. Estey EH, **Thall PF**. New designs for phase 2 clinical trials. *Blood*, 102: 442-448, 2003.
157. Estey EH, **Thall PF**, Wang X, Verstovsek S, Cortes J, Kantarjian HM. Effect of circulating blasts at time of complete remission on subsequent relapse-free survival time in newly-diagnosed AML. *Blood*, 102:3097-3099, 2003.
158. **Thall PF**, Lee S-J. Practical model-based dose-finding in phase I clinical trials: Methods based on toxicity. *International J Gynecological Cancer*. 13: 251-261, 2003. (Invited)
159. **Thall PF**, Champlin RE, Andersson BE. Comparison of 100-day mortality rates associated with IV busulfan and cyclophosphamide versus other preparative regimens in allogeneic bone marrow

transplant for chronic myelogenous leukemia: Bayesian sensitivity analyses of confounded treatment and center effects. *Bone Marrow Transplantation*, 33: 1191-1199, 2004.

160. Khuri FR, Glisson BS, Kim ES, **Thall PF**, Meyers ML, Herbst RS, Munden RF, Zaknoen S, Baum C, Zhu Y, Statkevich P, Bangert S, Thompson E, Lu C, Wang X, Shin DM, Papadimitrakopoulou V, Fossells FV, Bishop WR, Hong WK. Phase I study of the farnesyl transferase inhibitor (FTI) lonafarnib with paclitaxel in solid tumors. *Clinical Cancer Research* 10:2968-2976, 2004.
161. de Lima M, Couriel D, **Thall PF**, Wang X, Madden T, Jones R, Shpall EJ, Shahjahan M, Pierre B, Giralt S, Korbling M, Russell JA, Champlin RE, Andersson BS. Once daily intravenous busulfan and fludarabine: Clinical and pharmacokinetic results of a reduced toxicity myeloablative regimen for allogeneic stem cell transplantation in AML and MDS. *Blood*. 104:857-864, 2004.
162. Pisters PWT, Patel SR, Prieto VG, **Thall PF**, Lewis VO, Feig BW, Hunt KK, Yasko AW, Weber KL, Fenstermacher MJ, Burgess MA, Pollock RE, Zagars GK, Benjamin RS, Ballo MT. Phase I trial of preoperative doxorubicin-based concurrent chemoradiation and surgical resection for localized extremity and body wall soft tissue sarcomas. *J Clinical Oncology*. 22:3375-3380, 2004.
163. Mathew P, **Thall PF**, Jones D, Perez C, Bucana C, Troncoso P, Kim, S-J, Millikan R, Fidler, IJ and Logothetis C. Platelet-derived growth factor receptor inhibitor imatinib mesylate and docetaxel: A modular phase I trial in androgen-independent prostate cancer. *J Clinical Oncology*. 22:3323-3329, 2004.
164. Cormier JN, Huang XH, Xing Y, **Thall PF**, Wang X, Benjamin R, Pollock RE, Antonescu CR, Maki RG, Brennan MF, Pisters PWT. Cohort analysis of patients with localized high-risk extremity soft tissue sarcoma treated at two cancer centers: Chemotherapy-associated outcomes. *J Clinical Oncology*. 22:4567-4574, 2004.
165. Wong R, Shahjahanan M, Wang X, **Thall PF**, de Lima M, Khouri I, Gajewski J, Alamo J, Couriel D, Andersson BS, Donato M, Hosing C, Komanduri K, Anderlini P, Molldrem J, Ueno NT, Estey E, Ippoliti C, Champlin R, Giralt S. Prognostic factors for outcomes of patients with refractory or relapsed acute myelogenous leukemia or myelodysplastic syndromes undergoing allogeneic progenitor cell transplantation. *Biology of Blood and Marrow Transplantation*. 11:108-114, 2005.
166. Steinert DM, Oyarzo M, Wang X, Choi H, **Thall PF**, Medeiros LJ, Raymond AK, Benjamin RS, Zhang W, Trent JC. Expression of Bcl-2 in gastrointestinal stromal tumors: correlation with progression-free survival in 81 patients treated with imatinib mesylate. *Cancer*. 106:1617-1623, 2006.
167. Tannir NM, Cohen L, Wang X, **Thall PF**, Mathew P, Jonasch E, Siefer-Radtke A, Pagliaro LC, Ng C, Logothetis C. Improved tolerability and quality of life with maintained efficacy using twice-daily low-dose interferon alfa 2b: results of a randomized phase III trial of low-dose versus intermediate-dose interferon alfa 2b in patients with metastatic renal cell carcinoma. *Cancer*. 107:2254-2261, 2006.
168. Maki RG, Wathen JK, Hensley ML, Patel SR, Priebat DA, Okuno S, Samuels B, Fanucchi M, Harmon D, Schuetze SM, Reinke D, **Thall PF**, Benjamin RS, Baker LH. An adaptively randomized phase III

study of gemcitabine and docetaxel versus gemcitabine alone in patients with metastatic soft tissue sarcomas. *J Clinical Oncology*. 25:2755-2763, 2007.

169. **Thall PF**, Wathen JK. Practical Bayesian adaptive randomization in clinical trials. *European J Cancer*. 43, 860-867, 2007. (Invited)
170. Mathew P, **Thall PF**, Bucana C, Jones D, Johnson M, Wen S, Troncoso P, Oh WK, Morris MJ, Meluch A, Pagliaro L, Tannir N, Tu SM, Smith L, Cohen L, Kim SJ, Fidler IJ, Logothetis C Platelet-derived growth factor receptor inhibition and chemotherapy for castration-resistant prostate cancer with bone metastases. *Clinical Cancer Research*. 13:5816-5833, 2007
171. **Thall PF**, Logothetis C, Pagliaro L, Wen S, Brown MA, Williams D, Millikan R. Adaptive therapy for androgen independent prostate cancer: A randomized selection trial including four regimens. *J National Cancer Institute*. 99:1613-1622, 2007
172. Mao S, Daliani D, Wang X, **Thall PF**, Do K, Perez C, Brown M, Bouchillon K, Carter C, Logothetis C, Kim J. Employing the treatment-free interval of intermittent androgen ablation to screen candidate prostate cancer therapies. *The Prostate*. 67:1677-1685, 2007.
173. McAuliffe JC, Lazar JFC, Yang D, Steinert DM, Qiao W, **Thall PF**, Raymond AK, Benjamin RS, Trent JC. Association of intra-tumoral vascular endothelial growth factor expression and clinical outcome for patients with gastrointestinal stromal tumors treated with imatinib mesylate. *Clinical Cancer Research*. 13:6727-6734, 2007.
174. deLima M, Champlin RE, **Thall PF**, Wang X, Cook JD, Martin TG, McCormick G, Qazilbash M, Kebriaei P, Couriel D, Shpall EJ, Khouri I, Anderlini P, Hosing C, Chan KE, Patah PA, Caldera Z, Jabbour E, Giralt S, Phase I/II study of gemtuzumab ozogamicin added to fludarabine, melphalan and allogeneic hematopoietic stem cell transplantation for high-risk CD33 positive myeloid leukemias and myelodysplastic syndrome. *Leukemia*. 22:258-264, 2008.
175. Andersson BS, de Lima M, **Thall PF**, Wang X, Couriel D, Korbling M, Roberson S, Giralt S, Pierre B, Russell JA, Shpall EJ, Jones RB, Champlin RE. Once daily IV busulfan and fludarabine (IV Bu-Flu) compares favorably with IV busulfan and cyclophosphamide (IV BuCy2) as pretransplant conditioning therapy in AML/MDS. *Biology of Blood and Marrow Transplantation*. 14:672-684, 2008.
176. **Thall PF**, Wathen JK. Bayesian methods to account for patient heterogeneity in phase II clinical trials. *Current Opinion in Oncology*. 20:407-411, 2008 (Invited).
177. Tannir NM, **Thall PF**, Ng C, Wang X, Wooten L, Siefker-Radtke A., Mathew P, Pagliaro L, Wood C, Jonasch E. A phase II trial of gemcitabine plus capecitabine in metastatic renal cell cancer previously treated with immunotherapy and targeted agents. *J Urology*. 180:867-872. 2008.
178. Whelan HT, Cook JD, Amlie-Lefond CM, Hovinga CA, Chan AK, Ichord RN, deVeber GA, **Thall PF**. Practical model-based dose-finding in early phase clinical trials: Optimizing tissue plasminogen activator dose for treatment of ischemic stroke in children. *Stroke*. 39:2627-2636, 2008.
179. Mathew P, **Thall PF**, Wen S, Bucana C, Jones D, Horne E, Oh WK, Morris MJ, Lee Y-C, Logothetis CJ, Lin S-H, Fidler IJ. Dynamic change in phosphorylated platelet-derived growth factor receptor in

peripheral blood leucocytes following docetaxel therapy predicts progression-free and overall survival in prostate cancer. *British J Cancer*. 99:1426-1432, 2008.

180. Mathew P, Pisters LL, Wood CG, Papadopoulos JN, Williams DL, **Thall PF**, Wen S, Horne E, Oborn CJ, Langley R, Fidler IJ, Pettaway CA. Neoadjuvant platelet-derived growth factor inhibitor therapy combined with docetaxel and androgen ablation for high risk localized prostate cancer. *J Urology*. 181:81-87, 2009.
181. McAuliff JC, Hunt KK, Lazar AJF, Choi H, Qiao W, **Thall, P**, Pollock RE, Benjamin RS, Trent J. A Randomized, phase II study of preoperative plus postoperative imatinib in GIST: Evidence of rapid radiographic response and temporal induction of tumor cell apoptosis. *Annals of Surgical Oncology* 16:910-919, 2009.
182. Norman PH, **Thall PF**, Purugganan RV, Reidel B, Thakar DR, Rice DC, Huynh L, Qiao W, Wen S, Smythe WR. A possible association between aprotinin and improved survival after radical surgery for mesothelioma. *Cancer* 115:833-841, 2009.
183. Tsavachidou D, McDonnell T, Wen S, Wang X, Vakar-Lopez F, Pisters L, Pettaway C, Wood C, Do K-A, **Thall PF**, Stephens L, Taylor R, Menter D, Tronconso P, Lippman S, Logothetis CJ. Selenium and Vitamin E: Cell type and intervention-specific tissue effects in prostate cancer. *J National Cancer Institute* 101:306-320, 2009.
184. Siefker-Radtke AO, Kamat AM, Grossman B, Williams DL, Qiao W, **Thall PF**, Dinney CP, Millikan RE. A phase II clinical trial of alternating doublet chemotherapy with ifosfamide/doxorubicin and etoposide/cisplatin in small cell urothelial cancer: evidence supporting pre-operative chemotherapy. *J Clinical Oncology*. 27:2592-2597, 2009.
185. Andersson BS, de Lima M, **Thall PF**, Madden T, Russell JA, Champlin RE. Reduced-toxicity conditioning therapy with allogeneic stem cell transplantation for acute leukemia. *Current Opinion in Oncology* 21 Suppl 1:S11-5, 6/2009.
186. Ciurea SO, de Lima M, Cano P, Wang X, Korbling M, Giralt S, Shpall EJ, **Thall PF**, Champlin RE, Fernandez-Vina M. High risk of graft failure in patients with anti-HLA antibodies undergoing haploidentical stem cell transplantation. *Transplantation*. 88(8):1019-1024, 2009.
187. Armistead PM, de Lima M, Pierce S, Guo W, Wang X, **Thall PF**, Giralt S, Champlin R, Estey EH. Quantifying the survival benefit for allogeneic stem cell transplant in relapsed acute myeloid leukemia. *Biology of Blood and Marrow Transplantation*. 15(11):1431-1438, 2009.
188. Wrede B, Hasselblatt M, Peters O, **Thall PF**, Kutluk T, Moghrabi A, Mahajan A, Rutkowski S, Diez B, Wang X, Pietsch T, Kortman R, Paulus W, Jeibman A, Wolff JEA. Atypical choroid plexus papilloma – clinical experience in the CPT-SIOP-2000 study. *J Neuro-Oncology*. 95:383-392, 2009
189. Moulder SL, Holmes FA, Tolcher AW, **Thall PF**, Broglio K, Valero V, Buzdar AU, Arbuuck SG, Siedman A, Hortobagyi GN. A randomized phase II trial comparing 3-hour versus 96-hour infusion schedules of paclitaxel for the treatment of metastatic breast cancer. *Cancer*. 116:814-821, 2010.

190. Pagliaro LC, Williams D, Daliani D, Williams MB, Osai W, Kincaid M, Wen S, **Thall PF**, Pettaway CA,. Neoadjuvant paclitaxel, ifosfamide, and cisplatin chemotherapy for metastatic penile cancer: a phase II study. *J Clinical Oncology*. 28:3851-3857, 2010.
191. de Lima M, Giralt S, **Thall PF**, Silva LP, Wang X, Jones RB, Komanduri K, Braun TM, Nguyen HQ, Champlin R, Garcia-Manero G. Maintenance therapy with low-dose azacitidine after allogeneic hematopoietic stem cell transplantation for relapsed AML or MDS: a dose and schedule finding study. *Cancer*. 116:5420-5431, 2010.
192. Kebriaei P, Madden T, Kazerooni R, Wang X, **Thall PF**, Ledesma C, Nieto Y, Shpall EJ, Hosing C, Qazilbash M, Popat U, Khouri I, Champlin RE, Jones R, Andersson BS. Intravenous busulfan plus melphalan is a highly effective, well-tolerated preparative regimen for autologous stem cell transplantation in patients with advanced lymphoid malignancies. *Biology of Blood and Marrow Transplantation*. 17:412-420, 2011.
193. Andersson BS, Valdez BC, de Lima M, Wang X, **Thall PF**, Worth LL, Popat U, Madden T, Hosing C, Alousi A, Rondon G, Kebriaei P, Shpall EJ, Jones RB, Champlin RE. Clofarabine ± Fludarabine with once daily IV busulfan as pretransplant conditioning therapy for advanced myeloid leukemia and MDS. *Biology of Blood and Marrow Transplantation*. 17:893-900, 2011.
194. Mathew P, Wen S, Morita S, **Thall PF**. Placental growth factor and soluble c-kit receptor dynamics characterize the cytokine signature of imatinib in prostate cancer and bone metastases. *J Interferon and Cytokine Research*. 31(7):539-544, 2011.
195. Wolff JE, Rytting M, Vats T, Ater J, Mahajan A, Woo S, Ketonen L, Kuttesch J, Liu D, **Thall P**, Chang E. Induction treatment for diffuse intrinsic pontine glioma, experience at M.D. Anderson Cancer Center. *Anticancer Research*. 31:2265-2270, 2011.
196. Ciurea SO, **Thall PF**, Wang X, Wang S, Ying H, Cano P, Aung FIM, Rondon G, Molldrem JJ, Korbling M, Shpall EJ, de Lima M, Champlin RE, Fernandez-Vina, M. Donor-specific anti-HLA antibodies and graft failure in matched unrelated donor hematopoietic stem cell transplantation. *Blood*. 118:5957-5964, 2011
197. Sharma M, Khan H, **Thall PF**, Orlowski RZ, Bassett RL. Shah N, Bashir Q, Parmar S, Wang M, Shah JJ, Hosing CM, Popat UR, Giralt SA, Champlin RE,. Qazilbash MH. A randomized phase 2 trial of a preparative regimen of bortezomib, high dose melphalan, arsenic trioxide and ascorbic acid. *Cancer* 118:2507-2515, 2012.
198. Shah N, Ahmed F, Bashir Q, Qureshi S, Dinh Y, Rondon G, Wen S, **Thall P**, Khan H, Giralt S, Champlin R, Qazilbash M. Durable remission with salvage autotransplants in patients with multiple myeloma. *Cancer*. 118:3549-3555, 2012.
199. Nieto Y, **Thall P**, Valdez B, Andersson B, Champlin R, et al. High-dose infusional gemcitabine combined with busulfan and melphalan with autologous stem-cell transplant in patients with refractory lymphoid malignancies. *Biology of Blood and Marrow Transplantation*. 18:1677-1686, 2012.

200. Lin SH, Wang L, Myles B, **Thall PF**, Hofstetter WL, Swisher SG, Ajani JA, Cox JD, Komaki R, Liao W. Propensity score based comparison of long term outcomes with 3D conformal radiotherapy (3DCRT) versus Intensity Modulated Radiation Therapy (IMRT) in treatment of esophageal cancer. *J Radiation Oncology, Biology, Physics*. 84:1078-1085, 2012.
201. Parmar S, Rondon G, de Lima M, **Thall PF**, et al. Dose intensification of busulfan in the preparative regimen is associated with improved outcomes: A phase I/II controlled, randomized study. *Biology of Blood and Marrow Transplantation*. 19:474-480, 2013.
202. David E, **Thall PF**, Wei C, Hofstetter WL, Rice DC, Roth JA, Swisher SG, Walsh GW, Vaporciyan AA, Mehran R. Visceral pleural invasion is not predictive of worse survival or disease-free survival in NSCLC patients with smaller tumor size in a North American patient population. *Annals of Thoracic Surgery*. 95:1872-1877, 2013.
203. Aparicio AM, Harzstak AL, Corn PG, Lin E, Mathew P, Araujo JC, Tu SM, Pagliaro LC, Kim J, Millikan RE, Tannir NM, Arap W, Jones DM, Troncoso P, **Thall PF**, Logothetis CJ. Platinum-based chemotherapy for variant castrate-resistant prostate cancer. *Clinical Cancer Research*. 19:3621-3630, 2013.
204. Yilmaz M, Chemaly RF, Han XY, **Thall PF**, Fox PS, Tarrand JJ, de Lima M, Hosing CM, Popat UR, Shpall EJ, Champlin, Qazilbash, MH. Adenoviral infections in adult allogeneic hematopoietic stem cell transplant recipients: A single center experience. *Bone Marrow Transplantation*. 48:1218-1223, 2013.
205. Bashir Q, Khan H, **Thall PF**, Liu P, et al. A randomized phase II trial of fludarabine/melphalan 100 versus fludarabine/melphalan 140 followed by allogeneic hematopoietic stem cell transplantation for patients with multiple myeloma. *Biology of Blood and Marrow Transplantation*. 19:1453-1458, 2013.
206. Ajani JA, **Thall PF**, Swisher SG et al. A phase II randomized trial of induction chemotherapy versus no induction chemotherapy followed by preoperative chemoradiation in patients with esophageal cancer. *Annals of Oncology* 24:2844-2849, 2013.
207. Tang X, Alatrash G, Ning J, Jakher H, Stafford P, Zope M, Shpall EJ, Jones RB, Champlin RE, **Thall PF**, Andersson BS. Increasing chimerism following allogeneic stem cell transplantation is associated with longer survival time. *Biology of Blood and Marrow Transplantation*. 20:1139-1144, 2014.
208. Kanakry CG, O'Donnell P, Furlong T, de Lima M, Wei W, Medeot M, Milecarek M, Champlin R, Jones RJ, **Thall PF**, Andersson BS, Luznik L Multi-institutional study of post-transplantation cyclophosphamide as single-agent graft-versus-host disease prophylaxis after allogeneic bone marrow transplantation using myeloablative busulfan and fludarabine conditioning. *J Clinical Oncology* 32: 3497-3505, 2014.
209. Wang J, Milton DR, He L, Komaki R, Liao Z, Crane CH, Minsky B, **Thall PF**, Lin SH. Comparison of locoregional versus extended locoregional radiation volumes for patients with nonmetastatic gastro-esophageal junction carcinomas. *Journal of Thoracic Oncology*. 10(3):518-526, 2015.



210. Konopleva M, **Thall PF**, et al. Phase I/II Study of PR104, hypoxia-activated pro-drug in refractory / relapsed acute myeloid leukemia and acute lymphoblastic leukemia. *Haematologica*. 100:375-385, 2015.
211. Konopleva M, Benton CB, **Thall PF**, et al. Leukemia cell mobilization with G-CSF plus plerixafor during busulfan-fludarabine conditioning in allogeneic stem cell transplantation. *Bone Marrow Transplantation*. 50:939-946, 2015.
212. **Thall PF**, Fox PS, Wathen JK. Statistical controversies in medical research: scientific and ethical problems with adaptive randomization in comparative clinical trials. *Annals of Oncology* 26:1621-1628, 2015 (Invited)
213. Ciurea SO, **Thall PF**, Milton D, Barnes TH, Kongtim P, López AA, Yap DA, Popat U, Rondon G, Lichtiger B, Aung F, Fernández-Viña M, Champlin R, Cao K. Complement-binding donor-specific anti-HLA antibodies and risk of primary graft failure in hematopoietic stem cell transplantation. *Biology of Blood and Marrow Transplantation*. 21:1392-1398, 2015.
214. Shah N, **Thall PF**, Fox P, Bashir Q, Qazilbash M, et al. Phase I/II trial of lenalidomide and high dose melphalan with autologous stem cell transplantation for relapsed myeloma. *Leukemia*. 29:1945–1948, 2015.
215. Tseng WW, Zhou S, **Thall PF**, et al. Phase I adaptive dose-finding study of neoadjuvant gemcitabine combined with radiation therapy for patients with high risk extremity and trunk soft tissue sarcoma. *Cancer*. 121(20):3659–3667, 2015.
216. Sandberg D, Rytting M, **Thall PF**, et al. Methotrexate administration directly into the fourth ventricle in children with malignant fourth ventricular brain tumors: A pilot clinical trial. *J Neuro-Oncology*. 125:133-141, 2015.
217. Nieto Y, Valdez BC, **Thall PF**, et al. Vorinostat combined with high-dose gemcitabine, busulfan and melphalan with autologous stem-cell transplantation in patients with refractory lymphomas. *Biology of Blood and Marrow Transplantation*. 21(11):1914-20, 2015.
218. Nieto Y, Valdez B, **Thall PF**, et al. Double epigenetic modulation of high-dose chemotherapy with azacitidine and vorinostat for patients with refractory or poor-risk relapsed lymphoma. *Cancer*. 122:2680-2688, 2016.
219. Alatrash G, **Thall PF**, Andersson BS. et al. Long-term outcomes after treatment with clofarabine ± fludarabine with once daily IV busulfan as pretransplant preparative therapy for advanced myeloid leukemia and MDS. *Biology of Blood and Marrow Transplantation*. 22(10):1972-1800, 2016.
220. He L, Chapple A, Liao Z, Komaki R, **Thall PF**, Lin SH. Bayesian regression analyses of radiation modality effects on pericardial and pleural effusion and survival in esophageal cancer. *Radiotherapy and Oncology* 121:70-74, 2016.
221. Qazilbash M, Wieder E, **Thall PF**, Wang X, et al. PR1 peptide vaccine induces specific immunity with clinical responses in myeloid malignancies. *Leukemia*. 31:697-704, 2017.

222. Andersson BS, **Thall PF**, Valdez BC, Milton, D, et al. Fludarabine with pharmacokinetically-guided IV busulfan is superior to fixed-dose delivery in pretransplant conditioning of AML/MDS patients. *Bone Marrow Transplantation*. 52:580-587, 2017.
223. Lin SH, Merrell KW, Shen J, Verma V, Correa AM, Wang L, **Thall PF**, et al. Multi-institution analysis of radiation modality use and postoperative outcomes of neoadjuvant chemoradiation for esophageal cancer. *Radiotherapy and Oncology* 123:376-381, 2017.
224. Yan F, **Thall PF**, Lu KH, Gilbert MR, Yuan Y. Phase I-II clinical trial design: A state-of-the-art paradigm for dose finding with novel agents. *Annals of Oncology*. 29(3):694-699, 2018.
225. Nieto Y. **Thall PF**, Ma J, Champlin R, Andersson, BS, et al. Phase II trial of high-dose gemcitabine/busulfan/melphalan with autologous stem-cell transplantation for primary refractory or poor-risk-relapsed Hodgkin's lymphoma. *Biology of Blood and Marrow Transplantation*. 24:1602-1609, 2018.
226. Kellner JN, Delemartre EM, **Thall PF**, Andersson BS, Parmar S, et al. Third party, umbilical cord blood derived regulatory T-cells for prevention of graft versus host disease in allogeneic hematopoietic stem cell transplantation: feasibility, safety and immune reconstitution. *Oncotarget*. 9:35611-35622, 2018.
227. Hu B, **Thall PF**, Milton D, Qazilbash M, et al. High-risk myeloma and minimal residual disease post autologous-HSCT predict worse outcomes. *Leukemia and Lymphoma*. 60: 442-452, 2019.
228. Amsbaugh M, Mahajan A, **Thall PF**, McAleer MF, Paulino A, Grosshans D, Khatua S, Ketonen L, Fontanilla S, McGovern S. A phase 1/2 trial of reirradiation for diffuse intrinsic pontine gliomas. *International Journal of Radiation Oncology, Biology, Physics* 104(1):144-148, 2019.
229. Alatrash G, Kidwell KM, **Thall PF**, Di Stasi A, Chen J, Zope M, Champlin RE, Popat U, Shpall EJ, Jones RB, Andersson BS. Reduced intensity vs. myeloablative conditioning with fludarabine in combination with PK-guided busulfan in patients with AML/MDS. *Bone Marrow Transplantation*. 54:1245-1253, 2019.
230. Bashir Q, **Thall PF**, Milton D, Fox P, Qazilbash M, et al. Conditioning with busulfan plus melphalan versus melphalan alone before autologous haemopoietic cell transplantation for multiple myeloma: an open-label, randomised, phase 3 trial. *The Lancet Haematology* Volume 6, e266-275, 2019.
231. **Thall PF**. Bayesian utility-based designs for subgroup-specific randomized treatment comparison and early phase dose optimization in oncology clinical trials. *JCO Precision Oncology*. (Invited). Published online at [ascopubs.org/journal/po](https://doi.org/10.1200/PO.18.00379), <https://doi.org/10.1200/PO.18.00379>, October 24, 2019
232. Gauthier J, Yuan Y, **Thall PF**. Bayesian phase 1/2 trial designs and cellular immunotherapies: a practical primer. (Invited) *Cell and Gene Therapy Insights*. 5:1483-1494, 2019.
233. Rodriguez-Restrepo A, Mena G, Mehran, R, Cata J, **Thall PF**, Milton D, Rice D, et al. Matched pairs comparison of an enhanced recovery pathway versus conventional management on opioid exposure and pain control in patients undergoing lung surgery. *Annals of Surgery*. In press

234. Liu E, Marin D, Banerjee P, Macapinlac H, **Thall PF**, Rezvani K, et al. IL-15 armored CAR-transduced NK cells against CD19 positive B cell tumors. *New England Journal of Medicine*. In press.

### Book Chapters and Encyclopedia Articles

235. **Thall PF**, Simon R. Recent developments in the design of phase II clinical trials. In: P. Thall (ed.), *Recent Advances in the Design and Analysis of Clinical Trials*, pp. 49-71, Kluwer: Norwell, Massachusetts, 1995.
236. Simon R, **Thall PF**. Phase II clinical trials. In: P. Armitage, T. Colton, (eds.), *Encyclopedia of Biostatistics, Vol. 4*, pp. 3370-3376, United Kingdom; John Wiley & Sons Ltd., 1998.
237. **Thall PF**, Estey EH. Graphical methods for evaluating covariate effects in the Cox model. In: J. Crowley (ed.), *Handbook of Statistics in Clinical Oncology*, pp.411-432, New York: Marcel-Dekker, 2001.
238. Millikan R, **Thall PF**. Statistical considerations in the phase II evaluation of new therapies. In: M. Droller (ed.), *Current Clinical Urology: Bladder Cancer: Current Diagnosis and Treatment*, pp. 423-438, Totowa, NJ: Humana Press, 2001.
239. **Thall PF**, Sung H-G, Estey EH. Multi-course treatment strategies for clinical trials of rapidly fatal diseases (with discussion). In *Case Studies in Bayesian Statistics VI, Lecture Notes in Statistics 167*, pp. 33-89, New York: Springer, 2002.
240. **Thall PF**, Wang X. Bayesian sensitivity analyses of confounded treatment effects. In: JC Crowley and DP Pauler (eds) *Handbook of Statistics in Clinical Oncology: Second Edition, Revised and Expanded*, pp. 523-540, Boca Raton: Chapman & Hall/CRC Taylor & Francis Group, 2006.
241. **Thall PF**, Cook JD. Using both efficacy and toxicity for dose-finding. In S. Chevret (ed), *Statistical Methods for Dose Finding Experiments*. pp 275-285, New York: John Wiley & Sons, 2006.
242. Bekele BN, **Thall PF**. Dose-finding based on multiple ordinal toxicities. In S. Chevret (ed), *Statistical Methods for Dose Finding Experiments*. pp 243-258, New York: John Wiley & Sons, 2006.
243. **Thall PF**. A two-stage design for dose-finding with two cytotoxic agents in phase I trials. In S. Chevret (ed), *Statistical Methods for Dose Finding Experiments*. pp 259-274, New York: John Wiley & Sons, 2006.
244. **Thall PF**, Cook, JD. Adaptive dose-finding based on efficacy-toxicity trade-offs. *Encyclopedia of Biopharmaceutical Statistics, 2<sup>nd</sup> Edition*. pp 1-5, 2006.
245. Braun TM, **Thall PF**. Optimizing schedule of administration in phase I clinical trials. *Encyclopedia of Clinical Trials*. New York: John Wiley & Sons, 2008.

246. **Thall PF**, Wang, X. Parametric likelihoods for multiple non-fatal competing risks and death, with application to cancer data. In K. Peace (ed) *Design and Analysis of Clinical Trials with Time-to-Event Endpoints*. pp 371-385, Boca Raton, Chapman & Hall/CRC Taylor & Francis Group, Biostatistics Series, 2009.
247. **Thall PF**, Nguyen H. Covariate-adjusted adaptive dose-finding in early phase clinical trials. In: Chow SC, ed. *Encyclopedia of Biopharmaceutical Statistics. 3rd Edition*. London: Informa Healthcare Ltd. 1:369–379, 2010.
248. Morita S, **Thall PF**. Prior effective sample size of a Bayesian model. In: Chow SC, ed. *Encyclopedia of Biopharmaceutical Statistics. 3rd Edition*. London: Informa Healthcare Ltd., 1:1066–1069, 2010.
249. Wathen JK, **Thall PF**. Application of a Bayesian doubly optimal group sequential design for clinical trials. In M. Chen, D. Dey, P. Mueller, D. Sun, and K. Ye (eds.) *Frontiers of Statistical Decision Making and Bayesian Analysis. In honor of James O. Berger*. pp 257-270, New York: Springer-Verlag, 2010.
250. **Thall PF**, Nguyen H, Szabo A. Adaptive decision making based on interval censored data in a clinical trial to optimize rapid treatment of stroke. In D. Chen, J. Sun and K. Peace (eds.) *Interval Censored Time-to-Event Data in Clinical Trials: New Model Developments and Computational Strategies*. pp 329-343, London: Chapman & Hall/CRC, 2012.
251. **Thall PF**. Bayesian adaptive methods for clinical trials of targeted agents. In *Design and Analysis of Clinical Trials for Predictive Medicine: Applications in Cancer and Other Chronic Diseases*, S. Matsui, M. Buyse, R. Simon (eds) pp 789-809, London: Chapman & Hall/CRC, 2015.
252. **Thall PF**, Fox P, Wathen JK. Some caveats for outcome adaptive randomization in clinical trials. In *Modern Adaptive Randomized Clinical Trials: Statistical and Practical Aspects*. O. Sverdlov (ed). pp 287-305, Boca Raton: CRC Press, Taylor & Francis. 2015.
253. **Thall PF**. SMART design, conduct, and analysis in oncology. In *Dynamic Treatment Regimes in Practice: Planning Trials and Analyzing Data for Personalized Medicine*. E. Moodie and M. Kosorok (eds), pp. 41-54, SIAM. 2015

### Letters to the Editor

254. Andersson BS, Kashyap A, Couriel D, Madden T, de Lima M, **Thall PF**, Fernandez H, Vaughan WP, Jones R, Wingard JR. Intravenous busulfan in pretransplant chemotherapy: bioavailability and patient benefit. *Biology of Blood and Marrow Transplantation*, 9:722-724, 2003.
255. Cheung YK, Inoue LYT, Wathen JK and **Thall PF**. Response to comments on “Continuous Bayesian adaptive randomization based on event times with covariates” by Y.K. Cheung et al., *Stat in Medicine* 26:3052-3054, 2006.

256. Millikan R, Logothetis C, **Thall PF**. Response to comments on “Adaptive therapy for androgen independent prostate cancer: A randomized selection trial including four regimens” by P.F. Thall et al., *J National Cancer Institute*. 100(9):682-683, 2008.
257. Tannir N, **Thall PF**, Millikan R. Reply from Authors re: Camillo Porta. How to identify active novel agents in rare cancers and then make them available: a need for a paradigm shift. *European Urology* 62:1020–1021, 2012.
258. Yan F, **Thall PF**, Yuan Y. Letter to the Editor, on the paper ‘One-year outcomes after PCI strategies in cardiogenic shock’ Thiel, et al. *New England Journal of Medicine*. 380:1876-1877, 2019.
259. Response to letter to the Editor on “A Phase I/II Trial of Reirradiation for Diffuse Intrinsic Pontine Glioma”. Amsbaugh MJ, Mahajan A, **Thall PF**, McAleer MF, Paulino AC, Grosshans D, Khatua S, Ketonen L, Fontanilla H, McGovern SL. *International Journal of Radiation Oncology, Biology, Physics* .104(2):468-469, 2019.
260. Aparicio, A, **Thall PF**, Logothetis., C. Letter to the Editor, on the paper ‘Radiotherapy to the primary tumour for newly diagnosed, metastatic prostate cancer (STAMPEDE): a randomized controlled phase 3 trial.’ Parker, et al. *The Lancet*. 394:829-830, 2019.

#### **Book Review**

261. **Thall PF**. Stochastic Processes: A Survey of the Mathematical Theory, Springer-Verlag, by J. Lamperti. *J American Statistical Assoc*, 74: 245-246, 1979

#### **Submitted for Publication in Statistical Journals**

1. Murray TA, **Thall PF**, Schortgen F, Zohar S, Asfar P, Katsahian S. Robust adaptive incorporation of historical control data in design of a randomized controlled trial to evaluate external cooling in treatment of septic shock. Being revised per favorable reviews from *Bayesian Analysis*.
2. Lin R, Yin G, Yuan Y, **Thall PF**. Bayesian hierarchical random effects meta-analysis and design of phase I clinical trials.
3. Lin R, **Thall PF**, Yuan Y. A phase I-II basket trial design to optimize dose-schedule regimes based on delayed outcomes. Revised per favorable reviews from *Bayesian Analysis*.
4. Lee J, **Thall PF**, Masouel P. A phase I-II design based on periodic and continuous monitoring of ordinal disease severity and the times to toxicity and death.
5. Lin R, **Thall PF**, Yuan Y. BAGS: A Bayesian adaptive group sequential trial design with subgroup-specific survival comparisons. Invited for a special issue of *J American Statistical Association*. Being revised per favorable reviews.
6. Chapple AG, **Thall, PF**. Comparison of phase I-II designs with parametric or semi-parametric models using two different risk-benefit trade-off criteria.

7. Yan F, Jiang L, **Thall PF**, Huang, X. Comparing Bayesian early stopping boundaries for phase II clinical trials.

8. Park Y, Liu S, **Thall PF**, Yuan Y. Group sequential enrichment designs based on adaptive regression of response and survival time on high dimensional covariates. Being revised per favorable reviews from *J American Statistical Association*.

### **Submitted for Publication in Medical Journals**

9. Olson A, Lin R, Bdaiwi MH, **Thall PF**, Shpall EJ, Rezvani K, et al. Third-party BK virus specific cytotoxic T lymphocyte therapy for hemorrhagic cystitis following allotransplantation.

10. Lin SH, Lin Y, Yao L, **Thall PF**, Tsao AS, et al. Phase II trial of concurrent atezolizumab with chemoradiation in unresectable non-small cell lung cancer.

11. Dahlstrom KR, Song J, **Thall PF**, Sturgis EM, Garden AS, et al. Conditional survival five years after diagnosis among oropharyngeal cancer patients treated with radiation therapy.

12. Subudhi S, Vence L, Slack-Tidwell R, **Thall PF**, Sharma P, et al. Neoantigen responses, immune biomarkers and favorable outcomes in prostate cancer patients treated with ipilimumab. Revised per favorable reviews from *Science Translation Medicine*.

### **Journal Referee**

The American Statistician  
Annals of Applied Statistics  
Bayesian Analysis  
Biological Psychiatry  
Biometrics  
Biomed Central Medical Research Methodology  
Biometrika  
Biostatistics  
Blood  
BMC Cancer  
British Journal of Hematology  
Canadian Journal of Statistics  
Cancer  
Cancer Medicine  
Clinical Cancer Research  
Clinical Trials  
Communications in Statistics  
Computational Statistics  
Computer Methods and Programs in Biomedicine  
Controlled Clinical Trials  
Contemporary Clinical Trials  
European Journal of Cancer  
European Journal of Haematology  
Expert Review of Clinical Pharmacology  
Investigational New Drugs

Journal of Applied Probability  
Journal of the American Medical Association  
Journal of the American Medical Association, Oncology  
Journal of the American Statistical Association  
Journal of Biopharmaceutical Statistics  
Journal of Clinical Oncology  
Journal of the National Cancer Institute  
Journal of the Royal Statistical Society, Series A  
Journal of the Royal Statistical Society, Series B  
Journal of the Royal Statistical Society, Series C  
Journal of Statistical Planning and Inference  
Leukemia  
Leukemia and Lymphoma  
Mathematical Population Dynamics  
Medical Decision Making  
Nature  
Naval Research Logistics Quarterly  
New Zealand and Australian Journal of Statistics  
Pharmaceutical Statistics  
Stat  
Statistics in Medicine  
Statistics in Biopharmaceutical Research  
Statistics in Biosciences  
Statistical Methods in Medical Research  
Statistical Science  
Technometrics

### **PhD Committees**

#### **Committee Member and Dissertation Reader, George Washington University, 1980-1994:**

Belcher GP  
Blodgett RJ  
Cowan CD  
El-Dessouky SA  
Fan M  
Johnson AE,  
Lindblad A  
Mohadjer L  
Palesch Y  
Rundek BS  
Wright E,  
Younes, N

#### **PhD Committee Member, Outside Institutions**

University of Waterloo, Canada, 1999: Min Zhan, "Analysis of Incomplete Event History Data."

Universite Montpellier, U.F.R. de Medicine, France, 2008: Nadine Houede – “Recherche de strategie biostatistique dans les essais cliniques de phase I/II d’association comprenant un agent non cytotoxique”

University of California at Santa Cruz, 2018 : Arthur Lui  
PhD Advancement Qualifying Examination Committee, Jack Baskin School of Engineering,  
Department of Applied Mathematics and Statistics

### **PhD Thesis Supervisor**

J. Kyle Wathen, “Bayesian Doubly Optimal Group Sequential Designs for Randomized Clinical Trials,” Graduate School of Biomedical Sciences, University of Texas, M.D. Anderson Cancer Center, 2005.

Andrew G. Chapple, “Bayesian Models for Clinical Trials and Survival Analysis,” Department of Statistics, Rice University, 2018.

### **Postdoctoral Research Fellow Supervisor**

Brian Hobbs,	2010-2011	
Juhee Lee	2012	( jointly with Yuan Ji )
Ick-Hoon Jin	2012-2013	( jointly with Ying Yuan )
Yanxun Xu	2014-15	( jointly with Peter Mueller and Yuan Ji )
Thomas Murray	2014-2017	( jointly with Ying Yuan )
Ruitao Lin	2017-2019	( jointly with Ying Yuan )

### **Rice University Summer Intern Supervisor**

Andrew Chapple, 2015, 2016

## **Teaching**

### **Undergraduate Courses - University of Texas at Dallas and George Washington University**

1975 - 1990  
Introductory statistics  
Regression analysis  
Design of experiments  
Probability  
Mathematical statistics  
Gambling and games of chance  
Complex variables  
Linear algebra  
Calculus

### **Graduate Courses - University of Texas at Dallas and George Washington University**



1975 – 1990

Probability theory

Mathematical statistics

Stochastic processes

Large-sample theory

Distribution theory

Linear models

Design of experiments

Generalized linear models

Applied statistics

### **Graduate Courses, Rice University and MDACC Graduate School of Biological Sciences**

Clinical Trials: 2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016

### **Organization of National and International Conferences and Symposia**

1. “New Designs for Dose-Response Studies” (Discussant), Biometric Society ENAR Meeting, Birmingham, AL, March 1995.
2. Scientific Program Committee, (Planning and organization of the conference scientific program, Invitation of speakers), International Society for Clinical Biostatistics, Annual Meeting, Barcelona, Spain, July 31-August 4, 1995.
3. Scientific Program Committee, (Session Organizer) Society for Clinical Trials, Annual Meeting, Anaheim, CA, May 2-5, 1999.
4. “Dose-Finding Methods for Early Phase Clinical Trials” (Session Organizer), Society for Clinical Trials, Annual Meeting, Anaheim, CA, 1999.
5. “Design and Analysis of Clinical Trials with Multiple Endpoints” (Session Organizer), ENAR Annual Meeting, International Biometric Society, Chicago, IL 2000.
6. "Outcome Adaptive Methods in Early Phase Clinical Trials" (Session Organizer), ENAR 2002 Spring Meeting, International Biometric Society, Alexandria, VA, 2002.
7. "Recent Advances in Clinical Trial Design" (Session Organizer), WNAR Meeting of the International Biometric Society, UCLA, June 23-26, 2002.
8. “New Statistical Methods for Dose-Finding”, (Chairman and Conference Organizer), Henry Stewart Conferences, Washington, D.C., September 18-19, 2002.
9. “Bayesian Biostatistics: Introduction and Recent Advances”, (Conference Organizer), M.D. Anderson Cancer Center, Houston, TX, January 28-31, 2003.
10. Scientific Program Committee, Society for Clinical Trials Annual Meeting, (Planning and organization of the conference scientific program, Invitation of speakers), Portland, OR, May 22-25, 2005.

11. “Joint Modeling of Longitudinal and Time-to-Event Outcomes: Implications for Biomarkers and Surrogacy” (Session Organizer and Chair) Society for Clinical Trials, Annual Meeting, Portland, OR, May 22-25, 2005.
12. “Ethical Issues in Early Phase Clinical Trials: The Physician’s Perspective.” Plenary Session, (Session Organizer and Chair) Society for Clinical Trials, Annual Meeting, Portland, OR, May 22-25, 2005.
13. “Recent Innovations in Clinical Trial Design”, (Session Organizer and Chair), Joint Statistical Meetings, Minneapolis, MN, August 7-11, 2005.
14. “Bayesian Approaches to Clinical Trials” (Session Chair). Joint Statistical Meetings, Salt Lake City, UT, August 1, 2007.
15. “Dynamic Treatment Regimes: Practice and Theory” (Session Organizer). ENAR Meeting of the International Biometric Society, Crystal City, VA, March 16-19, 2008.
16. “Bayesian Methods in Clinical Trials” (Session Organizer). Drug Information Association, Statistical European Meeting, Ljubljana, Slovenia, October 22-24, 2008.
17. “Practical Applications of Dynamic Treatment Regimes in Medicine” (Session Organizer and Chair). ENAR Meeting of the International Biometric Society, Miami, FL, March 20-23, 2011.
18. Scientific Program Committee, International Indian Statistical Association Bi-Annual Conference, Chennai, India, January 2-5, 2013
19. “Recent Advances in Bayesian Methods for Clinical Trials” (Session Organizer). International Indian Statistical Association Bi-Annual Conference, Chennai, India, January 2-5, 2013.
20. “Section on Bayesian Statistical Science Student Paper Travel Award Winners I”, Topic Contributed, (Session Organizer), Joint Statistical Meetings, Montreal, Canada, 2013
21. “Section on Bayesian Statistical Science Student Paper Travel Award Winners II”, Topic Contributed, (Session Organizer), Joint Statistical Meetings, Montreal, Canada, 2013
22. Section on Bayesian Statistical Science Student Travel Award Winners, Session 3, Topic Contributed Papers (Session Chair), Joint Statistical Meetings, Boston, MA, 2014
23. “Response-Adaptive Randomization: Recent Developments and Controversies” Topic Contributed, (Session Chair), Joint Statistical Meetings, Seattle, WA, 2015.
24. “Bayes and Nonparametric Bayes Methods in Medical Studies” Invited Papers (Session Organizer) sponsored by Section on Bayesian Statistical Science, Joint Statistical Meetings, Seattle, WA, 2015.
25. “Practical Utility-Based Bayesian Clinical Trial Design” Topic Contributed Papers (Session Organizer and Chair) co-sponsored by Section on Bayesian Statistical Science, Biopharmaceutical

Section , and International Society for Bayesian Analysis, Joint Statistical Meetings, Chicago, IL, 2016.

26. “Recent Advances in Practical Clinical Trial Design” (Session Organizer). Invited Paper Session, ENAR Meeting of the International Biometric Society, Atlanta, GA, March 25-28, 2018.
27. “Applied Bayesian Precision Medicine” (Session Organizer). Invited Paper Session, Workshop on Bayesian Causal Inference, Ohio State University, Columbus, OH, June 2-4, 2019.
28. “Practical Bayesian Precision Medicine: Design and Analysis” (Session Organizer). Invited Paper Session, iBRIGHT 2019 conference, Department of Biostatistics, M.D. Anderson Cancer Center, Houston, TX, November 11-13, 2019.

### **Short Courses Presented**

1. Two-day short course “Phase I / Phase II Designs for Oncology Trials”, CIBA-Geigy Pharma, Basel, Switzerland, September 9-10, 1996.
2. Two-day short course, “Statistical Methods for Design and Monitoring of Early Phase Clinical Trials”, Novartis Pharma, Basel, Switzerland, October 20-21, 1997.
3. Half-day short course, “Design of Early Phase Oncology Clinical Trials”, Pediatric Blood and Marrow Transplant Consortium, St. Louis, MO, April 4, 1998.
4. Two day tutorial workshop on clinical trial design and conduct. Novartis Pharma, Morristown, NJ, March 6-7, 2003.
5. Tutorial workshop on adaptive Bayesian methods for clinical trials. Novartis Pharma, Basel, Switzerland, November 10-11, 2003.
6. Two day tutorial workshop on adaptive Bayesian methods for clinical trials. Serono International, Geneva, Switzerland, November 12, 2003.
7. Three-day short course, “Modern Bayesian Methods for Clinical Trials”, Center for Drug Evaluation and Research, U.S. Food and Drug Administration, Rockville, MD. Taught jointly with B. Carlin, December 10-12, 2003.
8. One-day short course, “Designing Clinical Trials: Practical Bayesian Methods”, Joint Statistical Meetings, Toronto, Canada, August 8, 2004.
9. Half-day short course, “Recent Advances in Bayesian Adaptive Dose-Finding”, Annual Meeting of the Society for Clinical Trials, Portland, OR, May 22, 2005.
10. Three-day short course, “Modern Methods for Clinical Trials”, Departamento de Bioestadística Epidemiología, Escuela de Salud Pública, RCM, UPR, San Juan, Puerto Rico. Taught jointly with M. Munsell and G. Yin, February 22-24, 2006.

11. Three-lecture tutorial: (i) Introduction to Bayesian Statistical Concepts. (ii) Bayesian Dose-Finding in Early Phase Clinical Trials. (iii) Covariate-Adjusted Adaptive Randomization in a Clinical Trial with Multi-Stage Therapy. Presented at “Innovative Proof-of-Concept Designs for Phase I/II and IIIb Studies.” Scian Services, Toronto, Canada, May 3-4, 2006.
12. Three-day short course, “Bayesian Clinical Trial Designs”, Institut Bergonie, Bordeaux, France. Taught jointly with J. Cook, June 12-14, 2006.
13. Half-day short course, “Practical Bayesian Dose-Finding Methods”, Thirtieth Annual Midwest Biopharmaceutical Statistics Workshop, Ball State University, Muncie, IN, May 21, 2007.
14. One-day short course, “Practical Bayesian Clinical Trial Design”, Joint Statistical Meetings, Salt Lake City, UT, July 30, 2007.
15. Half-day short course, “Bayesian Methods for Phase II Clinical Trials“, City of Hope Cancer Center, Duarte, CA, October 18, 2007.
16. Three-day short course, “Practical Bayesian Clinical Trial Design”, Northern Illinois Pharmaceutical Group, Abbott Laboratories, Lake Bluff, IL. Taught jointly with J. Wathen, December 5-7, 2007.
17. One-day short course, “Modern Practical Bayesian Clinical Trial Design”, Joint Statistical Meetings, Denver, CO. Taught jointly with J. Wathen, August 3, 2008.
18. Half-day short course “Some Practical Bayesian Phase I and Phase I/II Designs”, Hoffman-LaRoche, Inc., Nutley, NJ. October 10, 2008.
19. One-day short course, “Recent Developments in Practical Bayesian Methods for Clinical Trials”, International Chinese Statistical Association, Applied Statistics Symposium, San Francisco, June 21, 2009.
20. Half-day short course, “Recent Advances in Bayesian Adaptive Methods for Clinical Trials”, FDA/Industry Statistics Workshop, Washington DC, Sept. 23, 2009.
21. Three-day short course, “Recent Developments in Practical Bayesian Methods for Clinical Trials”, Savannah, GA, Sixteenth Annual Biopharmaceutical Applied Statistics Symposium, November 11-13, 2009.
22. One-day short course, “Recent Developments in Practical Bayesian Methods for Clinical Trials”, Indianapolis, IN, International Chinese Statistical Association, Applied Statistics Symposium, June 20, 2010.
23. One-day short course, “Bayesian Methods in Early Phase Clinical Trials.” Millennium Pharmaceuticals, Inc. The Takeda Oncology Company, Boston, MA, August 30, 2010.
24. Webinar, “Dysfunctional Paradigms in Clinical Trials: Some Bayesian Alternatives,” sponsored by the Section on Bayesian Statistical Science, American Statistical Association, June 7, 2012.

25. One-day short course, “Hybrid Bayesian Adaptive Clinical Trial Designs,” International Chinese Statistical Association, 2012 Applied Statistics Symposium, Boston, MA, June 23, 2012.
26. Half-day short course, “Utility-Based Clinical Trial Design and Analysis”, FDA/Industry Statistics Workshop, Washington DC, Sept. 12, 2012.
27. One-day short course, “Recent Advances in Bayesian Clinical Trial Design”, taught jointly with B. Hobbs, Joint Statistical Meetings, Montreal, Canada, August 4, 2013.
28. One-day short course, “Recent Advances in Bayesian Clinical Trial Design”, taught jointly with B. Hobbs, International Chinese Statistical Association and Korean International Statistical Society Joint Applied Statistics Symposium, Portland, Oregon, June 15, 2014.
29. Half-day short course. “Practical Solutions for Simple Problems with Bad Consequences in Clinical Trials” ENAR Meeting of the International Biometric Society, Austin, TX, March 6, 2016.
30. One-day short course, “Bayesian Designs for Phase I-II Clinical Trials”, taught jointly with Y. Yuan, Joint Statistical Meetings, Baltimore, MD, July 29, 2017.
31. Half-day short course, “Statistical Remedies for Flawed Conventions in Medical Research” Stat4Onc Annual Meeting, Hartford, CT, April 25, 2019.

#### **Invited Talks at Professional Meetings**

1. Some Covariance Models for Longitudinal Count Data with Overdispersion. Biometric Society WNAR Meeting, Santa Barbara, CA, July 2, 1991.
2. Test-based Variable Selection via Cross-Validation. Presented at the 1992 Conference of Texas Statisticians, Baylor University, Waco, TX, February 28-29, 1992.
3. Bayesian Design and Monitoring of Phase II Clinical Trials. Presented at the International Biometrics Conference, Hamilton, New Zealand, December 7-11, 1992.
4. Estimating Genomic Category Probabilities from Fluorescent *in situ* Hybridization Counts with Misclassification. Presented at the 1996 Eastern North American Region of the International Biometric Society Meeting, Basic Science Session, Richmond, VA, March 20, 1996.
5. A Strategy for Monitoring Multiple Outcomes in Early Phase Trials, or How to Conduct Single-Arm Trials if You Must. Presented at the Symposium on Bayesian Approaches to Clinical Trials, Harvard School of Public Health, Brookline, MA, March 28, 1996.
6. Parametric Likelihoods for Multiple Nonfatal Competing Risks and Death. Presented in the session “*Topics in Lifetime Data Analysis in Medical Research*,” at the Silver Jubilee Annual Meeting of the Statistical Society of Canada, University of New Brunswick, Fredericton, Canada, June 1-4, 1997.

7. A Strategy for Dose-Finding and Safety Monitoring Based on Efficacy and Adverse Outcomes in Phase I/II Clinical Trials, Symposium on Treatment Selection in Early Phase Clinical Research, MPS Research Unit, The University of Reading, U.K., October 15, 1997.
8. A Strategy for Dose-Finding and Safety Monitoring Based on Efficacy and Adverse Outcomes in Phase I/II Clinical Trials, Drug Information Association's Annual Symposium "Global Challenges and Strategies in the Pharmaceutical Industry, Recent Developments in Design and Analysis of Oncology Trials", Hilton Head, SC, March 15-17, 1998.
9. Some Experiences Applying the Continual Reassessment Method at M.D. Anderson Cancer Center, Drug Information Association's 34th Annual Meeting, Boston, MA, June 7-11, 1998.
10. A Strategy for Dose-Finding and Safety Monitoring Based on Safety and Efficacy Outcomes in Phase I/II Clinical Trials, 1998 WNAR Annual Meeting/IMS Western Regional Meeting, San Diego, CA, June 28-30, 1998.
11. Treatment Comparisons Based on Two-Dimensional Safety and Efficacy Alternatives in Oncology Trials. International Biometric Society, Region Oesterreich-Schweiz, Advances in Biometry, Basel, Switzerland, September 27-30, 1999.
12. Approximate Bayesian Evaluation of Multiple Treatment Effects: An Alternative to Hypothesis Testing. Mathematisches Forschungsinstitut Oberwolfach, Medical Statistics: Current Developments in Statistical Methodology for Clinical Trials, Oberwolfach, Germany, February 6-12, 2000.
13. Evaluating Multiple Treatment Courses in Clinical Trials. ENAR Meeting of the International Biometric Society, Session on "*Design and Analysis of Clinical trials With Multiple Endpoints*", Chicago, IL, March 19-22, 2000.
14. Treatment Comparisons Based on Two-Dimensional Safety and Efficacy Alternative in Clinical Trials. International Chinese Statistical Association, Applied Statistics Symposium, Piscataway, NJ, June 1-3, 2000.
15. Bayesian Methods in Early Phase Clinical Trial Design. American Statistical Association, Section on Bayesian Statistics, Joint Statistical Meetings, Indianapolis, IN, August 13-17, 2000.
16. Bayesian Strategies for Small  $n$  Clinical Trials. Conference on Future Directions for Small  $n$  Clinical Research Trials, National Academy of Sciences, Washington, D.C., September 28, 2000.
17. Bayesian Methods for Early Phase Clinical Trials: Dose-Finding and Safety Monitoring, First Annual Short Course in Bayesian Biostatistics: Applications to Clinical and Pharmaceutical Research, M.D. Anderson Cancer Center, Houston, TX, January 16-19, 2001.
18. Adaptive Designs: A Non-Small Cell Lung Cancer Trial. First Annual Short Course in Bayesian Biostatistics: Applications to Clinical and Pharmaceutical Research, M.D. Anderson Cancer Center, Houston, TX, January 16-19, 2001.

19. Practical Adaptive Sequential Dose-Finding in Phase I/II Clinical Trials. *Statistics of Optimal Dosing*, Henry Stewart Conferences, Washington, DC, July 26, 2001.
20. Seamlessly Expanding a Randomized Phase II Trial to Phase III. *Joint Statistical Meetings*, American Statistical Assoc., Section on Bayesian Statistics, Atlanta, GA, August 5-9, 2001.
21. Multi-course Treatment Strategies for Clinical Trials of Rapidly Fatal Diseases. *Bayesian Workshop VI*, Carnegie Mellon University, Pittsburgh, PA, September 28-29, 2001.
22. A Hierarchical Bayesian Model for an Activity Trial of Gleevec in Sarcoma: Borrowing Strength Across Disease Subtypes. *Connective Tissue Oncology Society Consortium Meeting*, West Palm Beach, FL, November 1-3, 2001.
23. Recent Advances in Outcome-Adaptive Clinical Trial Design. *9<sup>th</sup> Genitourinary Oncology Conference*, Melvin Samuels Lectureship, Houston, TX, February 7-8, 2002.
24. Seamlessly Expanding a Randomized Phase II Trial to a Phase III Trial. *Statistics of Multi-Center Trials*, Henry Stewart Conferences, Washington, D.C. March 5, 2002.
25. Adaptive Decision Making in a Lymphocyte Infusion Trial. *ENAR Meeting of the International Biometric Society*, Session on "*Outcome Adaptive Methods in Early Phase Clinical Trials*," Alexandria, VA, March 17-20, 2002.
26. Adaptive Design Strategies for Gene Therapy Trials. *Workshop "Cancer-How to Design Cancer Gene Therapy Clinical Trials"*, American Society of Gene Therapy, 5<sup>th</sup> Annual Meeting, Boston, MA, June 5-9, 2002.
27. Seamlessly Expanding a Randomized Phase II Trial to a Phase III Trial, Session "*Recent Advances in Clinical Trial Design*." *WNAR Meeting of the International Biometric Society*, UCLA, CA, June 23-26, 2002.
28. Dose-Finding with Two Agents in Phase I Oncology Trials. *New Statistical Methods for Dose-Finding*, Henry Stewart Conferences, Washington, D.C., September 18-19, 2002.
29. Some Bayesian Approaches to Sarcoma Trials. *Annual Meeting of the Connective Tissue Oncology Society*, San Francisco, CA, October 31-November 2, 2002.
29. Practical Adaptive Decision-Making in Oncology Clinical Trials. *Bayesian Biostatistics: Introduction and Recent Advances Short Course & Symposium*, M.D. Anderson Cancer Center, Houston, TX, January 28-31, 2003.
30. Adaptive Designs for Multi-Course Therapies. *Foundation for Integrative Biology – Toward Individualized Therapeutic Strategies*, M.D. Anderson Cancer Center, Houston, TX, February 6, 2003.
31. Evaluating Therapeutic Strategies in Multi-Course Clinical Trials. *ENAR 2003 Spring Meeting of the International Biometric Society*, Tampa, Florida, March 30-April 2, 2003.

32. Adaptive Decision-Making in a Lymphocyte Infusion Trial. Conference on New Directions in Experimental Design, Chicago, IL, May 14-17, 2003.
33. Covariate-Adjusted Adaptive Randomization in a Multi-Stage Sarcoma Trial. Dept. of Biostatistics, Harvard Schering-Plough Workshop on Development and Approval of Oncology Drug Products: Impact of Statistics, Boston, MA, May 28-30, 2003.
34. Biostatistical Consulting: The Doctor-Statistician relationship. Roundtable Luncheon, Section on Bayesian Statistical Sciences, American Statistical Association, Joint Meetings, San Francisco, CA, August 2–7, 2003.
35. Dose-Finding With Two Agents in Phase I Oncology Trials. In the session “*Recent Developments in Phase I Trials Design*,” ENAR 2004 Meeting of the International Biometric Society, Pittsburgh, PA, March 27-31, 2004.
36. Dose-Finding Based On Efficacy-Toxicity Trade-Offs. *Design and Analysis of Phase II Clinical Trials*, 25<sup>th</sup> Annual Meeting of the Society for Clinical Trials, New Orleans, LA, May 23-26, 2004.
37. A Donor Lymphocyte Infusion Trial: Adaptively Optimizing Infusion Times. In the Jiann-Ping Hsu Invited Paper Session on Pharmaceutical/Regulatory Sciences: *Adaptive Designs for Clinical Trials*. International Chinese Statistical Association 2004 Applied Statistics Symposium, San Diego, CA, June 6-9, 2004.
38. Bayesian Sensitivity Analyses of Confounded Treatment Effects in Survival Analysis. 25<sup>th</sup> Spring Symposium, New Jersey Chapter, American Statistical Assoc. “*Advances in Survival Analysis Methods for Clinical Trials*.” Piscataway, NJ, June 29, 2004.
39. Hybrid Adaptive Designs for Clinical Trials. Session on “Flexible Adaptive Design,” Joint Statistical Meetings, Toronto, Canada, August 8-12, 2004.
40. Practical Hybrid Clinical Trial Designs. Session on “Clinical trial designs to combine different stages of drug development,” 25<sup>th</sup> Annual Conference of the International Society for Clinical Biostatistics, Leiden, The Netherlands, August 15-19, 2004.
41. Bayesian Adaptive Methods for Clinical Trial Design and Conduct. Future Clinical Trials Issues in Multiple Sclerosis, Annual Meeting of the Multiple Sclerosis Society, Washington, D.C., December 2-4, 2004.
42. Some Phase 2/3 Clinical Trial Designs. Biostatistical Issues and the Design of Type 1 Diabetes TrialNet Protocols, NIDDK, Bethesda, Maryland, March 7, 2005.
43. Dose-Finding Based On Efficacy and Toxicity in Phase I/II Clinical Trials. In the session “*Recent Developments in Sequential Clinical Trials Methodology*” ENAR Meeting of the International Biometric Society, Austin, Texas, March 20-23, 2005.



44. On the Hazards of Survival Time Comparisons in the Presence of Recurrent Disease. Sarcoma Alliance for Research through Collaboration Biannual Meeting, Orlando, Florida, May 13, 2005.
45. Adaptive Multi-Course Treatment Strategies in Two Oncology Trials. Session on “Dynamic Treatment Regimes,” Joint Statistical Meetings, Minneapolis, Minnesota, August 7-11, 2005.
46. Multi-Stage Treatment Trials in Oncology. Dynamic Treatment Regimes Network Meeting, Institute for Social Research, University of Michigan, Ann Arbor, Michigan, September 14-15, 2005.
47. Dose Finding Based On Efficacy and Toxicity in Phase I/II Clinical Trials. 5<sup>th</sup> International Meeting on Statistical Methods in Biopharmacy. “*Statistical Innovations in Clinical Trials.*” Paris, France, September 26-27, 2005.
48. Some Bayesian Methods for Clinical Trial Design and Analysis. 12<sup>th</sup> Annual Biopharmaceutical Applied Statistics Symposium, Savannah, GA, November 7-11, 2005.
49. Adaptive Randomization in Sarcoma Trials: Past and Future. Sarcoma Alliance for Research through Collaboration, Biannual Meeting, Atlanta, GA, June 2, 2006.
50. Practical Adaptive Randomization in Clinical Trials. Journee des Statisticiens des Centres de Lutte contre le Cancer, Annual Meeting, Institut Bergonie, Bordeaux, France, June 15, 2006
51. A Geometric Approach to Comparing Treatments for Rapidly Fatal Diseases. Joint Statistical Meetings, Seattle, WA, August 6, 2006.
52. Innovative Bayesian Designs for Early Phase Clinical Trials. Third Strategic Directions in Cancer Therapy, Vancouver, British Columbia, Canada, March 2-3, 2007.
53. Patient-Specific Dose-Finding Based On Bivariate Outcomes With Covariates. ENAR Meeting of the International Biometric Society, Atlanta, GA, March 11-14, 2007.
54. Accounting for Heterogeneity in Phase II Clinical Trials Using Bayesian Methods, in the session “*Clinical Trials, Part I: Recent Innovations in Oncology Clinical Trials.*” American Association for Cancer Research, Annual Meeting, Los Angeles, CA April 14-18, 2007.
55. Practical Bayesian Adaptive Randomization in Clinical Trials, in the session “*Alternatives to Phase III Trial Design,*” Education Session, American Society of Clinical Oncology Annual Meeting, Chicago, IL, June 5, 2007.
56. Designing Clinical Trials to Evaluate Dynamic Treatment Regimes. Introductory Overview Lecture: “*Adaptive Designs and Other Emerging Issues in Clinical Trials,*” Joint Statistical Meetings, Salt Lake City, UT, July 29, 2007.

57. Comparing Two-Stage Treatment Strategies Based On Sequential Failure Times Subject to Interval Censoring. Joint Statistical Meetings, Salt Lake City, UT, July 31, 2007.
58. Assessing Two-Stage Treatment Strategies for Metastatic Renal Cell Cancer. Sixth Annual Kidney Cancer Association Meeting. Chicago, IL, October 12, 2007
59. Accounting for Patient Heterogeneity and Multivariate Outcomes in Early Phase Clinical Trials. In the session “*Bayesian Treatment of Multiplicities in Clinical Trials*”, Bayesian Biostatistics Conference, M.D. Anderson Cancer Center, January 31, 2008.
60. Comparing Two-Stage Treatment Strategies Based On Sequential Failure Times. In the session “*Dynamic Treatment Regimes: Practice and Theory*,” ENAR Meeting of the International Biometric Society, Arlington, VA, March 19, 2008.
61. Select-and-Test Designs for Phase II-III Clinical Trials. Forum on “*Decisions at the Phase II / Phase III Interface*”, American Association for Cancer Research, Annual Meeting, San Diego, CA, April 13, 2008
62. Bayesian Methods for Multidimensional Treatment Effects. University of Pennsylvania, Annual Conference on Statistical Issues in Clinical Trials: From Bench to Bedside to Community, Philadelphia, PA, April 18, 2008
63. Patient-Specific Dose-Finding Based On Bivariate Outcomes and Covariates. Session on “*Bayesian Analysis of Pharmaceutical Data*,” International Society For Biopharmaceutical Statistics, First Symposium, Shanghai, China, June 28-July 2, 2008
64. Comparing Two-Stage Treatment Strategies Based On Sequential Failure Times. Session on “*Survival Analysis*,” International Society For Biopharmaceutical Statistics, First Symposium, Shanghai, China, June 28-July 2, 2008.
65. Two-Stage Treatment Strategies Based On Sequential Failure Times. Designed Experiments: Recent Advances in Methods and Applications (DEMA2008), Isaac Newton Institute for Mathematical Sciences, Cambridge, UK, August 11-15, 2008.
66. Patient-Specific Dose-Finding Based On Bivariate Outcomes and Covariates. FDA/Industry Workshop, "Special Topics in Oncology Drug Development," Arlington, VA, September 16-17, 2008.
67. Utility-Based Optimization of Combination Therapy Using Ordinal Toxicity and Efficacy in Phase I/II Trials. Bayesian Biostatistics Conference, Houston, TX, January 26-28, 2009.
68. A Geometric Phase II-III Select-and-Test Design Based on Treatment Failure Time and Toxicity. Innovation in Choroid Plexus Tumor Research, Houston, TX, February 14-15, 2009.
69. A Prostate Cancer Trial with Re-Randomization: How We Spent a Decade Studying Twelve Dynamic Treatment Regimes. In the session “*Application of Dynamic Treatment Regimes*” ENAR Meeting of the International Biometric Society, San Antonio, TX, March 15-18, 2009.

70. Optimizing a Two Agent Combination Based On Utilities of Ordinal Toxicity and Efficacy Outcomes. A One-Day Symposium to Honor Ed Gehan. Department of Biostatistics, Bioinformatics and Biomathematics, Georgetown University, Washington, DC, April 27, 2009.
71. Bayesian Designs for Clinical Trials with Dynamic Re-Randomization. Biostatistics Workshop in Cancer Research, University of Toronto, Dalla Lana School of Public Health, July 24-26, 2009.
72. Utility-Based Optimization of Combination Therapy Using Ordinal Toxicity and Efficacy in Phase I/II Clinical Trials. Workshop in Phase I Designs with a Focus on the Continual Reassessment Method, Memorial Sloan-Kettering Cancer Center, October 2, 2009.
73. Navigating the Rocky Shoals of Adaptive Trial Design and Execution. Scientific Advances in Adaptive Clinical Trial Designs Workshop, Bethesda, MD, November 16-17, 2009.
74. Application of a Bayesian Doubly Optimal Group Sequential Design for Clinical Trials: Localized Surgery versus Chemotherapy for Non-Small-Cell Lung Cancer. Frontiers of Statistical Decision Making and Bayesian Analysis: A Conference in Honor of James O. Berger. UTSA, San Antonio, Texas, March 17 - 20, 2010
75. Using Prior Information and Elicited Utilities for Adaptive Decision Making in Phase I/II Trials. In the session “Recent Developments of Bayesian Methods for Combining Data from Multiple Sources.” ENAR Meeting of the International Biometric Society, New Orleans, LA, March 21-24, 2010.
76. A Bayesian Geometric Phase II-III Select-and-Test Design Based On Treatment Failure Time and Toxicity. International Chinese Statistical Association. 19<sup>th</sup> Annual Applied Statistics Symposium, Indianapolis, IN, June 19 - 23, 2010.
77. Prior Elicitation in Bayesian Clinical Trial Design. SAMSI Intensive Summer Research Program on Semiparametric Bayesian Inference: Applications in Pharmacokinetics and Pharmacodynamics. Research Triangle Park, NC, July 12 - 23, 2010
78. A Hybrid Geometric Select-and-Test Design Based on Treatment Failure Time and Toxicity. Joint Statistical Meetings, Vancouver, British Columbia, Canada, August 3, 2010
79. A Phase II-III Select-and-Test Design Based on Treatment Failure Time and Toxicity: Evaluating Chemotherapies for Choroid Plexus Carcinomas in Children. Society of Paediatric Oncology, Choroid Plexus Tumor Committee, Boston, MA, October 23, 2010
80. Bayesian Designs for Prostate Cancer Trials Involving Androgen Receptor Signaling. Androgen Receptor Signaling in Prostate Cancer: Translating Biology into Clinical Practice. Prostate Cancer Task Force, Genitourinary Steering Committee, NCI, Dec 6-7, 2010.

81. Optimizing the Bolus and Concentration of a Drug Administered by Continuous Infusion. In the session “Innovative Adaptive Designs in Early-Phase Oncology Clinical Trials,” ENAR Meeting of the International Biometric Society, Miami, FL, March 20-23, 2011.
82. Optimizing the Concentration and Bolus of a Drug Delivered by Continuous Infusion. In the session “Adaptive Designs for Clinical Trials,” International Conference on Design of Experiments, Memphis, TN, May 10-13, 2011.
83. Optimizing the Concentration and Bolus of a Drug Delivered by Continuous Infusion. In the session “Phase I/II clinical studies: safety versus efficacy,” International Chinese Statistical Association. 20<sup>th</sup> Annual Applied Statistics Symposium, New York, NY, June 26 - 29, 2011.
84. Practical Issues in Bayesian Adaptive Designs for Early Phase Clinical Trials. Leader, Roundtable discussion, sponsored by the Section on Bayesian Statistical Science, Joint Statistical Meetings, Miami, FL, August 2, 2011.
85. Optimizing the Bolus and Concentration of a Drug Administered by Continuous Infusion. Workshop on Design of Experiments in Healthcare, Isaac Newton Institute for Mathematical Sciences, Cambridge, England, August 15-19, 2011.
86. Establishing Priors from Elicited Values for Bayesian Dose-Finding Designs. Second Workshop, Continual Reassessment Method and Related Issues in Dose-Finding, Paris, September 15-16, 2011.
87. Practical Issues in the Design, Conduct, and Analysis of Randomized Oncology Trials Comparing Dynamic Treatment Regimes. In the session “Recent Advances in Dynamic Treatment Regimes Research” ENAR Meeting of the International Biometric Society, Washington, DC, April 1-4, 2012.
88. Dysfunctional Paradigms in Clinical Trials: Our Conventions Are Killing Us. In the session “Decision Making in the Process of Drug Development,” Midwest Biopharmaceutical Statistics Workshop, Ball State University, Muncie, IN, May 21-23, 2012.
89. Practical Challenges in the Design, Conduct, and Analysis of Randomized Trials of Dynamic Treatment Regimes in Oncology, International Chinese Statistical Association. 21<sup>st</sup> Annual Applied Statistics Symposium, Boston, MA, June 23 - 26, 2012.
90. Utility-Based Dose-Finding with Ordinal Toxicity and Efficacy. In the session “Dose Selection in Clinical Trials,” Joint Statistical Meetings, San Diego, CA, July 29 - August 2, 2012
91. Evaluating Joint Effects of Induction-Salvage Treatment Regimes on Overall Survival in Acute Leukemia, UAI Workshop on Causal Structure Learning, Catalina Island, CA, August 18, 2012.
92. Bayesian Dose-Finding in Two Treatment Cycles based on the Joint Utility of Efficacy and Toxicity. In the session “Multi-Stage Randomized Clinical Trials for the Development of Dynamic Treatment Regimes,” Society for Clinical Trials, Annual Meeting, Boston, MA, May 19-22, 2013.

93. Practical Adaptive Bayesian Methods for Early Phase Clinical Trials. In the pre-ASCO two-day workshop “Designs for Contemporary Early-Phase Clinical Trials,” Chicago, IL, May 30-31, 2013.
94. Discussant, for the session “Dynamic Treatment Regimes and Adaptive Designs Toward Personalized Health Care,” Joint Statistical Meetings, Montreal, Canada, August 4-8, 2013.
95. Utility-Based Dose-Finding with Ordinal Toxicity and Efficacy, in the session “Adaptive Designs for Clinical Trials,” Annual Conference of the International Society for Clinical Biostatistics, Munich, Germany, August 25-29, 2013.
96. Dose-Finding Based On Elicited Joint Utilities of Ordinal Toxicity and Efficacy. Third Biennial Workshop on Adaptive Early-Phase Clinical Trial Design, University of Michigan School of Public Health, September 26-27, 2013.
97. Bayesian Designs for Early Phase Clinical Trials. In the session "Shared Challenges of Small Group Trials" 17th ECCO - 38th ESMO - 32nd ESTRO European Cancer Congress, Amsterdam, The Netherlands, September 30, 2013
98. Bayesian Dose-Finding in Two Treatment Cycles based on the Joint Utility of Efficacy and Toxicity. In the session “Personalized Medicine and Dynamic Treatment Regimes” International Conference on Health Policy Statistics, Chicago, IL, October 9-11, 2013.
99. Bayesian Dose-finding Methods for Targeted Agents in Early Phase Clinical Trials. In the session “Recent Developments in Personalized Medicine” ENAR Meeting of the International Biometric Society, Baltimore, MD, March 16-19, 2014.
100. Bayesian Clinical Trial Design: 23 Years of Theory and Practice. Council of Texas Statisticians, Annual Meeting, University of Texas at Dallas, March 21-22, 2014.
101. Discussant, “Clinical Trials for Adaptive Intervention Designs: Design and Conduct of Sequential Multiple Assignment Randomized Trials,” Half day workshop, Society for Clinical Trials, Annual Meeting, Philadelphia, PA, May 18, 2014.
102. Utility-Based Optimization of Schedule-Dose Regimes based on the Times to Response and Toxicity. International Chinese Statistical Association & Korean International Statistical Society Joint Applied Statistics Symposium, Portland, Oregon, June 15, 2014.
103. Adaptively Optimizing Schedule-Dose Regimes based on Utilities of Competing Event Times. In the session ‘Design of Clinical Trials’ International Indian Statistical Association Conference, Riverside, CA, July 11-13, 2014
104. Evaluating Joint Effects of Induction-Salvage Treatment Regimes on Overall Survival in Acute Leukemia. Presented jointly with Yanxun Xu. AML Hackathon, DREAM 9, Rice University, Houston, TX, July 26, 2014.

105. Utility-Based Optimization of Schedule-Dose Regimes based on the Times to Response and Toxicity. In the session “Designs and Analyses of Studies with Small Sample Sizes” Joint Statistical Meetings, Boston, MA, August 5, 2014
106. Utility-Based Optimization of Schedule-Dose Regimes based on the Times to Response and Toxicity. Fourth Adaptive Early Phase Clinical Trials Workshop, Hollings Cancer Center, Medical University of South Carolina, Charleston, South Carolina, October 16 – 17, 2014
107. SMART Design, Conduct, and Analysis in Oncology. Keynote Address, Innovative Methods Program for Advancing Clinical Trials (IMPACT), Cary, North Carolina, November 20-21, 2014.
108. Bayesian Utility-Based Sequentially Adaptive Designs for Early Phase Clinical Trials. Symposium on Early Phase Dose Finding Methodology, Pierre and Marie Curie University, Paris, April 15–17, 2015
109. Bayesian Adaptive Optimization of Sedative Dose in Preterm Infants Being Treated for Respiratory Distress Syndrome. In the invited paper session, *Bayesian Adaptive Designs for Better Clinical Decision Making*, sponsored by WNAR, Joint Statistical Meetings, Seattle, Washington, August 11, 2015.
110. Utility-Based Bayesian Adaptive Designs for Early Phase Clinical Trials. 2015 ASA Biopharmaceutical Section, FDA-Industry Statistics Workshop, Washington D.C., September 16-18, 2015.
111. Bayesian Designs for Early Phase Clinical Trials. Kidney Cancer Association Annual Meeting, Miami, FL, November 6-7, 2015.
112. Adaptive Treatment Assignment: Getting Personal in Oncology. ENAR Meeting of the International Biometric Society, Austin, TX, March 6-9, 2016.
113. Caveats for Outcome Adaptive Randomization in Comparative Clinical Trials. 9th Annual Conference on Statistical Issues in Clinical Trials, University of Pennsylvania Center for Clinical Epidemiology and Biostatistics, Philadelphia, PA, April 13, 2016.
114. Bayesian Nonparametric Estimation for Dynamic Treatment Regimes with Sequential Transition Times. Invited Paper Session, JASA Applications and Case Studies, Joint Statistical Meetings, Chicago, IL, July 30 – August 4, 2016.
115. Discussant, Showcase of the Power of Statistics on Evaluating Dynamic Treatment Regimes Leading Toward Personalized Health Care, Invited Paper Session, Sponsored by ENAR and ICSA, Joint Statistical Meetings, Chicago, IL, July 30 – August 4, 2016.
116. Parametric Dose Standardization for Two-Agent Phase I-II Trials with Ordinal Efficacy and Toxicity. In the session, “Bringing Adaptive Trials into the Real World,” ENAR Meeting of the International Biometric Society, Washington, DC, March 12-15, 2017.

117. Parametric Dose Standardization for Two-Agent Phase I-II Trials with Ordinal Efficacy and Toxicity. In the session, “Recent Developments in Early Phase Dose-Finding,” International Chinese Statistical Association, Applied Statistics Symposium, Chicago, IL, June 25-29, 2017.
118. Some Caveats for Outcome Adaptive Randomization in Two Arm Clinical Trials, in the session “Adaptive randomization: a balance between innovation, bias reduction, regulatory and ethical considerations,” ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop, Washington, DC, September 25–27, 2017.
119. Robust Treatment Comparison Based on Utilities of Semi-Competing Risks in Non-Small-Cell Lung Cancer, in the session “Recent Advances in Practical Clinical Trial Design” Invited Paper Session, ENAR Meeting of the International Biometric Society, Atlanta, GA, March 25-28, 2018.
120. Roundtable discussion leader, ‘Practical Issues in Clinical Trial Design and Analysis,’ ENAR Meeting of the International Biometric Society, Atlanta, GA, March 25-28, 2018.
121. Discussant, Drug Information Association, Virtual Journal Club Meeting, ‘Novel Designs in Dose Finding’ April 26, 2018.
122. Bayesian Clinical Trial Designs to Evaluate Precision Medicine in Oncology, The Statistics and Applied Mathematics Institute Workshop on Precision Medicine, North Carolina State University, Raleigh, NC, August 13-17, 2018
123. Bayesian Clinical Trial Designs to Evaluate Precision Medicine in Oncology, 4th International Conference on Big Data and Information Analytics, SAMSI Session on Precision Medicine, Houston, Texas, December 17-19, 2018
124. Two Bayesian Clinical Trial Designs for Precision Medicine in Oncology. 2019 TCT Meetings of the ASBMT and CIBMTR, Houston, TX, February 20-24, 2019.
125. Roundtable discussion leader, ‘Practical Issues in Clinical Trial Design and Analysis for Precision Medicine,’ ENAR Meeting of the International Biometric Society, Philadelphia, PA, March 24-27, 2019.
126. Bayesian Oncology Clinical Trial Designs with Subgroup-Specific Decisions. Stat4Onc Annual Meeting, Hartford, CT, April 27-28, 2019.
127. Subgroup-Specific Dose Finding in Phase I Clinical Trials Based on Time to Toxicity Allowing Adaptive Subgroup Combination. In the session ‘Using adaptive treatment strategies to give the right patient the right dose at the right time’ ICSA Applied Statistics Symposium, Raleigh, NC, June 9-12, 2019.
128. Applications of Bayesian Precision Medicine. Keynote Address, International Society for Clinical Biostatistics, Annual Meeting, Leuven, Belgium, July 14-18, 2019.
129. Bayesian Clinical Trial Designs to Evaluate Subgroup-Specific Treatment Effects. In the session ‘Recent Developments in Novel Clinical Trial Design and Analysis for Precision Medicine’

Invited ENAR, Biometrics Section, Biopharmaceutical Section. Joint Statistical Meetings, July 27 - August 1, 2019, Denver, CO.

130. Two Bayesian Clinical Trial Designs for Precision Medicine in Oncology, in the session 'The Importance of Clinical Trial Design: Registry Trials, Novel Designs and Common Mistakes To Avoid', Cord Blood Connect Annual Meeting, September 14, 2019, Miami Beach, FL

### **Invited Talks at Universities, Medical Centers, Pharmaceutical Companies, and Federal Agencies**

1. Assessment of Stratum-Covariate Interactions in Cox's Proportional Hazards Regression Model. National Center for Health Statistics, Rockville, MD, 1983.
2. Two-Stage Designs. Cancer Therapy Evaluation Program, Division of Cancer Treatment, National Cancer Institute, Bethesda, MD, 1987.
3. Mixed Poisson Likelihood Regression Models for Longitudinal Interval Count Data. Department of Biostatistics, Medical College of Virginia, Virginia Commonwealth University, Richmond, VA, 1988.
4. Optimal Two-Stage Designs for Clinical Trials with Binary Response. Washington Statistical Society, Washington, D.C., 1988.
5. Some Covariance Models for Longitudinal Count Data with Overdispersion. Department of Statistics, Rice University, Houston, TX, February, 1991.
6. Test-Based Variable Selection via Cross-Validation. Biostatistics Center, George Washington University, Rockville, MD, May 15, 1992.
7. Practical Bayesian Stopping Rules for Clinical Oncologists. Institut Curie, Paris, France, September 17, 1993.
8. Practical Bayesian Stopping Rules for Clinical Oncologists. Institut Gustave-Roussy, Paris, France, September 20, 1993.
9. Bayesian Sequential Monitoring Designs for Single-Arm Clinical Trials with Multiple Outcomes. Institut für Medizinische Biometrie und Medizinische Informatik, Freiburg University, Germany, July 22, 1994.
10. Bayesian Sequential Monitoring Designs for Single-Arm Clinical Trials with Multiple Outcomes. Programs in Mathematical Sciences, University of Texas at Dallas, October 11, 1994.
11. Statistical Methods for Design and Conduct of Clinical Trials. University of Texas Southwestern Medical Center, Dept. of Academic Computing, Dallas, TX, January 20, 1995.



12. A Semiparametric Gamma-Poisson Regression Model for Repeated Interval Counts with Covariates. Dept. of Statistics and Actuarial Science, University of Waterloo, Waterloo, Canada, April 7, 1995.
13. Bayesian Sequential Monitoring Designs for Single-Arm Clinical Trials with Multiple Outcomes. Dept. of Health Sciences Research, Mayo Clinic, Rochester, Minnesota, September 18, 1995.
14. Bayesian Sequential Monitoring Designs for Single-Arm Clinical Trials with Multiple Outcomes. Houston Chapter, American Statistical Assoc., December 13, 1995.
15. Randomized Selection and Testing Designs for Phase II/III Clinical Trials. Swiss Group for Clinical Cancer Research, Bern, Switzerland, September 11, 1996.
16. Bayesian Design and Monitoring Strategies for Single-Arm Clinical Trials. Dept. of Statistics, University of Uppsala, Uppsala, Sweden, September 16, 1996.
17. Estimating Genomic Category Probabilities from FISH Counts with Misclassification. Dept. of Chemical Engineering, Rice University, October 2, 1996.
18. Variable Selection in Regression Via Repeated Data Splitting. Dept. of Statistics, University of Texas at Dallas, December 9-10, 1996.
19. A Strategy for Dose-Finding and Safety Monitoring Based on Efficacy and Adverse Outcomes in Phase I/II Clinical Trials. Dept. of Statistics, Carnegie Mellon University, Pittsburgh, Pennsylvania, April 25, 1997.
20. A Strategy for Dose-Finding and Safety Monitoring Based on Efficacy and Adverse Outcomes in Phase I/II Clinical Trials. University of Minnesota, Institute for Mathematics and Its Applications, Summer Program "Statistics in the Health Sciences", July 31-August 5, 1997.
21. Extensions and Applications of a Bayesian Strategy for Monitoring Multiple Outcomes in Clinical Trials. University of Southampton, U.K., October 28, 1997.
22. A Strategy for Dose-Finding and Safety Monitoring Based on Efficacy and Adverse Outcomes in Phase I/II Clinical Trials. Department of Biostatistics, Memorial Sloan Kettering Cancer Institute, New York, March 18, 1998.
23. Parametric Likelihoods for Multiple Non-Fatal Competing Risks and Death. Division of Biostatistics, Columbia University, New York, New York, March 19, 1998.
24. Approximate Bayesian Evaluation of Multiple Treatment Effects. Medical and Pharmaceutical Statistics Research Unit, Dept. of Applied Statistics, Reading University, England, August 20, 1998.
25. Decision-Theoretic Designs for Phase II Clinical Trials with Multiple Outcomes. Dept. of Statistics, Texas A & M University, September 24, 1998.

26. Practical Guidelines for Dose-Finding with the Continual Reassessment Method in Phase I Clinical Trials. H. Lee Moffitt Cancer Center, Tampa, FL, October 2, 1998.
27. New Dose-Finding Methods for Early Phase Clinical Trials. Department of Hematology, University of Illinois at Chicago, Chicago, IL, February 11, 1999.
28. Treatment Comparisons Based on Two-Dimensional Safety and Efficacy Alternatives in Oncology Trials. Dept. of Statistics and Actuarial Science, University of Waterloo, Canada, February 25, 1999.
29. Approximate Bayesian Evaluation of Multiple Treatment Effects: An Alternative to Hypothesis Testing. Novartis Pharmaceuticals, Basel, Switzerland, September 27, 1999.
30. Science and Safety Monitoring in Clinical Trials. Ares-Serono Group, Geneva, Switzerland, October 1, 1999.
31. Evaluating Multiple Treatment Courses in Clinical Trials. Dept. of Biostatistics, University of Missouri at Columbia, Columbia, Missouri, January 25, 2000.
32. Evaluating Multiple Treatment Courses in Clinical Trials. Department of Biostatistics & Medical Informatics, Abbott Laboratories Distinguished Lectureship in Pharmaceutical Applications, University of Wisconsin at Madison, Madison, WI, January 26, 2000.
33. Approximate Bayesian Evaluation of Multiple Treatment Effects: An Alternative to Hypothesis Testing. Dept. of Biostatistics, Harvard University, April 13, 2000.
34. Dose-Finding Based on Response and Toxicity: The Phase I/II Design. Biostatistics Branch, Div. of Intramural Research, National Institute of Neurological Disorders and Stroke, NIH, May 21, 2001.
35. Multi-course Treatment Strategies for Clinical Trials of Rapidly Fatal Diseases. Dept. of Statistics, Texas A & M University, October 18, 2001.
36. Treatment Comparisons Based on Two-Dimensional Safety and Efficacy Alternatives in Oncology Trials. Dept of Biostatistics, Medical College of Virginia, Virginia Commonwealth University, March 23, 2002.
37. Bayesian Methods in Clinical Trials: Recent Practical Innovations in Phase I and II Studies. Grand Rounds, Lombardi Cancer Center, Georgetown University, August 28, 2002.
38. Dose-Finding with Two Agents in Phase I Oncology Trials. Dept. of Biostatistics, Columbia University, November 25, 2002.
39. Adaptive Decision-Making in a Lymphocyte Infusion Trial. Dept. of Health Studies, University of Chicago, April 30, 2003.
40. Covariate-Adjusted Adaptive Randomization in a Sarcoma Trial With Multi-Stage Treatments. Population Science Division, Fox Chase Cancer Center, Philadelphia, PA, July 30, 2003.

41. Covariate-Adjusted Adaptive Randomization in a Sarcoma Trial with Multi-Stage Treatments. Department of Biostatistics, School of Public Health, University of Michigan, Ann Arbor, MI, September 4, 2003.
42. New Methods for Dose-Finding in Early Phase Clinical Trials. Department of Biostatistics, School of Public Health, University of Michigan, Ann Arbor, MI, September 5, 2003.
43. Covariate-Adjusted Adaptive Randomization in a Sarcoma Trial with Multi-Stage Treatments. Department of Biostatistics, St. Jude's Children's Research Hospital, Memphis, TN, October 16, 2003.
44. Practical Adaptive Decision-Making in Oncology Clinical Trials. Department of Biostatistics, St. Jude's Children's Research Hospital, Memphis, TN, October 16, 2003.
45. Adaptive Bayesian Designs for Clinical Trials. Center for Drug Evaluation and Research, U.S. Food and Drug Administration, Rockville, MD, December 15, 2003.
46. Some Bayesian Adaptive Methods for Clinical Trial Design and Conduct. Pharsight, Drug Development Consulting Services, Cary, NC, October 12-13, 2004.
47. Dose-Finding Based On Efficacy-Toxicity Trade-Offs. Office of Biostatistics Research, National Heart, Lung and Blood Institute, NIH, Bethesda, MD, November 30, 2004.
48. Recent Advances in Bayesian Adaptive Dose-Finding. Chiron Corporation, Emeryville, CA, July 12, 2005.
49. Dose Finding Based On Efficacy and Toxicity in Phase I/II Clinical Trials. Unité de Biostatistique, CRLC Val d'Aurelle, Montpellier, France, September 28, 2005.
50. Some Designs for Combining Phase II and Phase III Clinical Trials. Unité de Biostatistique, CRLC Val d'Aurelle, Montpellier, France, September 29, 2005.
51. Patient-Specific Dose-Finding: A New Method Based On Efficacy, Toxicity and Prognostic Covariates. Neurology Grand Rounds, National Institutes of Neurological Diseases and Stroke, Bethesda, MD, November 22, 2005.
52. Two New Bayesian Designs for Dose-Finding Trials. Solid Tumor Oncology and Hematologic Oncology Grand Rounds, Memorial Sloan-Kettering Cancer Center, New York, NY, May 9, 2006.
53. Covariate-Adjusted Adaptive Randomization in a Clinical Trial with Multi-Stage Therapy. Biometric Research Branch, Division of Cancer Treatment & Diagnosis, National Cancer Institute, Rockville, Maryland, October 16, 2006.
54. Improving the Reliability and Precision of Phase 2 Clinical Trials. Clinical Trials Task Force of the Investigational Drug Steering Committee, Division of Cancer Treatment and Diagnosis, Cancer Therapy Evaluation Program, National Cancer Institute, Rockville, Maryland, January 30, 2007.

55. A Geometric Approach to Comparing Treatments for Rapidly Fatal Diseases. Department of Biostatistics, Bioinformatics and Biomathematics, Georgetown University, September 20, 2007.
56. Some New Bayesian Designs for Early Phase Clinical Trials. City of Hope Cancer Center, Duarte, CA, October 17, 2007.
57. Comparing Two-Stage Treatment Strategies Based On Sequential Failure Times. Stanford Cancer Center, Palo Alto, CA, October 19, 2007.
58. Patient-Specific Dose-Finding Based On Bivariate Outcomes and Covariates. University of Pittsburgh, Department of Biostatistics, March 6, 2008.
59. Comparing Two-Stage Treatment Strategies Based On Sequential Failure Times. University of Pittsburgh, Department of Statistics, March 7, 2008.
60. Comparing Two-Stage Treatment Strategies Based On Sequential Failure Times. Department of Biostatistics, Bioinformatics & Epidemiology, Medical University of South Carolina, April 4, 2008
61. Comparing Two-Stage Treatment Strategies Based On Sequential Failure Times. Institut Bergonie, Bordeaux, France, May 21, 2008.
62. Patient-Specific Dose-Finding Based On Bivariate Outcomes and Covariates. Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University, January 30, 2009.
63. Patient-Specific Dose-Finding Based On Bivariate Efficacy-Toxicity Outcomes and Prognostic Covariates. Department of Biostatistics, University of North Carolina, January 27, 2010.
64. Select-and-Test Designs for Phase II-III Clinical Trials. Kanagawa Cancer Center Clinical Trial Design Workshop, Yokohama, Japan, April 12, 2010
65. Patient-Specific Dose-Finding Based On Bivariate (Efficacy, Toxicity) Outcomes and Covariates. Workshop on Contributions of Bayesian Statistics to Clinical Trials. University of Tokyo, April 13, 2010
66. Select-and-Test Designs for Phase II-III Clinical Trials. Kyoto University, Clinical Trial Design and Biostatistics Workshop, Kyoto, Japan, April 15, 2010.
67. Bayesian Adaptive Dose Finding Designs for Early Phase Clinical Trials. University of Texas, Public Health School, Houston, Texas, September 28, 2010
68. New Bayesian Adaptive Designs for Early Phase Clinical Trials. Tufts University School of Medicine, Cancer Center Grand Rounds, Boston, MA, October 22, 2010.
69. Establishing Priors for Bayesian Clinical Trials. Department of Biostatistics, Columbia University Medical Center, New York, NY, June 30, 2011.

70. Navigating the Rocky Shoals of Adaptive Clinical Trial Design and Conduct. Biosatistiques et Epidémiologie Clinique, Hôpital Saint-Louis, Paris, France, September 14, 2011.
71. Patient-Specific Dose-Finding Based on Bivariate Efficacy-Toxicity Outcomes and Prognostic Covariates. Department of Biostatistics, Vanderbilt University School of Medicine, Nashville, TN, November 2, 2011.
72. Utility-Based Dose-Finding with Ordinal Toxicity and Efficacy. Department of Biostatistics and Medical Informatics, University of Wisconsin-Madison, May 4, 2012.
73. A Bayesian Adaptive Design to Optimize Sedative Dose for Neonates Prior to Intubation. Hôpital Universitaire des Enfants Reine Fabiola, Brussels, Belgium, October 2, 2012.
74. Utility-Based Dose-Finding with Ordinal Toxicity and Efficacy. Department of Epidemiology, Biostatistics, and Occupational Health, McGill University, Montreal, Canada, February 12, 2013.
75. Bayesian Hybrid Adaptive Designs for Clinical Trials. Cancer Outcomes Research Program and Sheps Center for Health Services Research, University of North Carolina, September 13, 2013.
76. Bayesian Sequentially Adaptive Clinical Trial Design: General Concepts and Applications. University of Texas Public Health School, Center for Clinical and Translational Sciences, Houston, TX, October 18, 2013.
77. Bayesian Dose-Finding in Two Treatment Cycles Using Joint Efficacy-Toxicity Utilities. Biostatistics Department, University of Michigan, April 17, 2014
78. Utility-Based Bayesian Adaptive Designs for Early Phase Clinical Trials. Radiation Oncology Department, University of Michigan, April 18, 2014
79. Optimizing Schedule-Dose Regimes in Early Phase Clinical Trials, Department of Biostatistics, Mailman School of Public Health, Columbia University, May 1, 2014
80. Bayesian Methods for Targeted Agents in Early Phase Clinical Trials. INSERM UMRS 1138, Information Sciences to support Personalized Medicine, Centre de Recherche des Cordeliers, Paris, France, May, 26, 2014
81. Utility-Based Bayesian Adaptive Designs for Early Phase Clinical Trials. INSERM UMRS 1138, Clinical Epidemiology and Economic Evaluation Applied to Vulnerable Populations, UEC - Hopital Robert Debre, Paris, France, May 28, 2014
82. Utility-Based Bayesian Adaptive Designs for Early Phase Clinical Trials. Greehey Children's Cancer Research Institute, University of Texas Health Science Center, San Antonio, Texas, February 13, 2015.
83. SMART Design, Conduct, and Analysis in Oncology. Systèmes d'Information et Médecine Personnalisée, Centre de Recherche des Cordeliers, INSERM, Paris, France, April 13, 2015.

84. Utility-Based Bayesian Adaptive Designs for Early Phase Clinical Trials. University of Texas Southwestern Medical Center, Dallas, Texas, October 2, 2015.
85. Dysfunctional Conventions in Clinical Trials: Some Practical Alternatives. Early Phase Biometrics, AstraZeneca Pharmaceuticals, Boston, MA, March 18, 2016.
86. Utility-Based Bayesian Adaptive Designs for Early Phase Clinical Trials. Early Phase Biometrics, AstraZeneca Pharmaceuticals, Boston, MA, March 18, 2016.
87. Caveats for Outcome Adaptive Randomization in Comparative Clinical Trials. Systèmes d'Information et Médecine Personnalisée, Centre de Recherche des Cordeliers, INSERM, Paris, France, June 13, 2016.
88. Statistical Remedies for Flawed Conventions in Medical Research. School of Public Health, Louisiana State University, February 11, 2019.

#### **Other Presentations**

1. Cluster Shock Models. American Statistical Association Meeting, Washington, D.C., 1979.
2. Gambling and Games of Chance. Washington Statistical Society, Washington, D.C., 1983.
3. Assessment of Stratum-Covariate Interactions in Cox's Proportional Hazards Regression Model. Society for Clinical Trials Annual Meeting, St. Louis, Missouri, 1983.
4. Nonparametric Two-Sample Tests for Recurrence Rates Based on Censored Count Data. Society for Clinical Trials Meeting, Montreal, Canada, 1986.
5. Mixed Poisson Likelihood Regression Models for Longitudinal Interval Count Data. American Statistical Association Meeting, Chicago, IL, 1986.
6. A Two-stage Design for Choosing Among Several Experimental Treatments and a Control in Phase III Clinical Trials. Society for Clinical Trials Meeting, Atlanta, GA, 1987.
7. Optimal Two-Stage Designs for Clinical Trials with Binary Response. Society for Clinical Trials Meeting, San Diego, CA, 1988.
8. Some Covariance Models for Longitudinal Count Data with Overdispersion. Biometric Society ENAR Meeting, Baltimore, Maryland, 1990, also presented to the Department of Statistics, Rice University, Houston, Texas, February, 1991.
9. A Comparative Analysis of Complete Remission and Survival in AML Patients Treated with High Dose ARA-C Alone or +GM-CSF. Department of Hematology, MDACC, June 5, 1991.
10. A Bayesian Treatment Selection Design for Evaluating New Therapies in Leukemia. Dept. of Hematology, MDACC, September 26, 1991.

11. A Bayesian Strategy for Screening Cancer Treatments Prior to Phase II Evaluation. Division of Medicine, MDACC, April 7, 1992.
12. Basic Concepts in Statistics. Melanoma/Sarcoma Research Conference, MDACC, April 13, 1992.
13. How to Survive Statistics. Melanoma/Sarcoma Research Conference, MDACC, April 20, 1992.
14. Your Friend, the Sample Statistic. Melanoma/Sarcoma Research Conference, MDACC, April 27, 1992.
15. The Mythology of P-values: Hypothesis Testing in the Clinic. Melanoma/Sarcoma Research Conf, MDACC, May 4 and June 8, 1992.
16. Practical Bayesian Guidelines for Phase IIB Clinical trials. 1992 annual meetings for the Society for Clinical Trials, Philadelphia, PA, May 10-13, 1992.
17. Confidence Intervals and Multiple Testing. Melanoma/Sarcoma Research Conference, MDACC, June 15, 1992.
18. Regression: Fitting Equations to Data. Melanoma/Sarcoma Research Conference, MDACC, June 22, 1992.
19. Statistical Designs for Phase II Clinical Trials. Melanoma/Sarcoma Research Conference, MDACC, July 6, 1992.
20. Phase II Trials With Continuous Monitoring: a Bayesian Design. Melanoma/Sarcoma Research Conference, MDACC, July 20, 1992.
21. A Bayesian Strategy for Screening Cancer Treatments Prior to Phase II Clinical Evaluation. 13th annual meeting of the International Society of Clinical Biostatistics, Copenhagen, Denmark, August 17-21, 1992.
22. A Bayesian Design for a Phase IIB Study of Transretinoic Acid + Idarubicin in APL Patients. Dept. of Hematology, MDACC, September 30, 1992.
23. Bayesian Death in the Clinic. Department of Hematology, MDACC, April 14, 1993.
24. Design of Phase II Bone Marrow Transplant Studies. Section of Bone Marrow Transplant, Dept. of Hematology, MDACC, April 27, 1993.
25. Results of Accelerated Radiotherapy with Carboplatin in Glioblastomas. Department of Neuro-Oncology, MDACC, May 6, 1993.
26. Sample Size and Monitoring Criteria for Bayesian Phase II Clinical Trials. 14th Annual Meeting of the Society for Clinical Trials, Orlando, FL, May 25, 1993.
27. Q-Twist: A Quality-of-Life Oriented Statistic for Cancer Clinical Trials. Quality of Life Multidisciplinary Study Group, MDACC, July 8, 1993.

28. New Designs for Clinical Trials With Multiple Endpoints. Department of Hematology, MDACC, August 25, 1993.
29. Practical Bayesian Stopping Rules for Clinical Oncologists. Research Council, MDACC, September 13, 1993.
30. Bayesian Designs for Phase II Clinical Trials With Single or Multiple Endpoints. 14th Meeting, International Soc. Clinical Biostat, Cambridge, UK, September 20-24, 1993.
31. Prevalence of a Transient Condition: A Quantitative Method for Evaluating Quality of Life in Clinical Trials. Quality of Life Multidisciplinary Study Group, MDACC, February 22, 1994.
32. A Quantitative Method for Evaluating Quality of Life in Clinical Trials. Dept of Hematology, MDACC, March 9, 1994.
33. Bayesian Sequential Monitoring Designs For Single-Arm Clinical Trials with Multiple Outcomes. ENAR Meeting of Biometric Society, Cleveland, OH, April 10-14, 1994.
34. A Statistical Design for the CD34 Allogeneic Bone Marrow Transplant Trial: Application of the Thall-Simon-Estey Monitoring Strategy. Section of Bone Marrow Transplant, Dept. of Hematology, MDACC, April 19, 1994.
35. Bayesian Sequential Monitoring Designs For Single-Arm Clinical Trials with Multiple Outcomes. 1994 Meeting of the Soc. for Clinical Trials, Houston, TX, May 8-11, 1994.
36. Statistical Designs for Monitoring Single-Arm Clinical Trials with Multiple Outcomes. Pediatrics Research Conference, Division of Pediatrics, MDACC, June 13, 1994.
37. Bayesian Sequential Monitoring Designs for Single-Arm Clinical Trials With Multiple Outcomes. 15th Meeting of the International Society of Clinical Biostatistics (ISCB) Basel, Switzerland, July 25-29, 1994.
38. Phase II Trials. Hematology/Oncology Fellows, MDACC, September 19, 1994.
39. Analysis of Prognostic Factors. Hematology/Oncology Fellows, MDACC, September 23, 1994.
40. A Strategy for Selecting Treatments for Phase II Study: The Phase I 1/2 Design. Program in Experimental Therapeutics, MDACC, January 17, 1995.
41. Bayesian Sequential Monitoring Designs for Single-Arm Clinical Trials with Multiple Outcomes. Department of Statistics, Rice University, Houston, TX, January 30, 1995.
42. Statistical Data Analysis: Fitting Equations to Data. Medical Oncology Fellows, MDACC, May 8, 1995.
43. Balancing Prognostic Factors in Randomized Clinical Trials: The Pocock-Simon Design. Leukemia Section, Hematology Dept., MDACC, September 6, 1995.



44. Statistical Designs for Phase II and Phase III Cancer Clinical Trials. Rhône-Poulenc Rorer Preceptorship Program, MDACC, October 24, 1995.
45. Statistical Designs for Phase II and Phase III Cancer Clinical Trials Rhône-Poulenc Rorer Preceptorship Program, MDACC, February 21, 1996.
46. Semiparametric Regression Analysis for Recurrent Event Interval Counts. 1996 ENAR Spring Meeting, Richmond, VA, March 19, 1996.
47. A Strategy for Monitoring Multiple Outcomes in Developmental Clinical Trials. Dept. of Nuclear Medicine, MDACC, April 30, 1996.
48. A New Statistical Strategy for Monitoring Multiple Adverse and Efficacy Outcomes in Phase I/II Clinical Trials. Division of Medicine Grand Rounds, MDACC, July 9, 1996.
49. Statistical Design of Phase II and Phase III Clinical Trials. ICC/Janssen Preceptorship Program, MDACC, July 30, 1996.
50. Variable Selection in Regression Via Repeated Data Splitting. ENAR Spring Meeting, Memphis, TN, March 23, 1997.
51. Variable Selection in Regression Via Repeated Data Splitting. 29th Symposium on the Interface Between Computing Science and Statistics, Houston, TX, May 15, 1997.
52. New Graphical Methods for Evaluating and Improving Goodness-of-Fit in Survival Analysis With the Cox Model. MDACC “Advances in Oncology” Grand Rounds, August 15, 1997.
53. A Strategy for Dose-Finding and Safety Monitoring Based on Efficacy and Adverse Outcomes in Phase I/II Clinical Trials. 3rd International Congress on Statistical Methods in Biopharmacy: Optimising in Drug Development, Paris, France, September 15-16, 1997.
54. A Strategy for Dose-Finding and Safety Monitoring Based on Efficacy and Adverse Outcomes in Phase I/II Clinical Trials. ENAR Spring Meeting, Pittsburgh, PA, March 28-April 1, 1998.
55. Practical Guidelines for Dose-Finding with the Continual Reassessment Method in Phase I Clinical Trials. Pediatric Research Conf., MDACC, September 14, 1998.
56. A Strategy for Dose-Finding and Safety Monitoring Based on Efficacy and Toxicity in Phase I/II Clinical Trials. Pediatric Research Conference, MDACC, October 5, 1998.
57. Treatment Comparisons based on Two-Dimensional Safety and Efficacy Alternatives in Oncology Trials. ENAR Spring Meeting, Atlanta, GA, March 28-31, 1999.
58. Safety Monitoring and Science in Clinical Trials. Rhone-Poulenc-Rohrer Preceptorship, MDACC, November 11, 1999.

59. A New Statistical Strategy for Evaluating AML/MDS Treatment Strategies. Department of Leukemia, MDACC, March 7, 2001.
60. A Survival Analysis of Data from 90 Chronic Lymphocytic Leukemia patients treated at MDACC. Department of Leukemia, MDACC, June 29, 2001.
61. Adaptive Designs for Early Phase Oncology Trials. Department of GI Medical Oncology, MDACC, February 27, 2002.
62. A General Approach to a Two-Component Phase I Trial. Grand Rounds, MDACC, June 21, 2002 (presented jointly with R. Millikan).
63. Dose-Finding in Early Phase Clinical Trials I: Methods Based on Toxicity. Department of Pediatrics, MDACC, March 19, 2003.
64. Dose-Finding in Early Phase Clinical Trial. Pediatric Grand Rounds, MDACC, April 21, 2003.
65. Effects of Tacrolimus Level on Survival Time in Allogeneic Transplant Patients. Department of Blood and Marrow Transplantation, MDACC, April 22, 2003.
66. Adaptive Decision-Making in Cancer Clinical Trials. Core Curriculum Lecture, MDACC, May 5, 2003.
67. New Methods for Dose-Finding in Early Phase Clinical Trials. Medical Grand Rounds, MDACC, July 8, 2003.
68. Adaptive Randomization in a Multi-Stage Trial: Gemcitabine +/- Docetaxel for Soft Tissue Sarcoma. In the session "Clinical Trials: 2003 and Beyond," annual meeting of the Connective Tissue Oncology Society, Barcelona, Spain, November 6-8, 2003.
69. Adaptive Randomization in Clinical Trials. Human Protocol Research, GS21 0132, Graduate School of Biomedical Sciences, MDACC, October 11, 2006.
70. Adaptive Randomization in Clinical Trials. Human Protocol Research, GS21 0132, Graduate School of Biomedical Sciences, MDACC, October 10, 2007.
71. Simultaneously Optimizing Dose and Schedule of a New Cytotoxic Agent : A New Paradigm for Phase I Clinical Trials. Presented to the Department of Stem Cell Transplantation and Cellular Therapy, MDACC, February 26, 2008.
72. Adaptive Randomization in Clinical Trials. Human Protocol Research, GS21 0132, Graduate School of Biomedical Sciences, MDACC, October 1, 2008
73. Two Adaptive Bayesian Designs for Early Phase Clinical Trials. Presented to External Review Panel for the Division of Quantitative Sciences at MDACC, June 2, 2009.
74. Innovative Bayesian Methods for Early Phase Clinical Trials. Human Protocol Research, GS21 0132, Graduate School of Biomedical Sciences, MDACC, September 30, 2009.

75. Innovative Bayesian Adaptive Clinical Trial Designs. Clinical Trials Faculty Meeting, Department of Investigational Cancer Therapeutics, MDACC, October 14, 2009.
76. Monitoring Multiple Events in Early Phase Clinical Trials. Clinical Trial Design Discussion Forum, Department of Biostatistics, MDACC, October 21, 2009.
77. A Bayesian-Frequentist Geometric Phase II-III Select-and-Test Design: Evaluating Chemotherapies for Choroid Plexus Carcinomas in Children. Department of Biostatistics, MDACC, February 8, 2010.
78. Innovative Bayesian Methods for Early Phase Clinical Trials. Human Protocol Research, GS21 0132, Graduate School of Biomedical Sciences, MDACC, November 3, 2010.
79. Innovative Bayesian Methods for Early Phase Clinical Trials. Human Protocol Research, GS21 0132, Graduate School of Biomedical Sciences, MDACC, March 21, 2012.
80. Evaluating Induction-Salvage Treatment Regimes in Therapy of AML/MDS. Hematology Grand Rounds, MDACC, May 9, 2012.
81. 22 Years Working as a Biostatistician in a Cancer Center: A Few Snapshots. Presentation to the Rice University Summer Institute of Statistics students, July 9, 2012.
82. Utility-Based Methods for Early Phase Clinical Trials. Department of Investigational Cancer Therapeutics, Pre-Clinical Meeting, MDACC, October 24, 2012.
83. Dysfunctional Conventions in Clinical Trials: Some Practical Alternatives. Grand Rounds, Department of Biostatistics, MDACC, January 17, 2013
84. Innovative Bayesian Methods for Early Phase Clinical Trials. Human Protocol Research, GS21 1132, Graduate School of Biomedical Sciences, MDACC, March 27, 2013.
85. 23 Years Working as a Biostatistician at M.D. Anderson Cancer Center: Some Very Brief Examples. Presentation to the Rice University Summer Institute of Statistics students, MDACC, June 7, 2013.
86. Dysfunctional Conventions in Clinical Trials: Some Practical Alternatives. Grand Rounds, Department of Anesthesiology, MDACC, July 3, 2013.
87. Dysfunctional Conventions in Clinical Trials. Department of Investigational Cancer Therapeutics, MDACC, October 24, 2013.
88. Counterintuitive Properties of Clinical Trials: Bayesian Methods to Avoid Getting it Wrong Department of Investigational Cancer Therapeutics, MDACC, February 6, 2014.
89. Bayesian Utility-Based Designs, Dynamic Treatment Regimes, and Personalized Medicine. Human Protocol Research, MDACC, March 26, 2014

90. Recent Practical Improvements in the EffTox Dose-Finding Design (jointly with R. Herrick). Informal Biostatistics Lunch Discussion, Department of Biostatistics, MDACC, April 14, 2014
91. Finding an Optimal Dose Pair of MLN0128 and Paclitaxel with a fixed dose of Carboplatin in Patients with Advanced Tumors: A Phase I-II Design. Department of Investigational Cancer Therapeutics, Clinical Studies Meeting, November 6, 2014.
92. Dysfunctional Conventions in Cancer Clinical Trials, and Some Practical Alternatives. Human Protocol Research, MDACC, March 25, 2015
93. Utility-Based Bayesian Adaptive Designs for Early Phase Clinical Trials. Department of Biostatistics, MDACC, October 12, 2015
94. Interim Analyses of Data from the START Trial, Protocol 2010-0085 (N. Tannir, PI). GU Oncology Department, MD Anderson Cancer Center, October 21, 2015
95. Dysfunctional Conventions in Cancer Clinical Trials: Some Practical Alternatives. Human Protocol Research, MDACC, March 23, 2016
96. Randomization and Bias in Clinical Research: Basic Concepts and Two Recent Applications. Surgical Oncology and Breast Medical Oncology Departments, MDACC, August 26, 2016
97. Dysfunctional Conventions in Clinical Trials: Some Practical Alternatives. Lecture #1, Clinical Trials Workshop for Surgical Oncology and Breast Medical Oncology Fellows, MDACC, January 19, 2018.
98. Randomization and Bias in Clinical Research: Basic Concepts and Some Recent Trial Designs. Lecture #2, Clinical Trials Workshop for Surgical Oncology and Breast Medical Oncology Fellows, MDACC, January 19, 2018.
99. Robust Treatment Comparison Based on Utilities of Semi-Competing Risks in Non-Small-Cell Lung Cancer. Informal Biostatistics Lunch Discussion Series, Department of Biostatistics, MDACC, April 9, 2018.
100. Two Utility-Based Bayesian Designs with Adaptive Subgroup-Specific Decisions for Precision Medicine. Informal Biostatistics Lunch Discussion Series, Department of Biostatistics, MDACC, August 12, 2019.
101. Randomization and Bias in Clinical Research: Basic Concepts and Some Recent Trial Designs. Department of Endocrine Neoplasia and Hormonal Disorders, October 28, 2019.
102. Survival Analysis and Some Statistical Graphics. Department of Endocrine Neoplasia and Hormonal Disorders, November 4, 2019.
103. Bayesian Nonparametric Survival Regression for Optimizing Precision Dosing of Intravenous Busulfan in Allogeneic Stem Cell Transplantation. Informal Biostatistics Lunch Discussion Series, Department of Biostatistics, MDACC, December 9, 2019.

**Professional Societies**

American Statistical Association  
International Biometric Society  
International Chinese Statistical Association  
International Society for Bayesian Analysis  
Royal Statistical Society  
Society for Clinical Trials