

MEI-YIN CHEN POLLEY

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Education:

Columbia University, New York, New York
Ph.D. Biostatistics, February 2006 (Thesis advisor: Ken Cheung)
M.S. Biostatistics, August 2001

Harvard University, Cambridge, Massachusetts
A.M. Statistics, May 1999

National Taipei University, Taipei, Taiwan
B.B.A. Statistics, May 1995

Professional Experience:

Statistician. NCI/NIH, Biometric Research Branch (BRB), Division of Cancer Treatment and Diagnosis. Statistical reviewer for biomarker study protocols, statistician in the Cancer Diagnosis Program (CDP). August 2010 - present.

Assistant Professor. Department of Neurological Surgery, University of California San Francisco, San Francisco, California. Provided biostatistical input into the design, analysis, and reporting of the study results within the Brain Tumor Research Center (BTC). Statistician for the Brain Specialized Program of Research Excellence (SPORE) grant and the P01 project on Imaging and Tissue Biomarkers in the Treatment of Brain Tumors. September 2007 - July 2010.

Member of the UCSF Biostatistics and Computation Biology (BCB) Core. UCSF Comprehensive Cancer Center, San Francisco, California. Statistical reviewer of the UCSF Cancer Center protocol review committee (PRC). Provided statistical consultation for brain tumor projects within the UCSF Cancer Center. September 2007 - July 2010.

Course Instructor. Co-directed with Drs. Kathleen Lamborn and Susan Chang on Evidence-Based Medicine. This lecture series constitutes part of training program for residents and trainees at UCSF Neurosurgery. Topics discussed included biostatistics and clinical research methods. September 2007 - July 2010.

Biostatistics Manager. Amgen Inc., Thousand Oaks/South San Francisco, California. Provided statistical input into the design and conduct of cancer clinical trials. Authored statistical sections in study protocols and statistical analysis plans (SAP). Developed R and SAS programs to perform statistical analyses and simulation studies. January 2006 - August 2007.

Course Instructor. Department of Biostatistics, Columbia University, New York, New York. Taught graduate level courses at Columbia University Mailman School of Public Health. Responsibilities included lectures and developing course materials, exams and homework assignments.

- Applied Regression Analysis, Summer 2004 and Summer 2005.
- Statistical Computing with SAS, Summer 2004.

Summer Intern. Amgen Inc., Thousand Oaks, California. Worked in the Oncology Supportive Care therapeutic area. Collaborated with mentors and provided solutions to a statistical problem involving missing data encountered in a project. May, 2003 - August, 2003.

Graduate Research Assistant. Department of Biostatistics, Columbia University, New York, New York. Assisted in statistical model fitting and generated graphs for the textbook *Statistical Methods for Rates and Proportions* authored by Professors Joseph Fleiss, Bruce Levin and Myunghee Cho Paik. September 2001 - April 2002.

Teaching Assistant. Department of Biostatistics, Columbia University, New York, New York. Teaching assistant for graduate courses in introduction to biostatistical methods, design of medical experiments, and categorical data analysis. September 2000 - December 2001.

Research Assistant. Department of Epidemiology, Columbia University, New York, New York. Assisted Professor Maureen Durkin in data management and data analysis on a cohort study of neurodevelopmental outcomes of brain injuries associated with premature birth. January 2000 - August 2000.

Teaching Assistant. Department of Statistics, Harvard University, Cambridge, Massachusetts. Teaching assistant for undergraduate course in introduction to statistics. January 1998 - August 1998.

Honors and Awards:

REAC Pilot Research Awards in Basic and Clinical/Translational Sciences, UCSF Resource Allocation Program (RAP), 2009.

Award for Excellence in Clinical Research. The Joint Meeting of the Society for Neuro-Oncology and the AANS/CNS Sections on Tumors (supported by American Brain Tumor Association), 2009.

AACR Cancer Biostatistics Workshop travel scholarship, 2008.

The Joseph L. Fleiss Memorial Prize in Biostatistics for an Outstanding Dissertation. Columbia Mailman School of Public Health, May 2006.

Merck & Co., Inc. Fellowship. Department of Biostatistics, Columbia University, New York, New York, 2001-2004.

Academic Honor. Department of Statistics, National Taipei University, Taipei, Taiwan, 1994-1995.

Professional Societies and Committee Memberships:

Memberships

American Statistical Association, 2004-present

Society for Neuro-Oncology, 2007-present

Service to Professional Organizations

Session organizer for the Western North American Region (WNAR) of the International Biometric Society, 2009-2010.

Editorial Board Membership:

Associate Editor for Neurosurgery, 2009-present.

Reviewer for Professional Journals:

Neuro-Oncology
Journal of Neuro-Oncology
Journal of Clinical Oncology
Clinical Trials
Neurosurgery
Statistics in Biopharmaceutical Research

Computer Skills:

Statistical packages: proficient with Splus and R, SAS, STATA and SPSS.

Applications: LaTeX, EndNote, proficient with Microsoft Word, Excel, and PowerPoint.

Database: clinical trial data management system eVelos

Languages:

Chinese: Reading and speaking.

Taiwanese: speaking.

Presentations and Lectures:

International and National

Two-Stage Designs for Dose-Finding with a Biologic Endpoint Using Stepwise Tests. Invited presentation at International Chinese Statistical Association (ICSA) Applied Statistics Symposium, Raleigh, NC, 2007.

Two-Stage Designs for Dose-Finding with a Biologic Endpoint Using Stepwise Tests. Invited presentation at the Joint Statistical Meeting (JSM), Salt Lake City, UT, 2007.

The Calibration of the TITE-CRM Design for Phase I Cancer Trials with Late Onset Toxicities and Fast Patient Accrual. Presentation at the Joint Statistical Meeting (JSM), Washington DC, 2009.

Six-month Progression-Free Survival as an Alternative Primary Efficacy Endpoint to Overall Survival in Newly-Diagnosed Glioblastoma Patients Receiving Temozolomide. Award presentation at the Joint Meeting of the Society for Neuro-Oncology and the AANS/CNS Sections on Tumors, New Orleans LA, 2009.

Regional and Other Invited Presentations

Missing Data Imputation with an Application to a KGF Phase III trial. Presentation at Amgen Inc., Thousand Oaks, CA, 2003.

Two-Stage Designs for Dose-Finding with a Biologic Endpoint Using Stepwise Tests.

- Invited presentation at the Merck Symposium, Merck Inc., 2002.
- Invited presentation at the New York State Psychiatric Institute, New York, NY, 2002.
- Invited presentation at Amgen Inc., Thousand Oaks, CA, 2005.
- Invited presentation at Genentech Inc., South San Francisco, CA, 2007.
- Department of Epidemiology and Biostatistics, UCSF, San Francisco, CA, 2007.

Efficacy Endpoints for Brain Tumor Clinical Trials: A Statistical Perspective. Biomedical Science Graduate Program lecture series, Department of Neurological Surgery, UCSF, San Francisco, CA, 2010.

Practical Modifications to the Time-to-Event Continual Reassessment Method for Phase I Cancer Trials with Fast Patient Accrual and Late-Onset Toxicities. Invited presentation at the Biometric Research Branch, National Cancer Institute, Bethesda, MD, 2010.

Bibliography:

1. **Polley MY**. Practical modifications to the time-to-event continuation reassessment method for phase I cancer trials with fast patient accrual and late-onset toxicities. Statistics in Medicine, 2011 (In Press).
2. **Polley MY**, Lamborn KL, Chang SM, Butowski NA, Clarke J, Prados MD. The conditional probability of survival in newly-diagnosed glioblastoma patients. Journal of Clinical Oncology, 2011 (In Press).
3. Mueller S, **Polley MY**, Lee B, Kunwar S, Pedain C, Wembacher-Schrö E, Mittermeyer S, Westphal M, Sampson JH, Vogelbaum MA, Croteau D, Chang SM. Effect of imaging and catheter characteristics on clinical outcome for patients in the PRECISE study. Journal of Neurooncology, 101(2): 267-77, 2011.
4. Mueller S, Yang X, Sottero TL, Prasad G, **Polley MY**, Weiss WA, Matthay KK, DuBois SG, Haas-Kogan DA. Cooperation of the HDAC inhibitor vorinostat and radiation in metastatic neuroblastoma and underlying mechanisms. Cancer Letters 306(2): 223-29, 2011.
5. Clark AJ, Butowski NA, Chang SM, Prados MD, Clarke J, **Polley MY**, Sughrue ME, McDermott MW, Parsa AT, Berger MS, Aghi MK. Impact of bevacizumab chemotherapy on craniotomy wound healing. Journal of Neurosurgery 114(6): 1609-16, 2011.
6. Sanai N, **Polley MY**, McDermott MW, Parsa AT, Berger MS. An extent of resection threshold for newly-diagnosed glioblastomas. Journal of Neurosurgery, 2011 (In Press).
7. Chang EF, Clark A, Smith JS, **Polley MY**, Chang SM, Barbaro NM, Parsa AT, McDermott MW, Berger MS. Functional mapping-guided resection of low-grade gliomas in eloquent areas of the brain: improvement of long-term survival. Journal of Neurosurgery 114(3): 566-73, 2011.
8. Parvataneni R, **Polley MY**, Prados MD, Lamborn KR, Butowski N, Liu R, Clarke J, Page M, Rabbitt J, Fedoroff A, Clow E, Urquhart T, Hsieh E, Kivett V, Foft J, DeBoer R, Chang SM. Identifying the needs of brain tumor patients and their caregivers. Journal of Neurooncology, 2011 (In Press).
9. Li Y, Lupo JM, **Polley MY**, Crane JC, Bian W, Cha S, Chang SM, Nelson SJ. Serial analysis of imaging parameters in patients with newly diagnosed glioblastoma multiforme. Neuro-Oncology 13(5): 546-57, 2011.
10. Tate MC, Kim C-Y, Chang EF, **Polley MY**, Berger MS. Assessment of morbidity following resection of cingulate gyrus gliomas. Journal of Neurosurgery 114(3): 640-7, 2011.
11. Prasad G, Sottero T, Yang X, Mueller S, James D, Weiss WA, **Polley MY**, Ozawa T, Berger MS, Aftab DT, Prados MD, Haas-Kogan DA. Inhibition of PI3K/mTOR pathways in glioblastoma and implications for combination therapy with temozolomide. Neuro-Oncology 13(4): 384-92, 2011.
12. Essock-Burns E, Lupo JM, Cha S, **Polley MY**, Butowski NA, Chang SM, Nelson SJ. Assessment of perfusion MRI derived parameters in evaluating and predicting response to anti-angiogenic therapy in patients with newly-diagnosed GBM. Neuro-Oncology 13(1): 119-31, 2011.
13. Srinivasan R, Phillips JJ, Vandenberg SR, **Polley MY**, Bourne G, Au A, Pirzkall A, Cha S, Chang SM, Nelson SJ. Ex vivo MR spectroscopic measure differentiates tumor from treatment effects in GBM. Neuro-Oncology 12(11): 1152-61, 2010.

14. Cloyd JM, Acosta FL Jr, **Polley MY**, Ames CP. En bloc resection for primary and metastatic tumors of the spine: a systematic review of the literature. Neurosurgery 67(2): 435-44, 2010.
15. Khayal IS, **Polley MY**, Jalbert L, Elkhaled A, Chang SM, Cha S, Butowski NA, Nelson SJ. Evaluation of diffusion parameters as early biomarkers of disease progression in glioblastoma multiforme. Neuro-Oncology 12(9): 908-16, 2010.
16. **Polley MY**, Lamborn KR, Chang SM, Butowski N, Clarke JL, Prados M. Six-month progression-free survival as an alternative primary efficacy endpoint to overall survival in newly diagnosed glioblastoma patients receiving temozolomide. Neuro-Oncology 12(3): 274-82, 2010.
17. Butowski N, Chang SM, Lamborn KR, **Polley MY**, Parvataneni R, Hristova-Kazmierski M, Musib L, Nicol SJ, Thornton DE, Prados MD. Enzastaurin plus temozolomide with radiation therapy in glioblastoma multiforme: a phase I study. Neuro-Oncology 12(6): 608-13, 2010.
18. Schiffman JD, Hodgson JG, Vandenberg SR, Flaherty P, **Polley MY**, Yu M, Fisher PG, Rowitch DH, Ford JM, Berger MS, Ji H, Gutmann DH, James CD. Oncogenic BRAF mutation with CDKN2A inactivation is characteristic of a subset of pediatric malignant astrocytomas. Cancer Research 70(2): 512-9, 2010.
19. McBride SM, Perez DA, **Polley MY**, Vandenberg SR, Smith JS, Zheng S, Lamborn KR, Wiencke JK, Chang SM, Prados MD, Berger MS, Stokoe D, Haas-Kogan DA. Activation of PI3K/mTOR pathway occurs in most adult low-grade gliomas and predicts patient survival. Journal of Neurooncology 97(1): 33-40, 2010.
20. Sanai N, **Polley MY**, Berger MS. Insular glioma resection: assessment of patient morbidity, survival, and tumor progression. Journal of Neurosurgery 112(1): 1-9, 2010.
21. Liu R, Solheim K, **Polley MY**, Lamborn KR, Page M, Fedoroff A, Rabbitt J, Butowski N, Prados M, Chang SM. Quality of life in low-grade glioma patients receiving temozolomide. Neuro-Oncology 11(1): 59-68, 2009.
22. **Polley MY**, Cheung YK. Two-stage designs for dose-finding trials with a biologic endpoint using stepwise tests. Biometrics 64(1): 232-41, 2008.

Submitted:

1. Butowski N, Chang SM, Lamborn KR, **Polley MY**, Pieper R, Costello J, Vandenberg S, Parvataneni R, Nicole A, Hristova-Kazmierski M, Nicol SJ, Thornton DE, Prados MD. Phase II and pharmacogenomics study of enzastaurin plus temozolomide during and following radiation therapy in patients with newly diagnosed glioblastoma multiforme and gliosarcoma. Submitted to Neuro-Oncology.
2. Phillips JJ, Huillard E, Ward A, Robinson A, Lum D, **Polley MY**, Rosen SD, Rowitch DH, Werb Z. Heparan sulfate sulfatase SULF2 regulates PDGFR signaling and growth in malignant glioblastoma. Submitted to Cancer Cell.
3. Pejavar S, **Polley MY**, Rosenberg-Wahl S, Chennupati S, Wara WM, Prados MD, Berger MS, Banerjee A, Gupta N, Haas-Kogan DA. Pediatric intracranial ependymoma: The roles of surgery, radiation and chemotherapy. Submitted to Journal of Neurooncology.