

Anastasios A. Tsiatis

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Year of Birth: 1948

Place of Birth: New York, New York

Education:

1974 University of California, Berkeley Ph.D., Statistics
1970 Massachusetts Institute of Technology B.S., Mathematics

Academic Positions:

2004– Drexel Professor of Statistics, Department of Statistics,
North Carolina State University, Raleigh, NC
1998– Member, Lineberger Comprehensive Cancer Center,
University of North Carolina, Chapel Hill, NC
1997– Adjunct Professor, Department of Biostatistics and Bioinformatics,
Duke University, Durham, NC
1997–2004 Professor, Department of Statistics,
North Carolina State University, Raleigh, NC
1996–1997 Visiting Professor, Department of Statistics,
North Carolina State University, Raleigh, NC
1990–1997 Professor of Biostatistics, Department of Biostatistics,
Harvard School of Public Health, Boston, MA
1981–1990 Biostatistician, Dana-Farber Cancer Institute,
Boston, MA
1981–1990 Associate Professor, Department of Biostatistics,
Harvard School of Public Health, Boston, MA
1980–1981 Associate Member, Biostatistics Division,
St. Jude Children’s Research Hospital, Memphis, TN
1979–1980 Associate Professor, Department of Statistics,
University of Wisconsin, Madison, WI
1974–1979 Assistant Professor, Departments of Statistics and
Preventive Medicine, University of Wisconsin, Madison, WI
1970–1974 Teaching and Research Assistant, Department of Statistics,
University of California, Berkeley, CA

Other Professional Positions:

1984–1995 Statistical consultant, World Health Organization—
primary consultant for Breast Self Examination study
conducted in former Soviet Union
1982–1984 Coordinating Statistician, Eastern Cooperative
Oncology Group

Awards and Honors:

- 1986 Spiegelman Award, most outstanding contribution of a young (under 40) statistician in Public Health
- 1987 Margaret Drolette Faculty Teaching Award, Harvard School of Public Health
- 1987 Elected Ordinary Member, International Statistical Institute
- 1990 Fellow, American Statistical Association
- 1992 Teaching Citation, Harvard School of Public Health
- 1993 Fellow, Institute of Mathematical Statistics
- 1993–1994 Three of Dr. Tsiatis' students (J. Spritzler, U. Dafni, S. Murray) each awarded Drug Information Association Dissertation Summary Award; for each student, Dr. Tsiatis received a \$10,000 award in his name to Harvard School of Public Health
- 2001 Paper by Scharfstein, D.O., Tsiatis, A.A. and Robins, J.M. "Semi-parametric efficiency and its implications on the design and analysis of group sequential studies", published in *JASA* 1997, was given the Snedecor Award
- 2002 Rupert Miller Distinguished Lecturer for the Department of Statistics at Stanford University
- 2003 Greenberg Distinguished Lecturer for the Department of Biostatistics at the University of North Carolina
- 2003 Alumni Outstanding Research Award from North Carolina State University
- 2003 Received MERIT award from The National Allergy and Infectious Diseases Council
- 2004 Named Drexel Professor of Statistics at North Carolina State University

Major Research Grants (Principal Investigator):

- 1983–1990 NIH-NCI, Grant R01–CA36446, Early Stopping of Clinical Trials
- 1990–2006 NIH-NCI, Grant R01–CA51692, Statistical Analysis of Time to Event Data in Cancer
- 1991–2003 NIH-NIAID, Grant R01–AI31789, Statistical Methods for AIDS Clinical Trials
- 2003–2013 NIH-NIAID, Grant R37–AI31789, Statistical Methods for AIDS Clinical Trials

Editorial Service:

- 1988–1994 Associate Editor, *Statistics and Probability Letters*
- 1995–1998 Associate Editor, *Annals of Statistics*
- 1996– Associate Editor, *Biometrika*
- 1998– Editor, *Statistics for Biology and Health* series of Springer-Verlag

Other Professional Activities:

1985	Member, National Academy of Sciences Subcommittee on Dietary Intake Evaluation
1987–1988	Member, Data Safety and Monitoring Board, AIDS Clinical Trials Group (NIH-NIAID)
1987–1993	Member, Data Safety Quality Committee, Diabetes Complication Control Trial (NIH-NIDDK)
1989	Program Chair, Spring Biometrics (ENAR) Meetings, Lexington, KY
1994–2002	Member, Data Safety Quality Committee, Diabetes Prevention Trial, Type 1 (NIDDK)
1995–1997	Member, Data Safety and Monitoring Committee, Indinavir Trial, Merck and Co.
1998–1999	Member, Data Monitoring Committee, Abacavir Trial, Glaxo Wellcome, Inc.
1998–	Member, Data Safety and Monitoring Board, AIDS Clinical Trials Group (NIH-NIAID)
2002–2006	Member, Biological Response Modifier Advisory Committee for the Food and Drug Administration (FDA)
2002–	Member, Data Safety Monitoring Board, Trialnet Studies for the Treatment and Prevention of Type I Diabetes, (NIH-NIDDK)

Professional Memberships:

1977–	Institute of Mathematical Statistics
1977–	American Statistical Association
1977–	International Biometric Society (Eastern North American Region)
1985–	Greek Statistical Institute
1987–	International Statistical Institute

Doctoral Student Research Supervision (as Principal Supervisor):

1. Gary L. Rosner, “Group Sequential Methods for Clinical Trials,” 1985.
2. Myrto Lefkopoulou, “Proportional Hazards Regression Model for Tied Survival Data,” 1986.
3. Sandro Pampallona, “Group Sequential Methods,” 1990.
4. Paul Elson, “Group Sequential Trials: Computing Design Characteristics and the Effect of Lag Time,” 1991.
5. John G. Spritzler, “A Group Sequential Test of Equal Response Rates When There is Lag Time in Reporting,” 1992.
6. Robert L. Strawderman, “Statistical Methods in the Surrogate Marker Problem,” 1992.
7. Urania Dafni, “Evaluating Surrogate Markers of Clinical Outcome when Measured with Error,” 1993.
8. Susan Murray, “Nonparametric Estimation and Testing for Survival Data in the Two Sample Censored Data Problem Incorporating Longitudinal Covariates,” 1994.

9. Anthony Rossini, "Regression Models for Interval Censored Data," 1994.
10. Michael S. Wulfsohn, "Analysis of Survival Data to Time Dependent Covariates Measured with Error and Repeated Event Data," 1994.
11. Daniel Scharfstein, "Semiparametric Efficiency: Implications for the Design and Analysis of Group Sequential Studies," 1996.
12. Ping Hu, "Measurement Error, Reporting Delays and Early Detection Trials," 1996.
13. Helene Boucher, "Design and Analysis of Group Sequential Clinical Trials with Survival Data," 1996.
14. Hongwei Zhao, "Survival Analysis of Quality Adjusted Lifetime," 1997.
15. Justin Kopit, "More Powerful Tests from Confidence Set p Values and Interim Analysis when the Data are Subject to Delay," 1999.
16. Li Yang, "Efficiency Study of Estimators for Treatment Effects in a Pretest-Posttest Trial with Missing Data," 1999.
17. Heejung Bang, "Estimating Medical Costs with Censored Data and its Efficiency Study," 1999.
18. Zhe Shang, "Predicted Survival Based on the Cox Model," 1999.
19. Meifen Kung, "Information-Based Group Sequential Tests with Lagged or Censored Data," 2000.
20. Pei-Yun Chen, "Estimating Treatment Differences in Costs, Effects, and Cost-Effectiveness Ratios in Observational Studies with Right Censored Data," 2001.
21. Jared Lunceford (jointly with Marie Davidian), "Estimating Causal Treatment Effects Via the Propensity Score and Estimating Survival Distributions in Clinical Trials That Follow Two-Stage Randomization Designs," 2001.
22. Kaifeng Lu, "Estimation of Regression Coefficients in the Competing Risks Model with Missing Cause of Failure," 2002.
23. Kevin Anstrom, "Utilizing Propensity Scores to Estimate Average Causal Treatment Effects from Observational Studies with Right Censored Data," 2002.
24. Xiao Song (jointly with Marie Davidian), "Topics in Joint Modeling of Survival and Longitudinal Data," 2002.
25. Brent Johnson, "The Analysis of Censored Covariates in Observational Studies," 2003.
26. Abdus Wahed, "Efficient Estimation of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials," 2003.
27. Selene Leon, (jointly with Marie Davidian), "Semiparametric Estimation of Treatment Effect in Pretest-Posttest Studies With and Without Missing Data," 2003.
28. Yuliya Lokhnygina, "Topics in Design and Analysis of Clinical Trials," 2004.
29. Mike Gao, "Semiparametric Estimators for the Regression Coefficients in the Linear Transformation Competing Risks Model With Missing Cause of Failure," 2005.
30. Tony Guo, "Statistical Analysis in Two-Stage Randomization Designs in Clinical Trials," 2005.

31. Anindita Banerjee, “Optimal Two-Stage Designs in Phase II Clinical Trials,” 2005.
32. Liqiu Jiang, “Topics in Longitudinal Studies With Coarsened Data,” 2006.
33. Xiaomin Lu, “Improving the Efficiency to the Logrank and Other Tests Using Auxiliary Covariates,” 2006.
34. Jason Brinkley, in progress, expected December 2007.
35. Min Zhang (jointly with Marie Davidian), in progress, expected May 2008.
36. Weihua Cao (jointly with Marie Davidian), in progress, expected May 2008.

Major Research Interests:

1. Statistical methods in clinical trials
2. Survival analysis
3. Sequential methods
4. Nonparametric maximum likelihood and semi-parametric methods
5. Cost of care and quality of life
6. Surrogate markers
7. Causal Inference

Peer-Reviewed Publications:

1. Tsiatis AA. A nonidentifiability aspect of the problem of competing risks. *Proceedings of the National Academy of Sciences USA*. 1975; 72:20–22.
2. DoPico GA, Reddan WG, Flaherty D, Tsiatis AA. Respiratory abnormalities among grain handlers. *American Review of Respiratory Diseases*. 1977; 115:915–927.
3. Tsiatis AA. An example of nonidentifiability in competing risks. *Scandinavian Actuarial Journal*. 1978; 235–239.
4. Braun SR, DoPico GA, Tsiatis AA, Horvath E, Dickie HA, Rankin J. Farmer’s Lung Disease: Long-term physiologic and clinical outcome. *American Review of Respiratory Diseases*. 1979; 119:185–191.
5. Braun SR, Tsiatis AA. Pulmonary abnormalities in art glass-blowers. *Journal of Occupational Medicine*. 1979; 21(7):487–489.
6. Tsiatis AA. A note on a goodness-of-fit test for the logistic regression model. *Biometrika*. 1980; 67:250–251.
7. Tsiatis AA. A large sample study of Cox’s regression model. *Annals of Statistics*. 1981; 9:93–108.

8. Tsiatis AA. The asymptotic joint distribution of the efficient scores test for the proportional hazards model calculated over time. *Biometrika*. 1981; 68:311–315.
9. D’Alessio DJ, Minor TE, Allen CI, Tsiatis AA, Nelson DB. A study of the proportion of swimmers among well controls and children with enterovirus-like illness shedding or not shedding an enterovirus. *American Journal of Epidemiology*. 1981; 113:533–541.
10. Evans WE, Tsiatis AA, Rivera G, Murphy SB, Dahl GV, Denison M, Crom WR, Barker LF, Mauer AM. Anaphylactoid reactions to *E. coli* and *Erwinia Asparaginase* in children with leukemia and lymphoma. *Cancer*. 1982; 49: 378–1383.
11. Sanyal SK, Mariencheck WC, Hughes WA, Parvey L, Tsiatis AA, Mackert PW. Serial pulmonary function studies in immunosuppressed host surviving *Pneumocystis carinii* pneumonitis: A prospective study. *American Review of Respiratory Diseases*. 1981; 124:161–166.
12. Young TB, Kanarek MS, Tsiatis AA. Drinking water chlorination and female cancer mortality. *Journal of the National Cancer Institute*. 1981; 67:1191–1198.
13. Evans WE, Tsiatis AA, Crom WR, Brodeur GM, Coburn TC, Pratt CB. Pharmacokinetics of sustained serum methotrexate concentrations secondary to GI obstructions. *Journal of Pharmaceutical Science*. 1981; 70:1194–1198.
14. Minor TE, Allen CI, Tsiatis AA, Nelson DB, D’Alessio DJ. Human infective dose determinations for oral polio virus Type I vaccine in infants. *Journal of Clinical Microbiology*. 1981; 13:388–389.
15. Evans WE, Tsiatis AA, Crom WE, Green AA, Hayes FA, Pratt CB. Pharmacokinetic modeling of cisplatin disposition in children and adolescents with cancer. *Journal Pharmaceutical Science*. 1981; 70.
16. Brodeur GM, Green AA, Hayes FA, Williams KJ, Williams DL, Tsiatis A.A.: Cytogenetic features of human neuroblastomas and cell lines. *Cancer Research*. 1981; 41:4678–4686
17. Tsiatis AA. Repeated significance testing for a general class of score statistic used in censored survival analysis. *Journal of the American Statistical Association*. 1982; 77:855–861.
18. Dow LW, Chang LJA, Tsiatis AA, Melvin SL, Bowman, WP. Relationship of pretreatment lymphoblast proliferative activity and prognosis in 97 children with acute lymphoblastic leukemia. *Blood*. 1982; 59:1197–1220.
19. Williams DL, Tsiatis AA, Brodeur GM, Look AT, Bowman WP, Dahl GV, Kalwinsky DK, Rivera G. Prognostic importance of chromosome number in 136 untreated children with acute lymphoblastic leukemia. *Blood*. 1982; 60:864–871.
20. Brodeur GM, Tsiatis AA, Williams DL, Lathardt FW, Green AA. Statistical analysis of cytogenetic abnormalities in human cancer cells. *Cancer Genetics and Cytogenetics*. 1982; 7:137–152.
21. Lagakos SW, Tsiatis AA. Discussion of paper "Linear nonparametric tests for comparison of counting processes, with applications to censored survival data" by Andersen, P.K., Borgan, O., Gill, R., and Keiding, N. *International Statistical Review*. 1982; 50:36–37.
22. Nordheim EV, Tsiatis AA, Shapas TJ. Incorporating extra information in experimental design for bioassay. *Biometrics*. 1983; 39:87–96.

23. Muggia FM, Tsiatis AA *et al.* Phase II trial of PALA in lymphoma: An ECOG study. *Cancer Treatment Reports*. 1984; 68:551–553.
24. DoPico GA, Reddan W, Tsiatis A, Peters ME, Rankin J. Epidemiologic study of clinical and physiologic parameters in grain handlers of northern United States. *American Review of Respiratory Diseases*. 1984; 130:759–765.
25. Mehta CR, Patel NR, Tsiatis AA. Exact significance testing to establish the equivalence of two treatments being compared on the basis of ordered categorical data. *Biometrics*. 1984; 40:819–826.
26. Tsiatis AA, Rosner GL, Mehta CR. Exact confidence intervals following a group sequential test. *Biometrics*. 1984; 40:797–804.
27. Tsiatis AA, Rosner GL, Tritchler DL. Group sequential tests with censored survival data adjusting for covariates. *Biometrika*. 1985; 72(2):365–373.
28. Glick JH, Tsiatis AA. MOPP/ABVD Chemotherapy for advanced Hodgkin’s Disease: The controversy continues. *Annals of Internal Medicine*. 1986; 104:6:876–878.
29. Boros L, Tsiatis AA *et al.* Phase II ECOG study of Spirogermanium in previously treated lymphoma. *Cancer Treatment Reports*. 1987.
30. Oken, MM, Lenhard, RE, Tsiatis, AA, Glick, JH, Silverstein, MN. Contribution of prednisone to the effectiveness of Hexamethylmelamine in multiple-myeloma. *Cancer Treatment Reports*. 1987; 1: (9) 807-811.
31. Schoenfeld DA, Tsiatis AA. A modified log rank test for highly stratified data. *Biometrika*. 1987; 74:167–75.
32. Wang SK, Tsiatis AA. Approximately optimal one-parameter boundaries for group sequential trials. *Biometrics*. 1987; 43:193–199.
33. Tsiatis AA. Two sample linear rank tests for survival analysis. *Proceedings of the Princeton Conference*, 1987.
34. Pocock SJ, Geller NL, Tsiatis AA. The analysis of multiple endpoints in clinical trials. *Biometrics*. 1987; 43:487–498.
35. Tosteson TD, Tsiatis AA. The asymptotic relative efficiency of score tests in a generalized linear model with surrogate covariates. *Biometrika*. 1988; 75:3, 507–14.
36. Rosner GL, Tsiatis AA. Exact confidence intervals following a group sequential trial: A comparison of methods. *Biometrika*. 1988; 75:4, 723–730.
37. Hirji KF, Tsiatis AA, Mehta CR. Median unbiased estimation for binary data. *The American Statistician*. 1989; 43:7–11.
38. Rosner GL, Tsiatis AA. The impact that group sequential tests would have made on ECOG clinical trials. *Statistics in Medicine*. 1989, 8:505–516.
39. Gray RJ, Tsiatis AA. A linear rank test for use when the main interest is in differences in cure rates. *Biometrics*. 1989; 45:899–904.
40. Tsiatis AA. Estimating regression parameters using linear rank tests for censored data. *Annals of Statistics*. 1990; 18:354–372.

41. Kim K, Tsiatis AA. Study duration for clinical trials with survival response and early stopping rule. *Biometrics*. 1990; 46:81–92.
42. Pathak PK, Tsiatis AA. Quasi-likelihood models in sampling. In *Proceeding of the R.C. Base Symposium on Probability, Statistics and Design of Experiments*. Delhi, Willex Easter, New Delhi. 1990; 571–579.
43. Fischl MA *et al.* (Tsiatis AA). A randomized controlled trial of reduced daily dose of Zidovudine in patients with the acquired immunodeficiency syndrome. *New England Journal of Medicine*. 1990; 323:1009–1014.
44. Byar DP *et al.* (Tsiatis AA). Design considerations for AIDS trials. *New England Journal of Medicine*. 1990; 323:1343–1348.
45. Tsiatis AA. Analysis and interpretation of trial results – Intent-to-treat analysis. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*. 1990; 3:S120–S123.
46. Moore DF, Tsiatis AA. Robust estimation of the variance in moment methods for extra-binomial and extra-Poisson variation. *Biometrics*. 1991; 47:383–401.
47. Robins JM, Tsiatis AA. Correcting for non-compliance in randomized trials using rank preserving structural failure time models. *Communications in Statistics*. 1991; 8:2609–2632.
48. Fischl, MA, Tsiatis, A. A reduced dose of zidovudine in patients with AIDS – Reply. *New England Journal of Medicine*. 1991; 324(14):995-996.
49. Yarchoan R *et al.* (Tsiatis AA). CD4 count and the risk for death in patients infected with HIV receiving antiretroviral therapy. *Annals of Internal Medicine*. 1991; 115:184–189.
50. Friedenbergl *et al.* (Tsiatis AA). High-dose Dexamethasone for refractory or relapsing multiple myeloma. *American Journal of Hematology*. 1991; 36:171–175.
51. Richman DD *et al.* (Tsiatis AA). Detection of mutations associated with Zidovudine resistance in human immunodeficiency virus by use of polymerase chain reaction. *Journal of Infectious Disease*. 1991; 164:1075–1081.
52. Robins, J., Wulfsohn, M, Tsiatis, AA. Adjusting for differential rates of pneumocystis-carinii pneumonia prophylaxis in high vs. low-dose AZT treatment arms in an AIDS randomized trial. *American Journal of Epidemiology*. 1991; 134(7):717-717.
53. Robins JM, Tsiatis AA. Semiparametric estimation of an accelerated failure time model with time dependent covariates. *Biometrika*. 1992; 79:311-319.
54. Tsiatis AA, Dafni U, DeGruttola V, Propert KJ, Strawderman RL, Wulfsohn M. The Relationship of CD4 Counts over Time to Survival in Patients with AIDS: Is CD4 a Good Surrogate Marker? *AIDS Epidemiology: Methodological Issues*. N. Jewell, K. Dietz, V. Farewell (eds) Boston: Birkhauser;1992: 256-274.
55. Yarchoan R, Tsiatis AA, Broder, S. CD4 counts and HIV-related deaths – Reply. *Annals of Internal Medicine*. 1992; 116(2):169-170.
56. DeGruttola V, Wulfsohn M, Fischl MA, Tsiatis A. Modeling the relationship between survival and CD4 lymphocytes in patients with AIDS and AIDS-related complex. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*. 1993; 6:359-365.

57. Spritzler JG, Tsiatis AA. A statistical method giving early and unbiased conclusions from clinical trials. *Drug Information Journal*. 1994; 28:805-816.
58. Dafni UG, Tsiatis AA. A method for evaluating surrogate markers when measured with error using the Cox model. *Drug Information Journal*. 1994; 28:667-690.
59. Pampallona S, Tsiatis AA. Group sequential designs for one and two sided hypothesis testing with provision for early stopping in favour of the null hypothesis. *Journal of Statistical Planning and Inference*. 1994; 42:19-35..
60. Mehta CR, Patel N, Senchaudhuri P, Tsiatis AA. Exact permutational tests for group sequential clinical trials. *Biometrics*. 1994; 50:1042-1053.
61. Tsiatis AA, DeGruttola V, Wulfsohn M. Modeling the relationship of survival to longitudinal data measured with error. Applications to Survival and CD4 counts in patients with AIDS. *Journal of the American Statistical Association*. 1995; 90:27-37.
62. Tsiatis AA, Boucher H, Kim K. Sequential methods for parametric survival models. *Biometrika*. 1995; 82:165-174.
63. Rabinowitz D, Tsiatis AA, Aragon J. Regression with interval censored data. *Biometrika*. 1995; 82:501-514.
64. Murray S, Tsiatis AA. Improving efficiency of estimation and testing for censored data using auxiliary covariates. *Drug Information Journal*). 1995;
65. Cavert W, Coombs RW, Grimes J, *et al.* (Tsiatis AA). Therapeutic significance of switching to didanosine (ddI) or adding ddI in subjects with zidovudine-resistant HIV-1. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*. 1995; 10:41-41.
66. Oken MM, Kyle RA, Greipp PR, Kay NE, Tsiatis AA, Gregory SA, Spiegel RJ, O'Connell MJ. Complete remission induction with combined VBMCP chemotherapy and Interferon ($rIFN_{\alpha 2\beta}$) in patients with Multiple Myeloma. *Leukemia and Lymphoma*. 1996; 20:447-452.
67. Murray S, Tsiatis AA. Nonparametric survival estimation using prognostic longitudinal covariates. *Biometrics*. 1996; 52:137-151.
68. Kim K, Boucher H, Tsiatis AA. Design and analysis of group sequential logrank tests in maximum duration versus information trials. *Biometrics*. 1996; 51:988-1000.
69. Rossini AJ, Tsiatis AA. A semiparametric proportional odds regression model for the analysis of current status data. *The Journal of the American Statistical Association*. 1996; 91:713-721.
70. Strawderman RL, Tsiatis AA. On the asymptotic properties of a flexible hazard estimator. *Annals of Statistics*. 1996; 24:41-63.
71. Hu P, Tsiatis AA. Estimating the survival distribution when ascertainment of vital status is subject to delay. *Biometrika*. 1996; 83:371-380.
72. Strawderman RL, Tsiatis AA. On consistency in parameter spaces of expanding dimension: an application of the Inverse Function Theorem. *Statistica Sinica*. 1996; 6:917-923.
73. Lee SJ, Kim K, Tsiatis AA. Repeated significance testing in longitudinal clinical trials. *Biometrika*. 1996; 83:779-789.
74. Wulfsohn MS, Tsiatis AA. A joint model for survival and longitudinal data measured with error. *Biometrics*. 1997; 53:330-339.

75. Zhao H, Tsiatis AA. A consistent estimator for the distribution of quality adjusted survival time. *Biometrika*. 1997; 84:339-348.
76. Scharfstein DO, Tsiatis AA, Robins JM. Semiparametric efficiency and its implication on the design and analysis of group sequential studies. *Journal of the American Statistical Association*. 1997; 92:1342-1350.
77. Scharfstein DO, Tsiatis AA. The use of simulation and bootstrap in information-based group sequential studies. *Statistics in Medicine*. 1998; 17:75-87.
78. Scharfstein DO, Tsiatis AA. Semiparametric efficient estimation in the generalized odds-rate class of regression models for right censored time to event data. *Lifetime Data Analysis*. 1998; 4:355-391.
79. Hu P, Tsiatis AA, Davidian M. Estimating the parameters in the Cox model when covariate variables are measured with error. *Biometrics*; 1998; 54:1407-1419.
80. Tsiatis AA. Competing risks. In *Encyclopedia of Biostatistics*. John Wiley and Sons, New York. 1998; 824-834.
81. Tsiatis AA. Interim analysis of censored data. In *Encyclopedia of Biostatistics*. John Wiley and Sons, New York. 1998; 2068-2073.
82. Dafni UG, Tsiatis AA. Evaluating surrogate markers of clinical outcome when measured with error. *Biometrics*. 1998; 54:1445-1462.
83. Zhao H, Tsiatis AA. Efficient estimation of the distribution of quality adjusted survival time. *Biometrics*. 1999; 55:1101-1107.
84. Murray S, Tsiatis AA. Sequential methods for comparing years of life saved in the two sample censored data problem. *Biometrics*. 1999; 55:1085-1092.
85. Fine JP, Tsiatis AA. Testing for differences in survival with delayed ascertainment. *Biometrics*. 2000; 56:145-153.
86. Zhao H, Tsiatis AA. Estimating mean quality adjusted lifetime with censored data. *Sankhya*. 2000; 62:175-188.
87. Bang H, Tsiatis AA. Estimating medical costs with censored data. *Biometrika*. 2000; 87:329-343.
88. Rabinowitz D, Betensky RA, Tsiatis AA. Using conditional logistic regression to fit proportional odds models to interval censored data. *Biometrics*. 2000; 56:511-518.
89. Mark DB *et al.* (Tsiatis AA). Cost effectiveness of platelet glycoprotein IIb/IIIa inhibition with eptifibatide in patients with acute non-ST elevation coronary syndromes. *Circulation*. 2000; 101(4):366-371.
90. Tsiatis AA. Estimating the distribution of quality-adjusted life with censored data. *American Heart Journal*. 2000; 139(4):177-181.
91. Babiker A *et al.* (Tsiatis AA). Human immunodeficiency virus type 1 RNA level and CD4 count as prognostic markers and surrogate end point; A meta-analysis. *AIDS Research and Human Retroviruses*. 2000; 16(12):1123-1133.
92. Tsiatis AA, Davidian M. A semiparametric estimator for the proportional hazards model with longitudinal covariates measured with error. *Biometrika*. 2001; 88:447-458.

93. Murray S, Tsiatis AA. Using auxiliary time-dependent covariates to recover information in nonparametric testing with censored data. *Lifetime Data Analysis*. 2001; 7:125-141.
94. Betensky RA, Rabinowitz D, Tsiatis AA. Computationally simple accelerated failure time regression for interval censored data. *Biometrika*. 2001; 88:703-711.
95. Mayers DL *et al.* (including Tsiatis AA). T215Y/F mutation associated with zidovudine (ZDV) resistance leads to poor response to ZDV+ddI or ZDV+ddI+NVP: ACTG 244/RV79. Submitted to *The Journal of Infectious Diseases*. 2001.
96. Zhao H, Tsiatis AA. Testing equality of survival functions of quality adjusted lifetime. *Biometrics*. 2001; 57:861-867.
97. Yang L, Tsiatis AA. Efficiency study for a treatment effect in a pretest-posttest trial. *The American Statistician*. 2001; 55:314-321.
98. Anstrom KJ, Tsiatis AA. Using propensity scores to estimate causal treatment effects with censored time-lagged data. *Biometrics*. 2001; 57:1207-1218.
99. Chen P, Tsiatis AA. Causal inference on the difference of the restricted mean life between two groups. *Biometrics*. 2001; 57:1030-1038.
100. Lu K, Tsiatis AA. Multiple imputation methods for estimating regression coefficients in proportional hazards models with missing cause of failure. *Biometrics*. 2001; 57:1191-1197.
101. Mehta CR, Tsiatis AA. Flexible sample size considerations using information based interim monitoring. *Drug Information Journal*. 2001; 35:1095-1112.
102. Pampallona S, Tsiatis AA, Kim K. Interim monitoring of group sequential trials using spending functions for the Type I and Type II error probabilities. *Drug Information Journal*. 2001; 35:1113-1121.
103. Bang H, Tsiatis AA. Median regression with censored cost data. *Biometrics*. 2002; 58:643-649.
104. Tsiatis AA, Davidian M, McNeney B. Multiple imputation methods for testing treatment differences in survival distributions with missing cause of failure. *Biometrika*. 2002; 89:238-244.
105. Lunceford JK, Davidian M, Tsiatis AA. Estimation of survival distributions of treatment policies in two-stage randomization designs in clinical trials. *Biometrics*. 2002; 58:48-57.
106. Song X, Davidian M, Tsiatis AA. An estimator for the proportional hazards model with multiple longitudinal covariates measured with error. *Biostatistics*. 2002; 3:511-528.
107. Song X, Davidian M, Tsiatis AA. A semiparametric likelihood approach to joint modeling of longitudinal and time-to-event data. *Biometrics*. 2002; 58:742-753.
108. Skyler JS *et al.* (including Tsiatis AA). Effects of insulin in relatives of patients with type 1 diabetes mellitus. *New England Journal of Medicine*. 2002; 346:1685-1691.
109. Kim K, Tsiatis AA, Mehta CR. Computational issues in information-based group sequential clinical trials. *Journal of the Japanese Society of Computational Statistics*. 2003; 15.2:153-167.
110. Tsiatis AA, Mehta C. On the inefficiency of the adaptive design for monitoring clinical trials. *Biometrika*. 2003; 90:367-378.

111. Leon S, Tsiatis AA, Davidian M. Semiparametric estimation of treatment effect in a pretest-posttest study. *Biometrics*. 2003; 59:1046-1055.
112. Wahed AS, Tsiatis AA. Optimal estimator for the survival distribution and related quantities for treatment policies in two-stage randomization designs in clinical trials. *Biometrics*. 2004; 60:124-133.
113. Johnson BA, Tsiatis AA. Estimating mean response as a function of treatment duration in an observational study, where duration may be informatively censored. *Biometrics*. 2004; 60:315-323.
114. Sachdev et al. (including Tsiatis, AA.) The prognostic importance of comorbidity for mortality in patients with stable coronary artery disease. *Journal of the American College of Cardiology*. 2004; 43:576-582.
115. Tsiatis AA, Davidian M. Joint modeling of longitudinal and time-to-event data: An overview. *Statistica Sinica*. 2004; 14:809-834.
116. Tsiatis AA, Ma Y. Locally efficient semiparametric estimators for functional measurement error models. *Biometrika*. 2004; 91:835-848.
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