

## Assoc. Prof. NİHAL ATA TUTKUN

### Personal Information

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### Education Information

Doctorate, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, İstatistik, Turkey 2005 - 2010

Postgraduate, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, İstatistik, Turkey 2002 - 2005

Undergraduate, Hacettepe Üniversitesi, Fen Fakültesi, İstatistik, Turkey 1998 - 2002

### Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Biostatistics and Medical Informatics, Statistics, Statistical Analysis and Applications, Natural Sciences

### Advising Theses

ATA TUTKUN N., Yaşam çözümlenmesinde iyileşme modelleri, Postgraduate, P.KARA(Student), 2017

ATA TUTKUN N., Kesikli yaşam süresi modelleri, Postgraduate, H.ÖLMEZ(Student), 2016

ATA TUTKUN N., Yaşam çözümlenmesinde zayıflık modelleri, Postgraduate, D.YEĞEN(Student), 2015

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **A comparative study with bootstrap resampling technique to uncover behavior of unconditional hazards and survival functions for gamma and inverse Gaussian frailty models**  
ATA TUTKUN N., Marthin P.  
MATHEMATICAL SCIENCES, 2021 (Journal Indexed in SCI)
- II. **Visual research on the trustability of classical variable selection methods in Cox regression**  
ATA TUTKUN N., KAYHAN ATILGAN Y.  
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.49, no.2, pp.869-886, 2020 (Journal Indexed in SCI)
- III. **Assessing the influence of climate change characteristics on the rainfall duration of Turkey**  
Tutkun N., Ozel G.  
NATURAL HAZARDS, vol.84, no.3, pp.2265-2277, 2016 (Journal Indexed in SCI)
- IV. **A Bayesian approach to Cox-Gompertz model**  
ATA TUTKUN N., DEMİRHAN H.  
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.45, no.5, pp.1621-1639, 2016 (Journal Indexed in SCI)
- V. **Survival Functions for the Frailty Models Based on the Discrete Compound Poisson Process**  
ATA TUTKUN N., ÖZEL KADILAR G.  
Journal Of Statistical Computation And Simulation, 2014 (Journal Indexed in SCI Expanded)
- VI. **Stratified Cox regression model for non-proportional hazards and an application on breast cancer patients**

ATA TUTKUN N., Karasoy D., Soezer M. T.

TURKIYE KLINIKLERI TIP BILIMLERI DERGISI, vol.28, no.3, pp.327-332, 2008 (Journal Indexed in SCI)

**VII. COX REGRESSION MODELS WITH NONPROPORTIONAL HAZARDS APPLIED TO LUNG CANCER SURVIVAL DATA**

ATA TUTKUN N., Sozer M. T.

HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.36, no.2, pp.157-167, 2007 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **ROBUST ESTIMATIONS OF SURVIVAL FUNCTION FOR WEIBULL DISTRIBUTION**  
KARAGÖZ D., ATA TUTKUN N.  
STATISTICA, vol.81, no.1, pp.3-23, 2021 (Journal Indexed in ESCI)
- II. **Flexible parametric survival models: An application to gastric cancer data**  
ATA TUTKUN N., YELDAN M., İlhan H.  
INTERNATIONAL JOURNAL OF ADVANCED AND APPLIED SCIENCES, vol.4, no.4, pp.91-95, 2017 (Journal Indexed in ESCI)
- III. **Discrete Frailty Model with Compound Poisson Distribution**  
ATA TUTKUN N., ÖZEL KADILAR G.  
International Journal of Ecological Economics & Statistics, vol.37, pp.1200-1230, 2016 (Refereed Journals of Other Institutions)
- IV. **Analyzing the factors influencing the duration of breastfeeding: An example of Turkish Republic of Northren Cyprus**  
Safak C., ATA TUTKUN N.  
IZMIR DR BEHCET UZ COCUK HASTANESI DERGISI, vol.5, no.3, pp.167-176, 2015 (Journal Indexed in ESCI)
- V. **An Alternative for the Proportional Hazards Model Using Accelerated Failure Time Model for the Destructive Earthquake Analysis in Turkey**  
ATA TUTKUN N., ÖZEL KADILAR G.  
International Journal of Ecological Economics & Statistics, 2013 (Refereed Journals of Other Institutions)
- VI. **Probabilistic Prediction of Bank Failures with Financial Ratios An Empirical Study on Turkish Banks**  
ÖZEL KADILAR G., ATA TUTKUN N.  
Pakistan Journal of Statistics and Operation Research, 2013 (Refereed Journals of Other Institutions)
- VII. **Weighted Estimation in Cox Regression: An Application to Breast Cancer Data**  
ATA TUTKUN N., Demdrhan H.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.26, no.1, pp.63-72, 2013 (Journal Indexed in ESCI)
- VIII. **A Simulation Study on Cox Regression with Weighted Estimations**  
ATA TUTKUN N., DEMİRHAN H.  
Electronic Journal of Applied Statistical Analysis, vol.7, no.1, pp.26-36, 2013 (Refereed Journals of Other Institutions)
- IX. **A Multivariate Non Parametric Hazard Model for Earthquake Occurrences in Turkey**  
ATA TUTKUN N., ÖZEL KADILAR G.  
Journal of Data Science, 2011 (Refereed Journals of Other Institutions)
- X. **Comparing Survival and Conditional Logistic Regression Models in Turkish Bank Failures**  
ATA TUTKUN N., ÖZEL KADILAR G.  
Journal Karya Asli Lorekan Ahli Matematik (Journal Kalam), 2010 (Refereed Journals of Other Institutions)
- XI. **SURVIVAL DATA MINING: AN APPLICATION TO CREDIT CARD HOLDERS**  
ATA TUTKUN N., Ozkok E., KARABEY U.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.26, no.1, pp.33-42, 2008 (Journal Indexed in ESCI)
- XII. **Eksik Gözlem Degerlerine Sahip OECD Ulkelerinin Bebek Sagligi ile Ilgili Analizinde Yerine Koyma Yöntemlerinin kullanilmasi**

## Refereed Congress / Symposium Publications in Proceedings

- I. **Relationship between baseline metabolic 18F-FDG parameters and survival in malignant pleural mesothelioma: A single centre experience**  
Kahya Y., SOYDAL Ç., Yenigun M. B. , ÖZKAN E., ATA TUTKUN N., ENÖN S., KÜÇÜK N. Ö. , CANGIR A.  
28th International Congress of the European-Respiratory-Society (ERS), Paris, France, 15 - 19 September 2018, vol.52
- II. **Semi-Parametric Accelerated Failure Time Mixture Cure Model**  
KARA P., ATA TUTKUN N., KARABEY U.  
10th International Statistics Congress, 6 - 08 December 2017
- III. **Model Selection Criteria in Survival Analysis**  
KARABEY U., ATA TUTKUN N.  
14th International Conference of Numerical Analysis and Applied Mathematics, 19 - 25 September 2016
- IV. **An Application of Survival Models in Motor Insurance**  
KARABEY U., ATA TUTKUN N.  
3rd International Researchers - Statisticians and Young Statisticians Congress, 24 - 26 May 2017
- V. **MODEL SELECTION CRITERION IN SURVIVAL ANALYSIS**  
KARABEY U., ATA TUTKUN N.  
International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece, 19 - 25 September 2016, vol.1863
- VI. **Extended Cox Regression Model: the Choice of Timefunction**  
IŞIK H., ATA TUTKUN N., Karasoy D.  
International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece, 19 - 25 September 2016, vol.1863
- VII. **Failure time analysis with unobserved heterogeneity Earthquake duration time of Turkey**  
ATA TUTKUN N., ÖZEL KADILAR G.  
International Conference on Advances in Natural and Applied Sciences, 21 - 24 April 2016
- VIII. **Investigation of Performances for the State Universities in Turkey**  
ÖZEL KADILAR G., ATA TUTKUN N.  
International Conference on Research in Education and Science (ICRES), 19 - 22 May 2016
- IX. **Analysis of Hacettepe University Faculty of Science Students Mobility for Studies**  
ATA TUTKUN N., ÖZEL KADILAR G., ÇAKMAKYAPAN S.  
International Conference on New Horizons in Education, 10 - 12 June 2015
- X. **A Probabilistic Risk Assessment of Time to Rainfall of Turkey A Censoring Approach**  
ATA TUTKUN N., ÖZEL KADILAR G.  
5th International Conference on Meteorology and Climatology of the Mediterranean, 02 March 2016 - 04 September 2014
- XI. **Statistical Analysis of Wind Speed Data**  
ÇAKMAKYAPAN S., ATA TUTKUN N., ÖZEL KADILAR G.  
15th International Symposium on Econometrics, Operations Research and Statistics, 22 May 2014
- XII. **Lindley Frailty Model for a Class of Compound Poisson Processes**  
ÖZEL KADILAR G., ATA TUTKUN N.  
ICNAAM 2013, 22 September 2013
- XIII. **Predicting Turkish Bank Failures An Empirical Comparison of the Survival Ordinary and Conditional Logistic Regression**  
UNVAN Y. A. , ATA TUTKUN N., ÖZEL KADILAR G.  
Econ Anadolu 2011 Post Crisis Dynamics, 18 September 2011

- XIV. **Estimating Survival Functions for Discrete Frailty Models Based on the Compound Poisson Process**  
ÖZEL KADILAR G., ATA TUTKUN N.  
Prague Stochastic, 22 August 2010
- XV. **Evaluation of Seismicity in Turkey and Surrounding Area Using Survival Models**  
ATA TUTKUN N., ÖZEL KADILAR G.  
10th International Vilnius Conference on Probability Theory and Mathematical Statistics, 20 June 2010
- XVI. **Discrete Frailty Model with the Compound Poisson Process**  
ÖZEL KADILAR G., ATA TUTKUN N.  
33rd Conference on Stochastic Processes and Their Applications, 11 October 2009
- XVII. **The Use of Survival Models to Explain Bankruptcy in Turkey**  
ATA TUTKUN N., ÖZEL KADILAR G.  
3rd International Conference on Mathematics and Statistics, 20 September 2009

## Supported Projects

- ÖZEL KADILAR G., ATA TUTKUN N., Project Supported by Higher Education Institutions, İstatistiksel Ağ Modelleri ve Stokastik Süreçler, 2017 - 2018
- KARABEY U., ATA TUTKUN N., Project Supported by Higher Education Institutions, Yaşam Çözümlemesi Analizinde Model Seçim Kriterleri, 2016 - 2016
- KARASOY D., IŞIK H., ATA TUTKUN N., Project Supported by Higher Education Institutions, Genişletilmiş Cox Regresyon Modeli Zaman Fonksiyonunun Seçimi, 2016 - 2016
- IŞIK H., ATA TUTKUN N., KARASOY D., Project Supported by Higher Education Institutions, Meslek Edindirme Kurslarının İşsizlik Süresine Etkisi: Yaşam Çözümlemesi Yaklaşımı, 2015 - 2015
- ATA TUTKUN N., Project Supported by Higher Education Institutions, Olay Geçmişi Çözümlemesi : Eğitim Bilimler'indeki Uygulamalar, 2015 - 2015

## Citations

Total Citations (WOS):46

h-index (WOS):2