# **Grigorios Papageorgiou**

**Biostatistician | Postdoctoral Researcher** 

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# **Professional Experience**

2022 - Present	<b>Statistics Leader</b> GSK
2021 - 2022	<b>Postdoctoral Researcher in Biostatistics</b> Department of Biostatistics, Erasmus University Medical Center
2021 - 2022	Methodological & Statistical Assessor College ter Beoordeling van Geneesmiddelen
2019 - 2022	<b>Statistical Consultant</b> Department of Internal Medicine, Erasmus University Medical Center
2019 - 2021	<b>Education Design Assistant</b> NIHES Innovation Team, Erasmus University Medical Center
2015 - 2022	<b>Statistical Consultant</b> Consultation centre for Patient-Oriented research, Erasmus University Medical Center
2015 - 2021	<b>PhD Researcher in Biostatistics</b> Department of Biostatistics, Erasmus University Medical Center
2015 - 2019	<b>Statistical Consultant</b> Department of Cardio-Thoracic Surgery, Erasmus University Medical Center
2015	R Tutor LStat, KU LEUVEN, VIB
2014	Statistical Consultant LStat, KU LEUVEN

#### **Education**

2015 - 2021 PhD in Biostatistics

Department of Biostatistics, Erasmus University Medical

Center

2013 - 2015 MSc in Statistics

Katholieke Universiteit Leuven, Leuven, Belgium

2006 - 2011 BSc in Statistics and Insurance Science

University of Piraeus, Piraeus, Greece

#### **Research Focus**

Joint Models for Longitudinal and Time-to-Event Data

Mixed-effects models

**Survival Analysis** 

**Multi-state Models** 

**Dynamic Prediction** 

**Missing Data** 

### **Statistical Software Development**

JMbayes2 **co-developer** 

Extended Joint Models for Longitudinal and Survival Data

JMbayes **co-developer** 

Fits joint models for continuous longitudinal responses and time-to-event data. I developed functionality for dynamic prediction of survival from multivariate joint models. I also developed functionality for joint models for multivariate longitudnial data and multi-state processes.

rQuote **Developer** 

Extracts quotes from the web with web-scraping based

on topics of interest.

#### **International Conferences**

2020 41st ISCB, Krakow, Poland

An Alternative Characterization of Missing at Random in

Shared Parameter Models

2019 40th ISCB, Leuven, Belgium

Feature selection of longitudinal biomarkers in multivariate joint models for longitudinal and multi-state pro-

cesses

2018 29th IBS, Barcelona, Spain

Feature selection of longitudinal biomarkers in multivariate joint models for longitudinal and multi-state pro-

cesses

2017 38th ISCB, Vigo, Spain

Individualized Dynamic Prediction of Survival with the

Presence of Intermediate Events

2017 9th EMR, Thessaloniki, Greece

Individualized Dynamic Prediction of Survival with the

Presence of Intermediate Events

#### **Peer Review for International Scientific Journals**

**Biometrics** 

**Journal of Statistical Software** 

**Biometrical Journal** 

Statistics in Medicine

Statistical Methods in Medical Research

Statistica Sinica

**Pharmaceutical Statistics** 

**Diagnostic and Prognostic Research** 

## Committees

**2022 - 2025 IBC**: Awards Fund Committee

## **Programming Languages & Statistical Software Skills**

Fluent R, C++, Markdown, LATEX

Intermediate SAS, Stan, HTML, CSS

#### **List of Publications**

- 1. S. Geurts, C. Brunborg, **Papageorgiou, G.**, M.A. Ikram, and M. Kavousi. "Subclinical Measures of Peripheral Atherosclerosis and the Risk of New-Onset Atrial Fibrillation in the General Population: the Rotterdam Study". In: *Journal of the American Heart Association* 11.1 (2022). DOI: 10. 1161/JAHA.121.023967.
- A. Gharbharan, C.C.E. Jordans, C. GeurtsvanKessel, J.G. den Hollander, F. Karim, F.P.N. Mollema, J.E. Stalenhoef Schukken, A. Dofferhoff, I. Ludwig, A. Koster, R.-J. Hassing, J.C. Bos, G.R. van Pottelberge, I.N. Vlasveld, H.S.M. Ammerlaan, E.M. van Leeuwen Segarceanu, J. Miedema, M. van der Eerden, T.J. Schrama, **Papageorgiou, G.**, P. te Boekhorst, F.H. Swaneveld, Y.M. Mueller, M.W.J. Schreurs, J.J.A. van Kampen, B. Rockx, N.M.A. Okba, P.D. Katsikis, M.P.G. Koopmans, B.L. Haagmans, C. Rokx, and B.J.A. Rijnders. "Effects of potent neutralizing antibodies from convalescent plasma in patients hospitalized for severe SARS-CoV-2 infection". In: *Nature Communications* 12.1 (2021). DOI: 10.1038/s41467-021-23469-2.
- 3. L. Horn, L. De Munter, **Papageorgiou, G.**, K.W.W. Lansink, M.A.C. De Jongh, and M.C.W. Joosen. "Association of longitudinal changes in patient-reported health status with return to work in the first 2 years after traumatic injury: A prospective cohort study in the Netherlands". In: *BMJ Open* 11.12 (2021). DOI: 10.1136/bmjopen-2021-055593.
- 4. E. Huizing, M.A. Schreve, S. Kum, **Papageorgiou, G.**, J.-P.P.M. de Vries, G.J. de Borst, and Ç. Ünlü. "Development of a Prediction Model for the Occurrence of Stenosis or Occlusion after Percutaneous Deep Venous Arterialization". In: *Diagnostics* 11.6 (2021). DOI: 10.3390/diagnostics11061008.
- 5. J.L.R. Romeo, **Papageorgiou, G.**, F.F.D. Da Costa, H.H. Sievers, A.J.J.C. Bogers, I. El-Hamamsy, P.D. Skillington, R. Wynne, S. Mastrobuoni, G. El Khoury, J.J.M. Takkenberg, and M.M. Mokhles. "Longterm Clinical and Echocardiographic Outcomes in Young and Middle-aged Adults Undergoing the Ross Procedure". In: *JAMA Cardiology* 6.5 (2021), pp. 539–548. DOI: 10.1001/jamacardio.2020.7434.
- A. Schauwvlieghe, A. Dunbar, E. Storme, A. Vlak, R. Aerts, J. Maertens, B. Sciot, T. Van Der Wel, Papageorgiou, G., I. Moors, J.J. Cornelissen, B.J.A. Rijnders, and T. Mercier. "Stopping antibiotic therapy after 72 h in patients with febrile neutropenia following intensive chemotherapy for AML/MDS (safe study): A retrospective comparative cohort study". In: EClinical Medicine 35 (2021). DOI: 10.1016/j.eclinm.2021.100855.
- W.M.A. van der Slot, J.L. Benner, L. Brunton, J.M. Engel, P. Gallien, S.R. Hilberink, G. Månum, P. Morgan, A. Opheim, I. Riquelme, E. Rodby-Bousquet, T.T. Şimşek, D.E. Thorpe, R.J.G. van den Berg-Emons, L.K. Vogtle, Papageorgiou, G., and M.E. Roebroeck. "Pain in adults with cerebral palsy: A systematic review and meta-analysis of individual participant data". In: Annals of Physical and Rehabilitation Medicine 64.3 (2021). DOI: 10.1016/j.rehab.2019.12.011.
- 8. **Papageorgiou, G.** and D. Rizopoulos. "An alternative characterization of MAR in shared parameter models for incomplete longitudinal data and its utilization for sensitivity analysis". In: *Statistical Modelling* 21.1-2 (2021), pp. 95–114. DOI: 10.1177/1471082X20927114.
- 9. D. Abjigitova, M.M. Mokhles, **Papageorgiou, G.**, J.A. Bekkers, and A.J.J.C. Bogers. "Outcomes of different aortic arch replacement techniques". In: *Journal of Cardiac Surgery* 35.2 (2020), pp. 367–374. DOI: 10.1111/jocs.14386.
- 10. J.L.R. Romeo, **Papageorgiou, G.**, J.J.M. Takkenberg, J.W. Roos-Hesselink, W.J. van Leeuwen, J.M.J. Cornette, D. Rizopoulos, A.J.J.C. Bogers, and M.M. Mokhles. "Influence of pregnancy on long-term durability of allografts in right ventricular outflow tract". In: *Journal of Thoracic and Cardiovas-cular Surgery* 159.4 (2020), 1508–1516.el. DOI: 10.1016/j.jtcvs.2019.08.083.
- 11. V. Wester, S. de Groot, T. Kanters, L. Wagner, J. Ardesch, I. Corro Ramos, M.-J. Enders-Slegers, M. de Ruiter, S. le Cessie, J. Los, **Papageorgiou, G.**, J. van Exel, and M. Versteegh. "Evaluating the Effectiveness and Cost-Effectiveness of Seizure Dogs in Persons With Medically Refractory Epilepsy in the Netherlands: Study Protocol for a Stepped Wedge Randomized Controlled Trial (EPISODE)". In: *Frontiers in Neurology* 11 (2020). DOI: 10.3389/fneur.2020.00003.

- 12. J.M. Colijn et al. "Increased High-Density Lipoprotein Levels Associated with Age-Related Macular Degeneration: Evidence from the EYE-RISK and European Eye Epidemiology Consortia". In: Ophthalmology 126.3 (2019), pp. 393–406. DOI: 10.1016/j.ophtha.2018.09.045.
- 13. J.R.G. Etnel, S.A. Huygens, P. Grashuis, B. Pekbay, **Papageorgiou, G.**, J.W. Roos Hesselink, A.J.J.C. Bogers, and J.J.M. Takkenberg. "Bioprosthetic aortic valve replacement in nonelderly adults: A systematic review, meta-analysis, and microsimulation". In: *Circulation: Cardiovascular Quality and Outcomes* 12.2 (2019). DOI: 10.1161/CIRCOUTCOMES.118.005481.
- 14. W.G. Knol, **Papageorgiou, G.**, and M.M. Mokhles. "What to do with the equipoise?" In: *European Heart Journal* 40.22 (2019), p. 1815. DOI: 10.1093/eurheartj/ehz176.
- 15. S.C. Rigters, M.P. Van Der Schroeff, **Papageorgiou, G.**, R.J. Baatenburg De Jong, and A. Goedegebure. "Progression of hearing loss in the aging population: Repeated auditory measurements in the Rotterdam study". In: *Audiology and Neurotology* 23.5 (2019), pp. 290–297. DOI: 10 . 1159 / 000492203.
- 16. **Papageorgiou, G.**, K. Mauff, A. Tomer, and D. Rizopoulos. "An overview of joint modeling of timeto-event and longitudinal outcomes". In: *Annual Review of Statistics and Its Application* 6 (2019), pp. 223–240. DOI: 10.1146/annurev-statistics-030718-105048.
- 17. **Papageorgiou, G.**, M.M. Mokhles, J.J.M. Takkenberg, and D. Rizopoulos. "Individualized dynamic prediction of survival with the presence of intermediate events". In: *Statistics in Medicine* 38.30 (2019), pp. 5623–5640. DOI: 10.1002/sim.8387.
- 18. J.R.G. Etnel, P. Grashuis, S.A. Huygens, B. Pekbay, **Papageorgiou, G.**, W.A. Helbing, J.W. Roos-Hesselink, A.J.J.C. Bogers, M.M. Mokhles, and J.J.M. Takkenberg. "The Ross Procedure: A Systematic Review, Meta-Analysis, and Microsimulation". In: *Circulation. Cardiovascular quality and outcomes* 11.12 (2018), e004748. DOI: 10.1161/CIRCOUTCOMES.118.004748.
- 19. S.J. Head, M. Milojevic, J. Daemen, J.-M. Ahn, E. Boersma, E.H. Christiansen, M.J. Domanski, M.E. Farkouh, M. Flather, V. Fuster, M.A. Hlatky, N.R. Holm, W.A. Hueb, M. Kamalesh, Y.-H. Kim, T. Mäkikallio, F.W. Mohr, **Papageorgiou, G.**, S.-J. Park, A.E. Rodriguez, J.F. Sabik, R.H. Stables, G.W. Stone, P.W. Serruys, and A.P. Kappetein. "Mortality after coronary artery bypass grafting versus percutaneous coronary intervention with stenting for coronary artery disease: a pooled analysis of individual patient data". In: *The Lancet* 391.10124 (2018), pp. 939–948. DOI: 10.1016/S0140-6736(18)30423-9.
- S.J. Head, M. Milojevic, J. Daemen, J.-M. Ahn, E. Boersma, E.H. Christiansen, M.J. Domanski, M.E. Farkouh, M. Flather, V. Fuster, M.A. Hlatky, N.R. Holm, W.A. Hueb, M. Kamalesh, Y.-H. Kim, T. Mäkikallio, F.W. Mohr, Papageorgiou, G., S.-J. Park, A.E. Rodriguez, J.F. Sabik, R.H. Stables, G.W. Stone, P.W. Serruys, and A.P. Kappetein. "Stroke Rates Following Surgical Versus Percutaneous Coronary Revascularization". In: Journal of the American College of Cardiology 72.4 (2018), pp. 386–398. DOI: 10.1016/j.jacc.2018.04.071.
- 21. S.J. Head, **Papageorgiou, G.**, M. Milojevic, G.W. Stone, and A.P. Kappetein. "Interpretation of results of pooled analysis of individual patient data Authors' reply". In: *The Lancet* 392.10150 (2018), p. 818. DOI: 10.1016/S0140-6736(18)31779-3.
- 22. J.L.R. Romeo, **Papageorgiou, G.**, J.J.M. Takkenberg, and M.M. Mokhles. "The right time-dependent statistics: this is the moment". In: *European journal of cardio-thoracic surgery : official journal of the European Association for Cardio-thoracic Surgery* 54.6 (2018), p. 1145. DOI: 10.1093/ejcts/ezy184.
- 23. J.L.R. Romeo, **Papageorgiou, G.**, P.C. Van De Woestijne, J.J.M. Takkenberg, L.E.H. Westenberg, I. Van Beynum, A.J.J.C. Bogers, and M.M. Mokhles. "Downsized cryopreserved and standard-sized allografts for right ventricular outflow tract reconstruction in children: Long-Term single-institutional experience". In: *Interactive Cardiovascular and Thoracic Surgery* 27.2 (2018), pp. 257–263. DOI: 10.1093/icvts/ivy057.
- 24. **Papageorgiou, G.**, S.W. Grant, J.J.M. Takkenberg, and M.M. Mokhles. "Statistical primer: How to deal with missing data in scientific research?" In: *Interactive Cardiovascular and Thoracic Surgery* 27.2 (2018), pp. 153–158. DOI: 10.1093/icvts/ivy102.