

# Grigorios Papageorgiou

Biostatistician | Postdoctoral Researcher

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## Professional Experience

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

## Education

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|-------------|---|
| 2015 - 2021 | <b>PhD in Biostatistics</b><br>Department of Biostatistics, Erasmus University Medical Center |
| 2013 - 2015 | <b>MSc in Statistics</b><br>Katholieke Universiteit Leuven, Leuven, Belgium                   |
| 2006 - 2011 | <b>BSc in Statistics and Insurance Science</b><br>University of Piraeus, Piraeus, Greece      |

## Research Focus

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**Joint Models for Longitudinal and Time-to-Event Data**

**Mixed-effects models**

**Survival Analysis**

**Multi-state Models**

**Dynamic Prediction**

**Missing Data**

## Statistical Software Development

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| JMbayes2 | <b>co-developer</b><br>Extended Joint Models for Longitudinal and Survival Data   |
| JMbayes  | <b>co-developer</b><br>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 longitudinal data and multi-state processes. |
| rQuote   | <b>Developer</b><br>Extracts quotes from the web with web-scraping based on topics of interest.   |

## International Conferences

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|-------------|--|
| <b>2020</b> | <b>41st ISCB, Krakow, Poland</b><br>An Alternative Characterization of Missing at Random in Shared Parameter Models  |
| <b>2019</b> | <b>40th ISCB, Leuven, Belgium</b><br>Feature selection of longitudinal biomarkers in multi-variate joint models for longitudinal and multi-state processes |
| <b>2018</b> | <b>29th IBS, Barcelona, Spain</b><br>Feature selection of longitudinal biomarkers in multi-variate joint models for longitudinal and multi-state processes |
| <b>2017</b> | <b>38th ISCB, Vigo, Spain</b><br>Individualized Dynamic Prediction of Survival with the Presence of Intermediate Events                                    |
| <b>2017</b> | <b>9th EMR, Thessaloniki, Greece</b><br>Individualized Dynamic Prediction of Survival with the Presence of Intermediate Events                             |

## Peer Review for International Scientific Journals

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**Biometrics**

**Journal of Statistical Software**

**Biometrical Journal**

**Statistics in Medicine**

**Statistical Methods in Medical Research**

**Statistica Sinica**

**Pharmaceutical Statistics**

**Diagnostic and Prognostic Research**

## Committees

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**2022 - 2025**

**IBC:** Awards Fund Committee

## Programming Languages & Statistical Software Skills

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**Fluent**

**R, C++, Markdown,  $\text{\LaTeX}$**

**Intermediate**

**SAS, Stan, HTML, CSS**

## List of Publications

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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](https://doi.org/10.1161/JAHA.121.023967).
2. 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](https://doi.org/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](https://doi.org/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](https://doi.org/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. "Long-term 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](https://doi.org/10.1001/jamacardio.2020.7434).
6. 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: *EClinicalMedicine* 35 (2021). doi: [10.1016/j.eclim.2021.100855](https://doi.org/10.1016/j.eclim.2021.100855).
7. W.M.A. van der Slot, J.L. Benner, L. Brunton, J.M. Engel, P. Gallien, S.R. Hilberink, G. Månun, 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. Roebroek. "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](https://doi.org/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](https://doi.org/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](https://doi.org/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 Cardiovascular Surgery* 159.4 (2020), 1508–1516.e1. doi: [10.1016/j.jtcvs.2019.08.083](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/10.1159/000492203).
16. **Papageorgiou, G.**, K. Mauff, A. Tomer, and D. Rizopoulos. "An overview of joint modeling of time-to-event and longitudinal outcomes". In: *Annual Review of Statistics and Its Application* 6 (2019), pp. 223–240. doi: [10.1146/annurev-statistics-030718-105048](https://doi.org/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](https://doi.org/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](https://doi.org/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. Mäkilä, 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](https://doi.org/10.1016/S0140-6736(18)30423-9).
20. 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. Mäkilä, 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](https://doi.org/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](https://doi.org/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](https://doi.org/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 standardized 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](https://doi.org/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](https://doi.org/10.1093/icvts/ivy102).