

Marta Cipriani

Curriculum Vitae et Studiorum

Academic experience

- 2026–Present **Post-Doctoral Research Fellow**, *School of Mathematics and Statistics, University College Dublin*.
Principal Investigator: Prof. Claire Gormley
- 2024–2025 **Research Fellow in Statistics**, *Dpt. of Political Sciences, Roma Tre University*.
Supervisor: Prof. Francesco Lagona
- 2024 **Visiting Graduate Researcher**, *Mathematical Institute, Leiden University*.
Supervisor: Prof. Marta Fiocco

Education

- 2022–2026 **PhD in Methodological Statistics with mention of "Doctor Europaeus"**, *Sapienza University of Rome*, Thesis title: *"Flexible methods for survival data: synthetic patients, imputation and prediction in mixture cure models"*. Final grade: Cum laude.
Supervisor: Prof. Marco Alfò
- 2023 **Course "Pseudo-observations in survival analysis"**, *University of Milano-Bicocca*.
Instructors: Per Kragh Andersen, Henrik Ravn
- 2019–2022 **Master's degree in Statistical Sciences - Major: Biostatistics**, *Sapienza University of Rome*, Thesis title: *"Joint models and pseudo-observations in survival analysis"*. Final grade: 110/110 cum laude.
Supervisor: Prof. Marco Alfò
- 2018–2019 **Erasmus+ Program**, *University Paris I Panthéon-Sorbonne*, .
- 2016–2019 **Bachelor's degree in Political Sciences**, *Roma Tre University*, Thesis title: *"The Cox model applied to a study on health and longevity in China"*. Final grade: 110/110 cum laude.
Supervisor: Prof. Francesco Lagona

Work experience

- 2022–Present **Biostatistical consultant**, *Fondazione GIMEMA Franco Mandelli ONLUS, Rome*.
Support in statistical methodology for clinical trials conducted by the Foundation.

Teaching experience

Teaching Assistant

- 2024–2025 **Statistica**, *Dpt. of Political Sciences, Roma Tre University*.
Course for the Bachelor programmes in L-36 and L-37
- 2023–2024 **Statistica**, *Dpt. of Political Sciences, Roma Tre University*.
Course for the Bachelor programmes in L-36 and L-37
- 2023–2024 **Statistica di base**, *Dpt. of Statistical Sciences, Sapienza University of Rome*.
Course for the Bachelor program in L-41

Funded research projects and Scholarships

Principal investigator

- 2024 **Research Grant for Junior Researcher**, *Sapienza University of Rome*.
Title: A multiple imputation approach to distinguish curative from life-prolonging effects in the presence of missing covariates
- 2023 **Research Grant for Junior Researcher**, *Sapienza University of Rome*.
Title: Unlocking the potential of artificial intelligence for generating synthetic patients in clinical trials
- 2022 **Full three-year PhD scholarship**, *Sapienza University of Rome*.

Research collaborator

- 2024 **Major Research Projects**, *Sapienza University of Rome*.
Title: Latent variable models for complex health data
- 2023 **Major Research Projects**, *Sapienza University of Rome*.
Title: Advancing precision public health medicine: high-performance computing for efficient solutions to bioinformatics and biostatistical challenges

Awards

- 2025 **Best Poster Award**, *International Workshop on Statistical Modelling*, Limerick, Ireland.
- 2025 **Best Poster Award**, *Survival Analysis for Junior Researchers Conference*, Bonn, Germany.
- 2024 **Best Oral Paper Presentation**, *International Biometric Conference*, Atlanta, USA.

Journal referee

Biometrical Journal, Journal of Statistical Computation and Simulation (JSCS), Metron, Italian Statistical Society Series on Advances in Statistics.

Personal information

- Programming** R, RStudio, Rmarkdown, \LaTeX , Overleaf, SAS, Stata, HTML, Github, Python
- Languages** Italian: mother tongue; English: advanced; French: baccalauréat général; Spanish: intermediate

- Memberships** Società Italiana di Statistica (SIS), Young SIS (y-SIS), International Biometric Society (IBS), International Society for Clinical Biostatistics (ISCB)
- Metrics** Tot. citations: 89 (Scholar); H-index: 6 (Scholar) accessed on 10/02/2026

Conferences and Workshops

Invited talk

- 2025 **New Frontiers in Hematologic Research: Quality of Life and Artificial Intelligence - GIMEMA International Meeting**, *Sala della Protomoteca, Campidoglio, Rome, Italy*.
Title: Unlocking the potential of synthetic patients for accelerating hematologic research
- 2024 **Workshop on "Dati sintetici per accelerare la ricerca clinica"**, *Sala Convegni AIL, Rome, Italy*.
Title: Un esempio della ricerca GIMEMA

Invited seminar

- 2025 **Synthetic Data: Opportunities and Challenges**, *Dpt. of Political Sciences, Roma Tre University, Italy*.
- 2024 **A multiple imputation approach to distinguish curative from life-prolonging effects in the presence of missing covariates**, *Mathematical Institute, Leiden University, The Netherlands*.

Contributed

- 2025 **39TH International Workshop on Statistical Modelling - IWSM 2025**, *University of Limerick, Ireland*.
Title: Extending landmarking to mixture cure model with time-varying covariates
- 2025 **SIS 2025 - Statistics for innovation**, *University of Genoa, Italy*.
Title: Missing covariates in mixture cure models: a multiple imputation approach
- 2025 **Survival Analysis for Junior Researchers Conference - SAfJR 2025**, *University of Bonn, Germany*.
Title: Extending landmarking to mixture cure model with time-varying covariates
- 2024 **International Biometric Conference - IBC 2024**, *Atlanta, USA*.
Title: A multiple imputation approach to distinguish curative from life-prolonging effects in the presence of missing covariates
- 2024 **Computational Intelligence methods for Bioinformatics and Biostatistics - CIBB 2024**, *University of Sannio, Italy*.
Title: Generating electronic health records using adversarial random forests
- 2024 **SIS 2024 – 52nd Scientific Meeting of the Italian Statistical Society**, *Università degli Studi di Bari "A. Moro", Italy*.
Title: A flexible parametric approach to synthetic patients generation in clinical trials
- 2023 **SIS 2023 – Statistical Learning, Sustainability and Impact Evaluation**, *Università Politecnica delle Marche, Italy*.
Title: Pseudo-observations in survival analysis

Conference chair

- 2026 **Computational Intelligence methods for Bioinformatics and Biostatistics (CIBB) 2026**, Sapienza University of Rome

Organizing committee

- 2025 **GRASPA 2025**, Roma Tre University
2023 **Italian Bayesian Day**, Sapienza University of Rome

Programme committee

- 2025 **Computational Intelligence methods for Bioinformatics and Biostatistics (CIBB) 2025**, Politecnico di Milano

Publications

Scientific papers

- 2025 **A flexible parametric approach to synthetic patients generation using health data**, *M. Cipriani, L. Di Rocco, M. Puopolo, M. Alfò*.
Statistical Methods and Applications, vol. 34, pp. 639–662. DOI: <https://doi.org/10.1007/s10260-025-00800-5>
- 2024 **Health-Related Quality of Life and Financial Burden in Ethiopian Patients With Chronic Myeloid Leukemia Receiving Tyrosine Kinase Inhibitors: A Cross-Sectional Study**, *F. Tadesse, F. Sparano, A. Gebremedhin, A. Abubeker, A. Piciocchi, M. Cipriani et al.*
JCO Global Oncology, 10:e2400281. DOI: <https://doi.org/10.1200/G0-24-00281>
- 2024 **Current Knowledge on Breast Implant-Associated Anaplastic Large Cell Lymphoma: Evidence from Italian Ministry of Health Registry Data**, *A. Campanale, M. Ventimiglia, M. Alfò, M. Cipriani, D. Minella, L. Lispi, A. Iachino*.
Aesthetic Plastic Surgery, vol. 49(5), pp. 1304–1313. DOI: <https://doi.org/10.1007/s00266-024-04426-y>
- 2024 **Health-related quality of life and symptoms of chronic myeloid leukemia patients after discontinuation of tyrosine kinase inhibitors: results from the EURO-SKKI Trial**, *F. Efficace, F.-X. Mahon, J. Richter, A. Piciocchi, M. Cipriani et al.*
Leukemia, vol. 38(8), pp. 1722–1730. DOI: <https://doi.org/10.1038/s41375-024-02341-4>
- 2024 **Unlocking the potential of synthetic patients for accelerating clinical trials: Results of the first GIMEMA experience on acute myeloid leukemia patients**, *A. Piciocchi, M. Cipriani, M. Messina, G. Marconi, V. Arena et al.*
eJHaem, vol. 5 (2), 353-359, 2023. DOI: <https://doi.org/10.1002/jha2.873>
- 2023 **A randomized double-blind clinical trial on safety and efficacy of tauroursodeoxycholic acid (TUDCA) as add-on treatment in patients affected by amyotrophic lateral sclerosis (ALS): the statistical analysis plan of TUDCA-ALS trial**, *F. L. Lombardo, S. Spila Alegiani, F. Mayer, M. Cipriani et al.*
Trials, vol. 24, article 792. DOI: <https://doi.org/10.1186/s13063-023-07638-w>

- 2023 **The Promotoer, a brain-computer interface-assisted intervention to promote upper limb functional motor recovery after stroke: a statistical analysis plan for a randomized controlled trial**, *M. Cipriani, F. Pichiorri, E. Colamarino, J. Toppi, F. Tamburella, M. Lorusso et al.*
Trials, vol. 24, article 736. DOI: <https://doi.org/10.1186/s13063-023-07773-4>
- 2023 **Applicability of 2022 classifications of acute myeloid leukemia in the real-world setting**, *E. Attardi, A. Savi, B. Borsellino, A. Piciocchi, M. Cipriani et al.*
Blood Adv, 7 (17): 5122–5131. DOI: <https://doi.org/10.1182/bloodadvances.2023010173>

Proceedings

- 2025 **Missing Covariates in Mixture Cure Models: A Multiple Imputation Approach**, *M. Cipriani, M. Fiocco, M. Alfó, E. Musta.*
Statistics for Innovation II, pp. 459–464, Springer, 2025. DOI: https://doi.org/10.1007/978-3-031-96303-2_75
- 2025 **A Flexible Parametric Approach to Synthetic Patients Generation in Clinical Trials**, *M. Cipriani, L. Di Rocco, M. Alfò.*
Methodological and Applied Statistics and Demography III, pp. 419–425, Springer. DOI: https://doi.org/10.1007/978-3-031-64431-3_69
- 2024 **Digital Twins As Control Groups to Accelerate Assessment of Safety and Efficacy of Novel Treatment Strategies in Ph-Negative Acute Lymphoblastic Leukemia**, *A. Piciocchi, M. Messina, G. Marsili, M. Cipriani et al.*
Blood, vol. 144 Suppl.1, pp. 274–275. DOI: <https://doi.org/10.1182/blood-2024-200643>
- 2023 **A Propensity Score Weighting Analysis Emphasizes the Progress of the Gimema Approach in Adult Ph-Positive Acute Lymphoblastic Leukemia in the TKI Era**, *A. Piciocchi, S. Chiaretti, M. Cipriani, M. Messina et al.*
Blood, vol. 142 Suppl.1, p. 4200. DOI: <https://doi.org/10.1182/blood-2023-179102>
- 2023 **Unraveling the Impact of 2022 Classifications on Secondary Acute Myeloid Leukemia: Assessing the True Qualification Power of Diagnostic Qualifiers**, *E. Attardi, A. Savi, B. Borsellino, M. Cipriani, A. Piciocchi et al.*
Blood, vol. 142 Suppl.1, p. 819. DOI: <https://doi.org/10.1182/blood-2023-185709>
- 2023 **P499: Applicability of 2022 classifications of acute myeloid leukemia in the real-world setting**, *E. Attardi, A. Savi, B. Borsellino, A. Piciocchi, M. Cipriani et al.*
HemaSphere, 7 (Suppl):e5402602. DOI: <https://doi.org/10.1097/01.HS9.0000968904.54026.02>
- 2023 **S159: Health-related quality of life of patients with chronic myeloid leukemia after discontinuation of tyrosine kinase inhibitors: Results from the EURO-SKI study**, *F. Efficace, F.-X. Mahon, J. Richter, A. Piciocchi, M. Cipriani et al.*
HemaSphere 7(S3):p e0972454. DOI: <https://doi.org/10.1097/01.HS9.0000967548.09724.54>

- 2023 **P523: The comparison of VFLAI, FLAI and 3+7 regimens by multilevel propensity score weighting highlights the benefit of the addition of venetoclax in no low-risk AML treated in GIMEMA trials and real world**, A. Piciocchi, G. Marconi, M. Cipriani et al.
HemaSphere 7(S3):p e0034216. DOI: <https://doi.org/10.1097/01.HS9.0000969000.00342.16>
- 2023 **P495: Unlocking the potential of synthetic patients for accelerating clinical trials: Results of the first GIMEMA experience**, A. Piciocchi, M. Cipriani, M. Messina, G. Marconi et al.
HemaSphere 7(S3):p e4536536. DOI: <https://doi.org/10.1097/01.HS9.0000968888.45365.36>
- 2023 **Addition of venetoclax to FLAI induction chemotherapy (VFLAI) improves survival in patients with intermediate and high-risk AML vs FLAI and 3+7: A GIMEMA Italian cooperative analysis**, G. Martinelli, M. Cipriani, G. Marconi, F. Guolo, P. Minetto, F. Paoloni, F. Cotugno et al.
Journal of Clinical Oncology, Volume 41, Number 16 suppl. DOI: https://doi.org/10.1200/JCO.2023.41.16_suppl.7013
- 2023 **Pseudo-observations in survival analysis**, M. Cipriani, A. Piciocchi, V. Arena, M. Alfò.
Book of short papers SIS 2023 - Statistical Learning, Sustainability and Impact Evaluation. ISBN: 9788891935618
- 2022 **The Addition of Venetoclax to Induction Chemotherapy in No Low-Risk AML Patients: A Propensity Score-Matched Analysis of the Gimema AML1718 and AML1310 Trials**, A. Piciocchi, M. Messina, M. Cipriani, F. Paoloni et al.
Blood, vol. 140 (Supplement 1): 137–138. DOI: <https://doi.org/10.1182/blood-2022-158890>
- 2022 **Health-Related Quality of Life and Financial Burden of Ethiopian Patients with Chronic Myeloid Leukemia Receiving Tyrosine Kinase Inhibitors**, F. Tadesse, A. Gebremedhin, A. Abubeker, A. Piciocchi, M. Cipriani et al.
Blood, vol. 140 (Supplement 1): 5264–5265. DOI: <https://doi.org/10.1182/blood-2022-163049>

Preprint and under review

- 2025 **Dynamic Prediction in Mixture Cure Models: A Model-Based Landmarking Approach**, M. Cipriani, M. Alfò, M. Signorelli.
arXiv preprint [arXiv:2509.18875](https://arxiv.org/abs/2509.18875) [stat.ME]. DOI: <https://doi.org/10.48550/arXiv.2509.18875>
- 2024 **A multiple imputation approach to distinguish curative from life-prolonging effects in the presence of missing covariates**, M. Cipriani, M. Fiocco, M. Alfò, M. Quelhas, E. Musta.
arXiv preprint [arXiv:2408.16485](https://arxiv.org/abs/2408.16485) [stat.ME]. DOI: <https://doi.org/10.48550/arXiv.2408.16485>