Salvatore Pirri

<u>About me</u>: Health Economics and Market Access Expert with 8 years of experience in strategic management, health economics, and decision-making processes. Proven track record in leading market access strategies and developing pharmacoeconomic models. Nearly a decade of experience in academic research and teaching in Italy and the UK, with a focus on health economics and data analytics, including machine learning techniques. Currently affiliated as a professional research associate at the Institute of Management, Sant'Anna School of Advanced Studies.

EDUCATION

PhD in Innovation Management, December 2018, with Honors.

at Sant'Anna School of Advanced Studies, Pisa (Italy)

Focus on: Big Data and innovation in healthcare management, modelling health economics.

Post Graduate Diploma (Master) in Business Administration and Service Innovation, 2016. at Sant'Anna School of Advanced Studies, Pisa (Italy)

Focus on: Critical thinking linked to innovation, business model innovation, R&D management.

MA in Science of Public Administrations and Government, 2013, with Honors. *at University of Calabria, Cosenza (Italy)*

Thesis: Comparative study on innovation and legislative policy between Italy and United Kingdom.

BA in Economics and Social Science, 2010. at University of Calabria, Cosenza (Italy)

Thesis: The relationship between religious values and economic growth.

RESEARCH and Working EXPERIENCE

HEOR Manager at Regulatory Pharma Net, Pisa (Italy).

10/2022 – present

Strategic P&R analysis, pricing and market access strategies for (Italy, Spain, France, UK); AIFA negotiation and followup strategies; Health Economics modelling (cost-effectiveness, budget impact); Designing strategy for HTA requirements across Europe.

Health Economist at Regulatory Pharma Net, Pisa (Italy).

07/2022 - 09/2022

HTA Assessments; Health Economics modelling (cost-effectiveness, budget impact); RWE analysis and scientific publications (posters, presentations and manuscripts).

Research fellow at the Sant 'Anna School of Advanced Studies, Pisa (Italy).

Institute of Management, Team led by Prof. G. Turchetti

06/2018 - 06/2021

Institute of Management. Team led by Prof. G. Turchetti.

09/2017 - 03/2018

Visiting fellow at the *University of Edinburgh*, (UK). supervised by Dr. Claudia Pagliari and Prof. Brian McKinstry.

SOFTWARE AND PROGRAMS

Expert: R, Excel (VBA), Gephi, Mendeley, Shiny, Git/GitHub, Microsoft Office.

Familiar: K-nime, Python, Stata.

AWARDS

2023	Best Research Podium Presentation Award at the ISPOR Rome Chapter congress.
2021	Winner of the Jean-Michel Metry Prize at the 25th ESPACOMP conference.
2019	EIT Health Innovation fellowship, StarShip Program.
2018	Erasmus+ scholarship for PhD visiting at the University of Edinburgh.
2017	ISPOR Conference, best poster award finalist.
2013	Erasmus program fellowship at Coventry University.
	Professional Activities

2019 - 20		Researcher at the ERN-REconnet project.
	2019 - 2021	Responsible for the economic modelling tools application in rare diseases management. Responsible for the medication adherence assessment task.
2015	2015	Internship as Project Manager at Leonardo Selex ES, Genova (Italy).
	2013	Develop company projects about grants and loans funds for the Italian Digital Agenda
2014	2014	Internship as Project Manager at "ENEA", Brussels, (Belgium).
	Scouting European H2020 opportunities about new technology strategy for KET – "Key Enabling Technologies"	
2012	Internship at the Italian Embassy in Hungary, Budapest, (Hungary).	
	2012	Preparing reports about the Hungarian economy and possible market opportunities for Italian companies and diplomatic administrative correspondences.

Professional Memberships

2021	ESPACOMP member.
2021	The International Society for Medication Adherence (ESPACOMP)
2021	SLEeuro - European Lupus Society (SLEuro).
2021	The European Lupus Society organization. (https://sleuro.org/)
2020	SIMA - Società Italiana di Management.
2020	Italian Society of Management (https://www.societamanagement.it/en/home/)
2020	ISPOR - Society for health economics and outcomes research
2020	International Society for Pharmacoeconomics and Outcomes Research. (https://www.ispor.org/)
2020	Società Italiana Marketing, (Italy).
2020	Italian Marketing Society (http://www.simktg.it/sp/en/home.3sp)

COURSES AND CERTIFICATIONS:

- Decision Modelling for Health Economic Evaluation Advanced Course (2023).
- Morisky Widget and Morsiky Medication Adherence tool protocol (2019). (MMAS Research LLC).
- Data Science Summer School (2019). https://datasciencephd.eu/DSSS19/
- Member of Mendeley Advisor group for reference manager software (2020).
- HelloAIRIS certification. EIT Health: Artificial Intelligence training program (2020).
- Introduction to Health Economic Evaluation; HERC Oxford course (2020).
- International Summer School on Rare Disease Registries and FAIRification of Data (2020). FAIR Data Principles use. https://www.go-fair.org/fair-principles/

TEACHING EXPERIENCE

Sant' Anna School of Advanced Studies

- Lecturer at: Scuola Superiore Sant'Anna (Pisa) in: NHS organisation and Market Access. October 2023;
- Lecturer at: Scuola Superiore Sant' Anna (Pisa) in: NHS organisation and Market Access. October 2022;
- Lecturer at: Scuola Superiore Sant'Anna (Pisa) in: NHS organisation and Market Access. October 2021;
- Teaching Assistant: Corso LM-MAIN, Sant'Anna-Trento, Management of Innovation. Instructor, Professor. Alberto Di Minin. Ass. Professor Andrea Tenucci. December 2018.March - April 2019.
- Teaching Assistant: Corso LM-MAIN, Sant'Anna-Trento, Management of Innovation. Instructor, Professor. Alberto Di Minin. Ass. Professor Andrea Tenucci. July 2016. March - July 2017.

University of Pisa

- Teaching Assistant: Post degree master, Data Driven Innovation DDI general management. Instructor, Professor. Alberto Di Minin. June 2018.
- Teaching Assistant: Post degree master, Big Data and Open Business model general management. Instructor, Professor. Andrea Piccaluga, Professor. Alberto Di Minin. July 2016.

The University of Newcastle Australia

• Lecturer at: Applied Economic Evaluation in Healthcare (https://www.newcastle.edu.au/course/GSBS6382); Introduction of Budget Impact Analysis. Instructor, Professor. Francesco Paolucci. July 2023.

The University of Milano

• Lecturer at: Economic Evaluation Models In Healthcare: A Practical Approach To The Development And Interpretation Of Cost-Effectiveness Models; Professor. Andrea Marcellusi. September 2024.

INVITED PRESENTATIONS

ISPOR Italian Roma Chapter. December 2023

ORAL PRESENTATION – "Beyond Excel: The emerging role of R in cost-effectiveness analysis."

SiHTA - Italian HTA Society. October 2023

ORAL PRESENTATION – "DCEA. a methodological approach for incorporating equity into pharmaco-economic evaluations."

ISPOR Italian Roma Chapter. November 2022

ORAL PRESENTATION – "The role of AIFA's innovativeness criteria for orphan and oncological drugs' appraisal."

ISPOR Roma for Future (GIRF). May 2022

SPEAKER - "Medication adherence and economic evaluations for decision-making processes."

ESPACOM conference, Early Career Researchers (ECR). November 2021

SPEAKER – "The added value of different backgrounds and research topics to investigated medication adherence".

ERN ReCONNET adherence web conference. January 2020

ORAL PRESENTATION – Salvatore Pirri, "Non-adherence in rare and complex connective tissue".

European Reference Networks meeting. Pisa (Italy) January 2019

ORAL PRESENTATION – Salvatore Pirri, "Selfcare management and economic implications for ERNs".

Health Data in the algorithm society. July 2017

ORAL PRESENTATION – Salvatore Pirri, "Big Data for health economics".

Poster presentation at ISPOR Annual Congress. Glasgow (UK). November 2017

POSTER PRESENTATION – Salvatore Pirri, "The application of Big Data Analysis to measure and better understand medication adherence".

PUBLICATIONS

Published

Marinello, D., Palla, I., Lorenzoni, V., Andreozzi, G., **Pirri, S.** *et al.* Exploring disease perception in Behçet's syndrome: combining a quantitative and a qualitative study based on a narrative medicine approach. *Orphanet J Rare Dis* **18**, 58 (2023). https://doi.org/10.1186/s13023-023-02668-8

Lorenzoni V, Andreozzi G, Bazzani A, Casigliani V, **Pirri S**, Tavoschi L, Turchetti G. *How Italy Tweeted about COVID-19: Detecting Reactions to the Pandemic from Social Media*. International Journal of Environmental Research and Public Health. 2022; 19(13):7785. https://doi.org/10.3390/ijerph19137785

Pirri S., Talarico R., Marinello D., Turchetti G. and Mosca, M. (2021). "A systematic literature review of existing tools used to assess medication adherence in connective tissue diseases: the state of the art for the future development of co-designed measurement tools"; Reumatismo, 73(3). doi: 10.4081/reumatismo.2021.1418.

Pirri S, Marinello D, Lorenzoni V, Andreozzi G, Bazzani A, Del Bianco A, Turchetti G, Mosca M, Talarico R. *Adherence to treatment in Behçet's syndrome: a multi-faceted issue*. Clin Exp Rheumatol. (2021) Sep 30. Epub ahead of print. PMID: 34596034.

Lorenzoni V., *Pirri S*, & Turchetti G. Cost-Effectiveness of Direct Non-Vitamin K Oral Anticoagulants Versus Vitamin K Antagonists for the Management of Patients with Non-Valvular Atrial Fibrillation Based on Available

- "Real-World" Evidence: The Italian National Health System Perspective. Clin Drug Investig (2021). https://doi.org/10.1007/s40261-021-01002-z
- A Caminati, B Vigone, S Cozzaglio, P De Nigris, I Galetti, S di Nunzio, V Verzeletti, J Cighetti, C Garbagnati, L Paleari, E Tabaglio and **S. Pirri**. "Expert opinion and patients' in-depth interviews on the impact of pulmonary complications in systemic sclerosis". Current Medical Research and Opinion, 37:sup2, (2021), 17-26, DOI: 10.1080/03007995.2021.1992370
- Talarico R, Cannizzo S, Lorenzoni V, Marinello D, Palla I, *Pirri S*. et al. RarERN Path: a methodology towards the optimisation of patients' care pathways in rare and complex diseases developed within the European Reference Networks. Orphanet J Rare Dis 15, 347 (2020). https://doi.org/10.1186/s13023-020-01631-1
- Cannizzo S, Palla I, *Pirri S*, Triulzi I, Carta C, Taruscio D, Turchetti G. *One year in review 2020: economic and organisational aspects in rare and complex connective tissue diseases*. Clin Exp Rheumatol. 2020 Nov-Dec;38(6):1037-1045. Epub (2020) Nov 17. PMID: 33242303.
- **S. Pirri**, V. Lorenzoni, G. Turchetti. "Scoping review and bibliometric analysis of Big Data applications for Medication adherence: an explorative methodological study to enhance consistency in literature". BMC Health Serv Res 20, 688 (2020). https://doi.org/10.1186/s12913-020-05544-4.
- **S. Pirri**, V. Lorenzoni, G. Andreaozzi, M. Mosca, G. Turchetti. "Latent topics and social network interaction during the World Lupus Day. A Topic modeling and users network analysis on Twitter". Int. J. Environ. Res. Public Health 2020, 17(15), 5440; https://doi.org/10.3390/ijerph17155440
- Cannizzo. S, Lorenzoni. V, Palla. I, **Pirri. S**. et al. "Rare diseases under different levels of economic analysis: current activities, challenges and perspectives". RMD Open (2018); 4:e000794. doi: 10.1136/rmdopen-2018-000794.
- P. Del Vecchio, A. Di Minin, A. Petruzzelli, U. Panniello, **S. Pirri**. "Big Data for Open Innovation in SMEs and Large Corporations: Trends, Opportunities, and Challenges". Creativity and Innovation Management. DOI:10.1111/caim.12224., (2017).

Academic Posters & Conference Paper

- *S Pirri*, C Garimberti, C Pieve, L Piampiani. "Beyond Excel: The emerging role of R in cost-effectiveness analysis". ISPOR Italian Roma-Chapter, Annual Meeting Conference; 12-13 December 2023.
- *S Pirri*, C Garimberti, C Pieve, L Piampiani. "*DCEA. a methodological approach for incorporating equity into pharmaco-economic evaluations*". SiHTA Italian HTA Society, Annual Meeting Conference; 24-26 October 2023.
- *S Pirri*, C Moreno, E Nannetti, M Sanna, C Garimberti, P Berto. "The role of AIFA's innovativeness criteria for orphan and oncological drugs' appraisal". ISPOR Italian Roma-Chapter, Annual Meeting Conference; 28-29 November 2021.
- *S Pirri*, V Lorenzoni, G Turchetti. "State of the art about the inclusion of medication adherence implications in pharmacoeconomic evaluations". Abstracts of the 25th Annual Meeting of ESPACOMP, the International Society for Medication Adherence, 08-19 November 2021. Int J Clin Pharm. 2022 Jan 30:1–24. doi: 10.1007/s11096-021-01373-5. Epub ahead of print. PMID: 35098429; PMCID: PMC8801236.

- Andreozzi G, *Pirri S*, Turchetti G, Lorenzoni V. "*The spread of contagion on Twitter: identification of communities analyzing data from the first wave of the COVID-19 epidemic*". 50th Meeting of the Italian Statistical Society (2021). http://meetings3.sis-statistica.org/index.php/sis2021/sis2021. Book of short papers SIS 2021. ISBN 9788891927361
- S. Pirri, C Pagliari, V Lorenzoni, G Turchetti. "Explorative scoping review and bibliometric analysis of big data applications for medication adherence". ISPOR Conf. Value in Health 22, S732-S733; (2019).
- V Lorenzoni, I Palla, *S Pirri*, I Triulzi, E Elefante, C Tani, S Cannizzo, et al. *Knowledge, use and desiderata about information and communication technologies systems for systemic lupus erythematosus. Preliminary results from the integrate pilot"*. ISPOR Conf. Value in Health 22, S867; (2019).
- *S Pirri*, V Lorenzoni, L Trieste, R Talarico, I Palla, C Tani, E Elefante. "The #Worldlupusday 2019 Across Twitter: An Explorative Analysis of Spreading Concepts and Sentiment Perceptions on Social Media". ACR Conf. Atlanta, USA; ARTHRITIS & RHEUMATOLOGY; (2019).
- V Lorenzoni, *S Pirri*, G Turchetti. "clinical and economic implications of using non-vitamin k antagonist oral anticoagulants for non-valvular atrial fibrillation using available evidence from real-world". ISPOR Conf. Value in Health 22, S554; (2019).
- V Lorenzoni, I Palla, E Elefante, C Tani, S Cannizzo, *S Pirri*, I Triulzi, et al. "Knowledge, Needs and Expectations Among Systemic Lupus Erythematosus: Preliminary Results from the INTEGRATE Pilot Project". ACR Conf. Atlanta, USA; ARTHRITIS & RHEUMATOLOGY; (2019).
- S. Pirri, G. Turchetti. "The application of Big Data Analysis to measure and better understand medication adherence: A systematic literature review". Poster presented at: ISPOR 20th Annual European Congress. Glasgow (UK). 2017.

REFERENCES CONTACT INFORMATION

- <u>Salvatore Amico Roxas</u>, Policy Officer at European Commission EIT strategy, Economic and Societal Impact; salvatore.AMICO-ROXAS@ec.europa.eu
- Patrizia Berto, Sr Director Head of P&R at PharmaLex; pberto789@gmail.com (+39 348 5119372)
- <u>Thomas Carlo Maria Topini</u>, General Manager Italy at Ascendis Pharma; tcmt@ascendispharma.com (+39 334 1909797)
- <u>Giuseppe Turchetti</u>, Professor in Economic Evaluation of Health Care, Sant' Anna School of Advanced Studies; giuseppe.turchetti@santannapisa.it
- <u>Claudia Pagliari</u>, Senior Lecturer in Primary Care and Informatics; Usher Institute University of Edinburgh. claudia.pagliari@ed.ac.uk
- <u>Brian McKinstry</u>, Professor of Primary Care E-Health; Usher Institute University of Edinburgh. brian.mckinstry@ed.ac.uk

REVIEWER FOR:

- Health Policy and Technology.
- Clinical and Experimental Rheumatology.
- California Management Review.
- International Journal of Environmental Research and Public Health.