

MARIELE GATTO, MD, PhD

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Publications (Pubmed): 100

H-index (Scopus): 36

**Current position**

Since 1/04/2023 **Associate Professor for Rheumatology**
Unit of Rheumatology
Dept of Clinical & Biological Sciences
University of Turin

Professional experience

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| 2021-2023 | Full-time researcher
Unit of Rheumatology
Department of Medicine
University of Padova |
| 2020-2021 | Post-doctoral Researcher
Project: <i>Immunophenotyping and functional characteristics of B cells in patients developing arthritis following administration of checkpoint inhibitors</i>
Department of Rheumatology and Inflammation Research
University of Gothenburg |
| 2016-2019 | PhD student (Doctor Europeus)
University of Padova and Charité – Universitätsmedizin Berlin
Lab research at Prof. Thomas Dörner's B cell Lab
Thesis: <i>Novel Pathogenic Pathways and Therapeutic Implications in Lupus Nephritis: The Emerging Role of PTX3-Related Immunity</i> |

Clinical activity

- Dr Gatto works at the inpatient clinics dedicated to systemic rheumatic diseases, where patients with acute conditions/disease relapses are admitted for diagnosis and treatment
- Dr Gatto leads a specialized outpatient clinics dedicated to the diagnosis, treatment, and follow-up of patients with systemic connective tissue diseases

Research

Laboratory:

- The laboratory research activity focuses on the study of animal models (NZB/W F1 and MRL/lpr) in vivo, with a particular emphasis on exploring new pathogenetic pathways. This includes investigating experimental molecules administered for therapeutic purposes in these models.
- Identification of serological or tissue markers in patients with autoimmune rheumatic diseases, especially in systemic lupus erythematosus, for clinical stratification and prognosis.
- Isolation and phenotypic characterization of circulating microvesicles and clinical correlation in patients with autoimmune rheumatic diseases, particularly in idiopathic inflammatory myopathies.

Epidemiological Research:

- Cohort studies in patients with systemic lupus erythematosus.
- Identification of clinical factors predicting therapy response in patients with systemic autoimmune diseases.
- Identification of risk factors for the development of severe respiratory system involvement patterns in patients with idiopathic inflammatory myopathies.

Other

- **PI or SI in several RCT on SLE and LN**
- **Mentoring of medical students and residents in Rheumatology**

Scientific Collaborations

Karolinska Institutet, Sweden	Several ongoing studies on the characterization of SLE and LN patients <ul style="list-style-type: none"> - Clustering based on immunophenotyping - Drug response according to endotype - Drug-elicited modification in the B cell repertoire and clinical correlates - Characterization of the dual tissue-blood signature in lupus nephritis
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3TR Horizon2020 Molecular diagnosis of patients with ARD (section: SLE)

ELUSIDATE protocol	Partner in the EUROPEAN LUpuS Inception-Cohort Developing initiATive
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Belimumab registry/ BERLISS studies	Italian belimumab registry <ul style="list-style-type: none"> - SLE patients - Belimumab as initial treatment in LN
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Voclosporin registry	Italian voclosporin registry in LN
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REVEAL study	Partner in the use of real-life Anifrolumab nationwide study in Italy
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Late Research grants

2022-2023	Italian Ministry for Research Grant and EU endorsed project (PRIN) in Life Sciences (as PI): The role and characterization of circulating microvesicles as early predictors of development of autoimmune rheumatic diseases
2021	Italian Society of Rheumatology (SIR) 2021 best oral presentation “Early changes in circulating B cells portend flares in patients with SLE treated with belimumab”,
2021	Stiftelsen Professor Nanna Svartz funding (Sweden) Study of early B cell abnormalities in checkpoint-inhibitors related arthritis in patients with metastatic melanoma
2020	“Lorenzo Re” Patient Onlus grant: 2-year project on preventive strategies in lupus nephritis

Selected publications 2020-2023

1. **Gatto M**, Depascale R, Stefanski AL, Schrezenmeier E, Dörner T. Translational implications of newly characterized pathogenic pathways in systemic lupus erythematosus. *Best Pract Res Clin Rheumatol*. 2023 Aug 23:101864.
2. Rahmé Z, Franco C, Cruciani C, Pettorossi F, Zaramella A, Realdon S, Iaccarino L, Frontini G, Moroni G, Doria A, Ghirardello A, **Gatto M**. Characterization of Serum Cytokine Profiles of Patients with Active Lupus Nephritis. *Int J Mol Sci*. 2023;24(19):14883.
3. Parodis I, Gomez A, Lindblom J, Chow JW, Sjöwall C, Sciascia S, **Gatto M**. B Cell Kinetics upon Therapy Commencement for Active Extrarenal Systemic Lupus Erythematosus in Relation to Development of Renal Flares: Results from Three Phase III Clinical Trials of Belimumab. *Int J Mol Sci*. 2022 Nov 11;23(22):13941.
4. **Gatto M**, Bjursten S, Jonsson C, et al. Early increase of circulating transitional B cells and autoantibodies to joint-related proteins in patients with metastatic melanoma developing checkpoint inhibitor-induced inflammatory arthritis. *Arthritis Rheumatol*. 2023 May;75(5):856-863. doi: 10.1002/art.42406. Epub 2023 Mar 14. PMID: 3640957
5. **Gatto M**, Radice F, Saccon F, et al. Clinical and histological findings at second but not at first kidney biopsy predict end-stage kidney disease in a large multicentric cohort of patients with active lupus nephritis. *Lupus Sci Med*. 2022;9(1):e000689.
6. Parodis I, Gomez A, Chow JW, Borg A, Lindblom J, **Gatto M**. Early B Cell and Plasma Cell Kinetics Upon Treatment Initiation Portend Flares in Systemic Lupus Erythematosus: A Post-Hoc Analysis of Three Phase III Clinical Trials of Belimumab. *Front Immunol*. 2022;13:796508. doi:10.3389/fimmu.2022.796508.
7. Parodis I, Gomez A, Lindblom J, Chow JW, Doria A, **Gatto M**. Early Changes in B and Plasma Cell Subsets and Traditional Serological Markers as Predictors of SRI-4 Response to Therapy in Systemic Lupus Erythematosus. *Front Med*. 2022;9.
8. **Gatto M**, Saccon F, Andreoli L, et al. Durable renal response and safety with add-on belimumab in patients with lupus nephritis in real-life setting (BeRLiSS-LN). Results from a large, nationwide, multicentric cohort. *J Autoimmun*. 2021;124:102729.
9. **Gatto M**, Radu CM, Luisetto R, et al. Immunization with Pentraxin3 prevents transition from subclinical to clinical lupus nephritis in lupus-prone mice: Insights from renal ultrastructural findings. *J Autoimmun*. 2020;111:102443.
10. **Gatto M**, Saccon F, Zen M, et al. Early Disease and Low Baseline Damage as Predictors of Response to Belimumab in Patients With Systemic Lupus Erythematosus in a Real-Life Setting. *Arthritis Rheumatol*. 2020;72(8):1314-1324
11. **Gatto M**, Wiedemann A, Nomovi N, Reiter K, Schrezenmeier E, Rose T, Szelinski F, Lino AC, Valentino S, Ghirardello A, Dörner T, Doria A. Circulating Pentraxin3-Specific B Cells Are Decreased in Lupus Nephritis. *Front Immunol*. 2019 Jan 25;10:29