



Chiara Tammaro

Address: Italy (Work)

WORK EXPERIENCE

1 DEC 2023 – CURRENT Rome, Italy

POST-DOC SAPIENZA UNIVERSITY OF ROME

Synthesis of new potent inhibitors of Coxsackievirus A9

31 OCT 2020 – 31 OCT 2023 Rome, Italy

PHD STUDENT SAPIENZA UNIVERSITY OF ROME

Since november 2020 I have started my PhD program in Pharmaceutical Sciences. I work in the research group of Prof. Biava and Prof Poce. My work project consists in the development and synthesis of new compounds with an antiviral activity and of new derivatives with an antimalarial role.

AUG 2018 – FEB 2020 Rome, Italy

INTERNSHIP FARMACIA OSTIENSE SNC

In this internship at Farmacia Ostiense I understood how a pharmacist works and which liability he has.

EDUCATION AND TRAINING

SEP 2014 – 5 JUL 2020 Rome, Italy

MASTER'S DEGREE IN CHEMISTRY AND PHARMACEUTICAL TECHNOLOGY Sapienza University of Rome

In my thesis I have worked in a laboratory where the field of the research was organic synthesis. I have learned all the techniques useful for the procedures of synthesis, purification and characterization of organic compounds with a pharmaceutical activity.

Address P.le Aldo Moro 5, 00185, Rome, Italy | **Field of study** Chemistry and pharmaceutical technology |

Final grade 110 cum laude | **Thesis** Development and synthesis of new idrazo-thiazoles with an activity focused on Eg5

AUG 2009 – JUN 2014 Terracina, Italy

HIGH SCHOOL DIPLOMA Liceo statale Leonardo Da Vinci

Address Via Pantanelle 1 , 04019, Terracina, Italy | **Field of study** classical high school diploma | **Final grade** 94/100

Rome, Italy

QUALIFICATION TO THE PROFESSION OF PHARMACIST Sapienza University of Rome

Address P.le Aldo Moro 5, 00185, Rome, Italy

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

UNDERSTANDING

SPEAKING

WRITING

Listening

Reading

Spoken production Spoken interaction

ENGLISH

B2

B1

B1

B2

B1

● DIGITAL SKILLS

Microsoft Office | ChemDraw professional | Mestrenova | Mestrelab - Mnova

Technical expertise

Liquid chromatography | CombiFlash | Crystallization Method | High Performance Liquid Chromatography (HPLC) | Organic synthesis | Distillation

● PUBLICATIONS

2023

[Direct-Acting Antivirals and Host-Targeting Approaches against Enterovirus B Infections Recent Advances](#)

Enterovirus B (EV-B)-related diseases, which can be life threatening in high-risk populations, have been recognized as a serious health problem, but their clinical treatment is largely supportive, and no selective antivirals are available on the market. As their clinical relevance has become more serious, efforts in the field of anti-EV-B inhibitors have greatly increased and many potential antivirals with very high selectivity indexes and promising in vitro activities have been discovered. The scope of this review encompasses recent advances in the discovery of new compounds with anti-viral activity against EV-B, as well as further progress in repurposing drugs to treat these infections. Current progress and future perspectives in drug discovery against EV-Bs are briefly discussed and existing gaps are spotlighted.

Chiara Tammaro, Michela Guida, Federico Appetecchia, Mariangela Biava, Sara Consalvi, Giovanna Poce

2022

[Malaria transmission blocking compounds: a patent review](#)

Introduction: Despite substantial progress in the field, malaria remains a global health issue and currently available control strategies are not sufficient to achieve eradication. Agents able to prevent transmission are likely to have a strong impact on malaria control and have been prioritized as a primary objective to reduce the number of secondary infections. Therefore, there is an increased interest in finding novel drugs targeting sexual stages of Plasmodium and innovative methods to target malaria transmission from host to vector, and vice versa.

Areas covered: This review covers innovative transmission-blocking inventions patented between 2015 and October 2021. The focus is on chemical interventions which could be used as "chemical vaccines" to prevent transmission (small molecules, carbohydrates, and polypeptides).

Expert opinion: Even though the development of novel strategies to block transmission still requires fundamental additional research and a deeper understanding of parasite sexual stages biology, the research in this field has significantly accelerated. Among innovative inventions patented over the last six years, the surface-delivery of antimalarial drugs to kill transmission-stages parasites in mosquitoes holds the highest promise for success in malaria control strategies, opening completely new scenarios in malaria transmission-blocking drug discovery.

Sara Consalvi, Chiara Tammaro, Federico Appetecchia, Mariangela Biava, Giovanna Poce

2024

[Amino Acid Biosynthesis Inhibitors in Tuberculosis Drug Discovery](#)

According to the latest World Health Organization (WHO) report, an estimated 10.6 million people were diagnosed with tuberculosis (TB) in 2022, and 1.30 million died. A major concern is the emergence of multi-drug-resistant (MDR) and extensively drug-resistant (XDR) strains, fueled by the length of anti-TB treatment and HIV comorbidity. Innovative anti-TB agents acting with new modes of action are the only solution to counteract the spread of resistant infections. To escape starvation and survive inside macrophages, *Mtb* has evolved to become independent of the host by synthesizing its own amino acids. Therefore, targeting amino acid biosynthesis could subvert the ability of the mycobacterium to evade the host immune system, providing innovative avenues for drug discovery. The aim of this review is to give an overview of the most recent progress in the discovery of amino acid biosynthesis inhibitors. Among the hits discovered over the past five years, tryptophan (Trp) inhibitors stand out as the most advanced and have significantly contributed to demonstrating the feasibility of this approach for future TB drug discovery. Future efforts should be directed at prioritizing the chemical optimization of these hits to enrich the TB drug pipeline with high-quality leads.

Guida, M., Tammaro, C., Poce, G., & Consalvi, S. (2024). *Pharmaceutics*, 16(6), 725.