

Interview with Irina Meln, PrIMAVeRa Project Coordinator & Senior Innovation Manager, European Vaccine Initiative

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Can you describe the project action plan to demonstrate how vaccines and monoclonal antibodies can help reduce antimicrobial resistance?

Preventive vaccination and treatment with mAbs are valuable strategies to reduce antimicrobial resistance (AMR). However, there are no comprehensive tools demonstrating the health and economic outcomes of using vaccines/mAbs compared to other measures for combatting AMR. The PrIMAVeRa project will develop an integrated tool that will enable public health professionals (decision-makers, policymakers) to make evidence-based decisions and prioritize the implementation of vaccination programs for more effective public health measures. To achieve this ambitious goal the PrIMAVeRa project will collect available epidemiological data and mathematical models to develop a new integrated tool to estimate the value of vaccines/mAbs in the reduction of AMR. The PrIMAVeRa project aims to develop a long-term implementation program for developed tools in eight countries including some with high AMR prevalence and burden.



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It has been 6 months since the PrIMAVeRa project started. What have you been able to put in place so far?

PrIMAVeRa is a large Consortium and consists of 19 organisations. It was initiated with a kick-off meeting that was held virtually on 25 November 2021 and drew approximately 56 attendees. The meeting covered an introduction of partners, the vision of the project, a scientific overview of PrIMAVeRa, and overviews of the different work packages and their activities for the first six months of the project. In addition to project partners, the kick-off meeting had presentations from three invited speakers, namely Dr. Tek-Ang Lim, who presented IMI and its expectations of the consortium, while Prof. Anders Karlén gave an overview of the AMR Accelerator and COMBINE, and Dr. Mateusz Hasso-Agopsowicz of the World Health Organization gave a keynote lecture articulating the importance of vaccines in preventing AMR. Please read more: <https://www.primavera-amr.eu/post/primavera-kick-off-meeting>.

For the presentation of PrIMAVeRa to external audiences, specific communication activities were planned. This will include the production and regular update of content to be part of the IMI AMR Accelerator's website and social media platforms with key messages tailored to PrIMAVeRa target audiences. Additionally, PrIMAVeRa's website was developed and launched in January 2022 (www.primavera-amr.eu).

Since its launch, PrIMAVeRa had several internal workshops to align on the pathogen selection strategy and to develop a framework for further model development. For example, in one workshop held virtually on 27-28 January 2022, the relevant strata/patient paths were selected. Consortium partners agreed upon important parameters to be considered as infection settings, infection origin, infections associated with device use, gender, age, elective or emergency surgery, or relevant comorbidities. Please read more: <https://www.primavera-amr.eu/post/primavera-wp2-workshop-virtually-held-on-27-28-january-2022>

You were able to meet last month with most of the AMR Accelerator projects at the occasion of the cross-project meeting held on the eve of the 6th AMR Conference in Basel, Switzerland. What are the most important benefits for a capacity-building project like PrIMAVeRa to be connected with so many partners involved in other AMR-related research projects?

The AMR Accelerator Cross-Project meeting organised by COMBINE on the 6th of April in Basel enabled PrIMAVeRa to participate in a variety of fruitful discussions about management, communication and dissemination, and data management across AMR Accelerator projects. The main outcomes of the PrIMAVeRa project will be publicly available epidemiological data repository and mathematical models. It was helpful to learn how other projects from the AMR Accelerator are managing data and employing data visualization platforms to ensure a higher impact on the projects. As PrIMAVeRa aims to equip public health professionals with better tools, it is important to have a user-friendly interface to increase the implementation of the tool. Additionally, since all projects were presented in the format of updates and challenges, it was helpful to learn about some challenges in data collection, which we will also encounter in the PrIMAVeRa project. Overall Networking in the context of AMR Accelerator Cross-Project was beneficial for PrIMAVeRa as multiple topics/challenges are similar across projects in AMR Accelerator and timely knowledge sharing between projects is vital.

Can you tell us a bit more about the pathogens that you prioritise to develop the mathematical models that will support the impact assessment of treatment and prevention strategies aimed at reducing the burden of antimicrobial resistance?

Pathogen selection strategy is critical for the PrIMAVeRa project as it will drive model development for specific pathogens. We took into consideration multiple parameters as WHO recommendations related to critical pathogens (such as carbapenem-resistant *Acinetobacter baumannii* and *Pseudomonas aeruginosa*, Enterobacteriaceae) and market access. Importantly PrIMAVeRa has a specific work package that will demonstrate the burden of AMR, meaning that pathogen selection is embedded in the workplace.

Which have been the first challenges you have identified in the first six months of the project and how are you planning to deal with them?

PrIMAVeRa is a data-driven project and relies on high-quality epidemiological data. Mathematical models will be built based on the available epidemiological data and additional data will be collected. It is critical for the PrIMAVeRa project to map data sets with patient-level data. Acquisition of required data can be a challenge since it is highly dependent on the data owner. Project partners started mapping relevant data sets and getting in the contact with other EU-funded projects which could have relevance to the PrIMAVeRa data.

¹ <https://www.who.int/news/item/27-02-2017-who-publishes-list-of-bacteria-for-which-new-antibiotics-are-urgently-needed>

About PrIMAVeRa

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About the AMR Accelerator

The aim of the Antimicrobial Resistance (AMR) Accelerator Programme is to progress the development of new medicines to treat or even prevent resistant bacterial infections in Europe and worldwide. The programme comprises the following three pillars: a Capability Building Network, a Tuberculosis Drug Development Network, and the Portfolio Building Networks.

The scope of the AMR Accelerator is broad; under one structure, it addresses many of the scientific challenges of AMR, and it supports the development of new ways to prevent and treat AMR. More broadly, the AMR Accelerator contributes to the European action plan on AMR.

For more information on the AMR Accelerator, please visit <https://www.amr-accelerator.eu/>

About the Innovative Health Initiative

The Innovative Health Initiative (IHI) is Europe's largest public-private initiative aiming to speed up the development of better and safer medicines for patients. IHI supports collaborative research projects and builds networks of industrial and academic experts in order to boost pharmaceutical innovation in Europe. IHI is a joint undertaking between the European Union and the European Federation of Pharmaceutical Industries and Associations, EFPIA.

For more information, please visit www.ihieurope.eu

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