

# JPIAMR – Joint Programing Initiative on Antimicrobial Resistance

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Swedish Research Council

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# Joint Programming Initiative on Antimicrobial Resistance

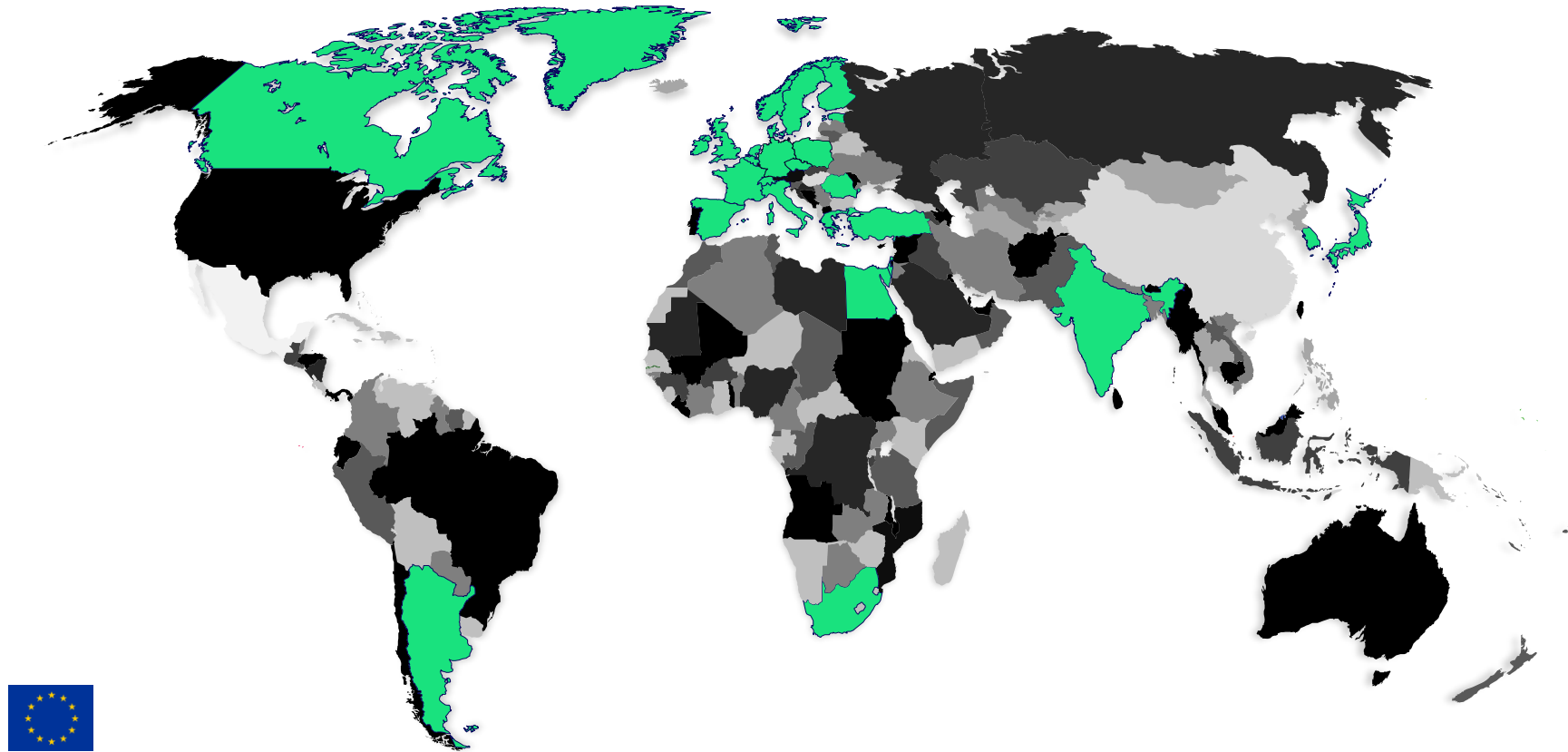
**Mission:** To join forces across nations by leading the alignment, coordination, and support to Antimicrobial Resistance One Health collaborative research and global policy activities

International collaborative platform that:

- aligns national research funding
- coordinates AMR research and funding on a global scale
- supports collaborative action for filling knowledge gaps on AMR with a One Health perspective

# JPIAMR: A Global Organisation

Uniting 27 countries to address AMR



The European Commission (DG Research) is a full non voting member

 JPIAMR member states



# JPIAMR in action



27  
countries



85 M€



79  
projects



JPIAMR-  
VRI

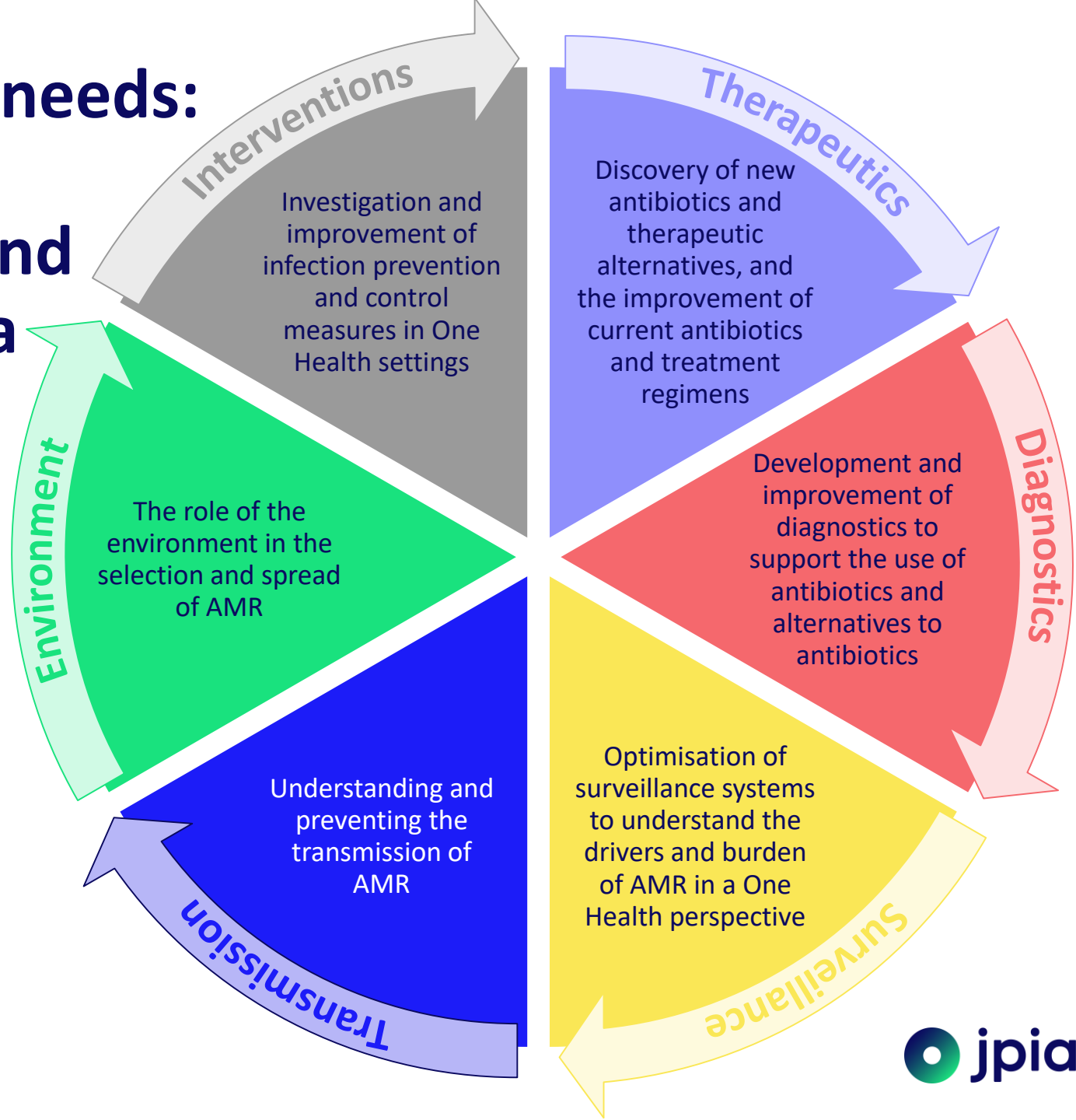


SRIA



20 in  
pipeline

# Identifying the research needs: The JPIAMR Strategic Research and Innovation Agenda



# International Alignment

## JPIAMR and global coordination

### ORGANISATIONS



UNGA, IAGC &  
Call for Action

G7 Resolutions  
G20 Resolutions  
EU Council Conclusions

AMR Global R&D Hub



World Health  
Organization



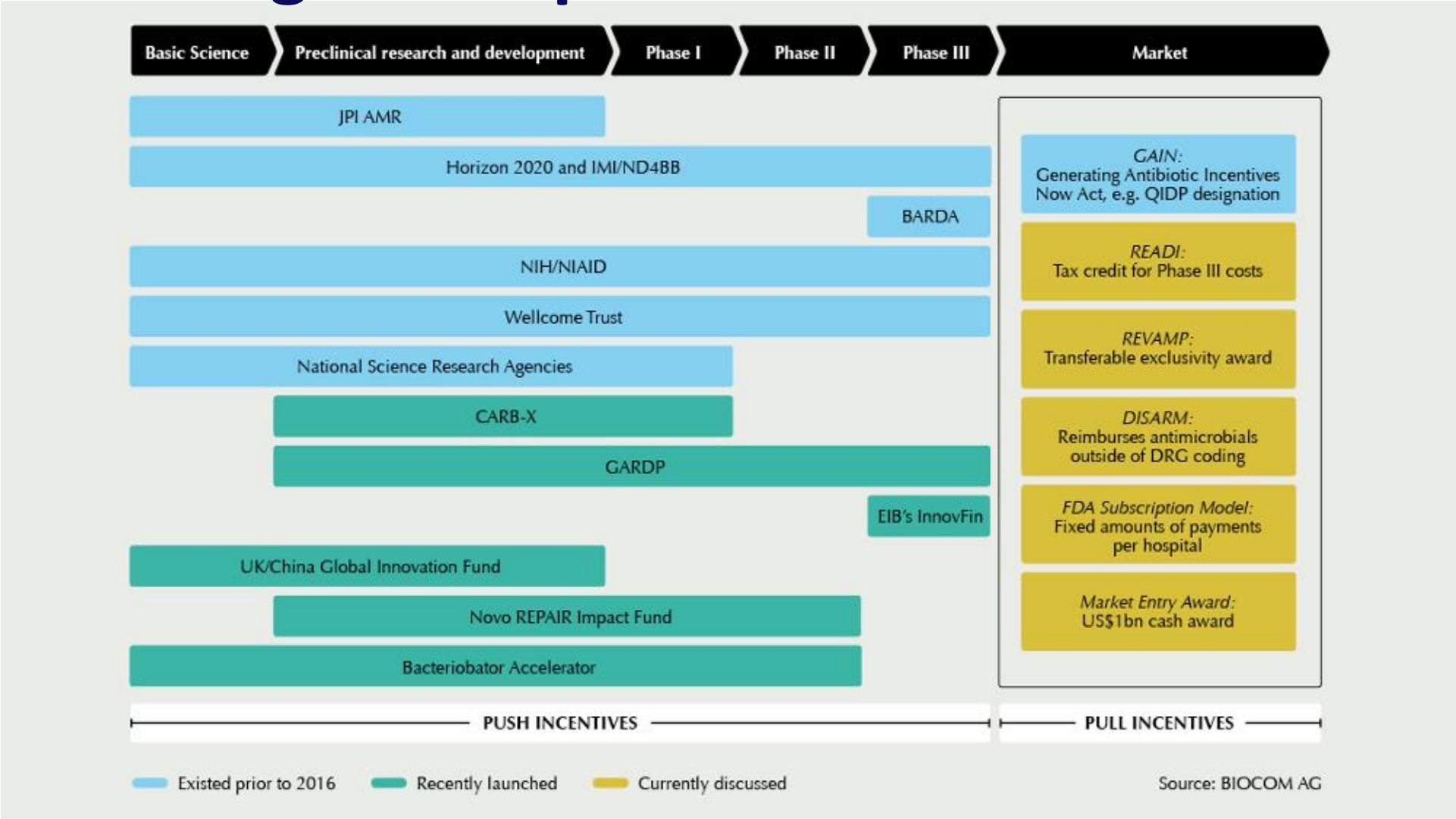
### FUNDERS



CARB-X



# AMR drug development international funders





# National Research Policy Alignment

## National alignment

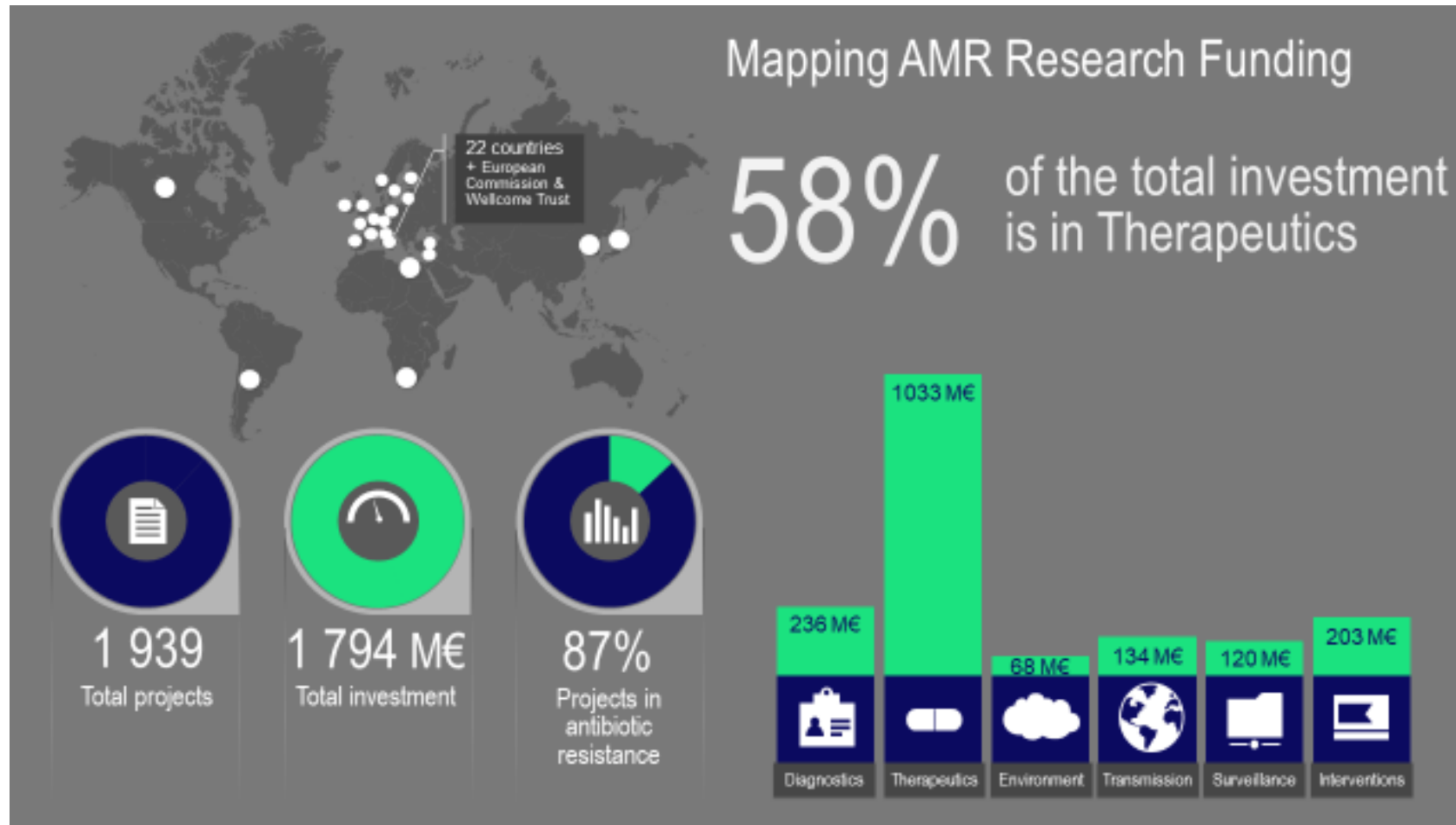
A better integration of JPIAMR efforts and SRIA with national strategies by engaging the national policy makers across different agencies aligning national inter-sectorial policies and programmes and developing national action plans for research coordinated with JPIAMR research agendas/plans seeking a One Health approach

- National alignment: intergovernmental organisation of AMR
- National alignment: alignment of SRIA and national research plans



# Global AMR research investments and projects

Dashboard: Database on AMR research landscape



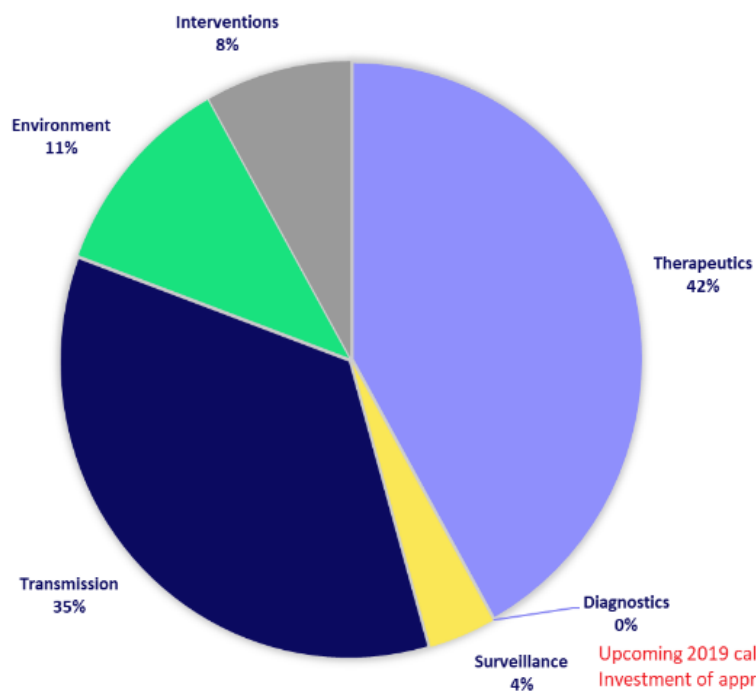
# JPIAMR workshops 2015-2018

Year	Workshops
2015	<ul style="list-style-type: none"><li>• Diagnostics</li><li>• Transmission dynamics</li><li>• Intergovernmental meeting</li></ul>
2016	<ul style="list-style-type: none"><li>• New frontiers in AMR research</li><li>• Transatlantic collaboration on clinical trials</li><li>• The interplay between AMR surveillance and science</li></ul>
2017	<ul style="list-style-type: none"><li>• Early discovery of new antibiotics</li><li>• Environmental dimensions of AMR</li><li>• Setting the scene for a JPIAMR Virtual Research Institute</li></ul>
2018	<ul style="list-style-type: none"><li>• JPIAMR Funded Networks workshop</li></ul>
Year	Workshops
2019	<ul style="list-style-type: none"><li>• VRI Network Start-up, February</li><li>• Surveillance Network Start-up, February</li><li>• AMR in Latin America, May</li><li>• AMR in Eastern Europe, June</li><li>• AMR meeting in South Korea, fall</li></ul>

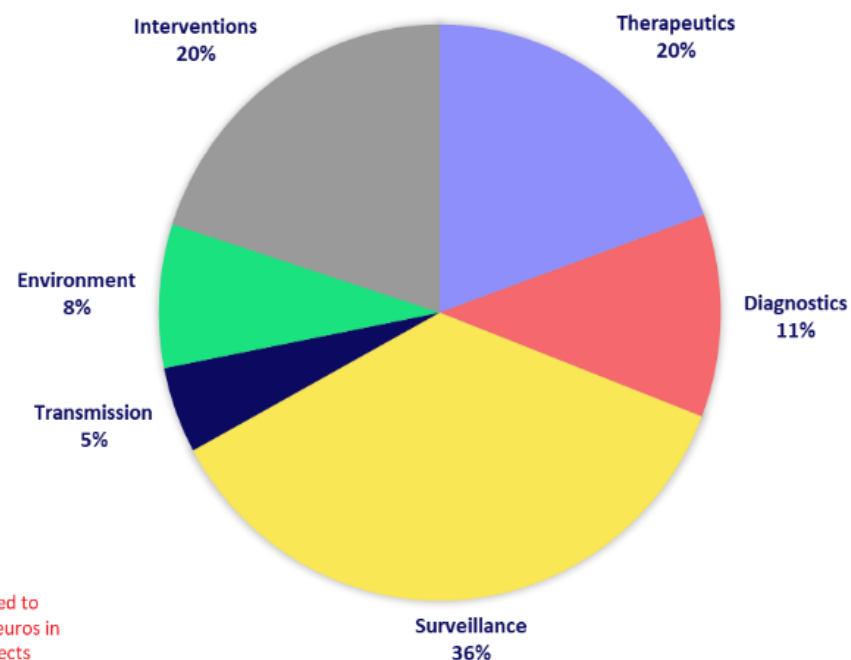
# Global AMR Research Funder

- Total of 9 joint transnational research calls
- Basic, pre-clinical and phase 1 clinical trials
- To date 49 projects, 30 networks in AMR research have received over 65 M€ from JPIAMR

Proportion of research projects per priority research area



Proportion of Networks per priority research area

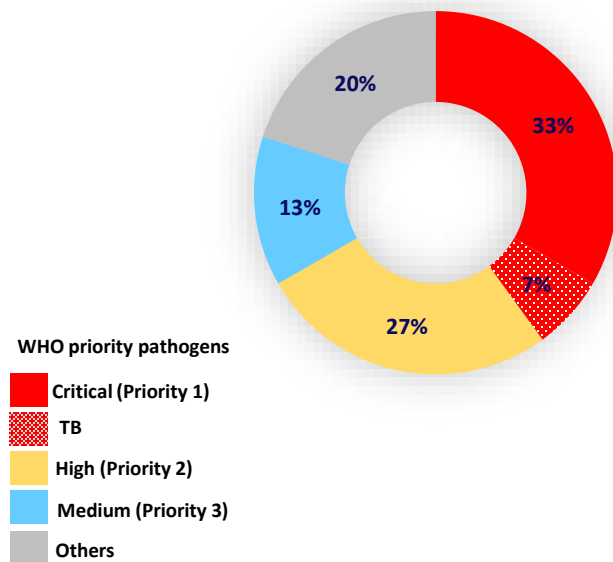


Upcoming 2019 call has committed to investment of approx 20 million euros in Diagnostics and Surveillance Projects

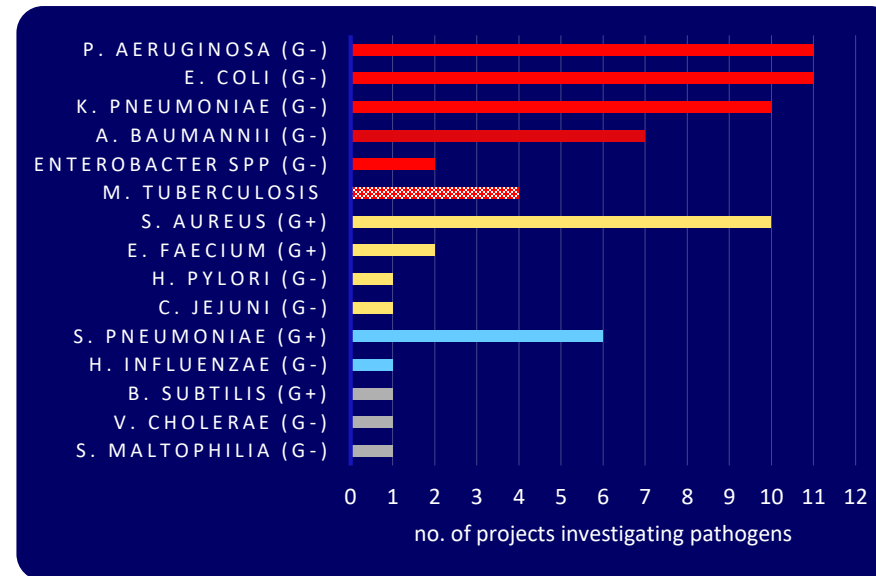
# JPIAMR funded 20 projects in Therapeutics research

- 100 partners in 17 countries
- 25M Euros invested

JPIAMR supported research projects addressing pathogens categorised under WHO Priority Pathogens List

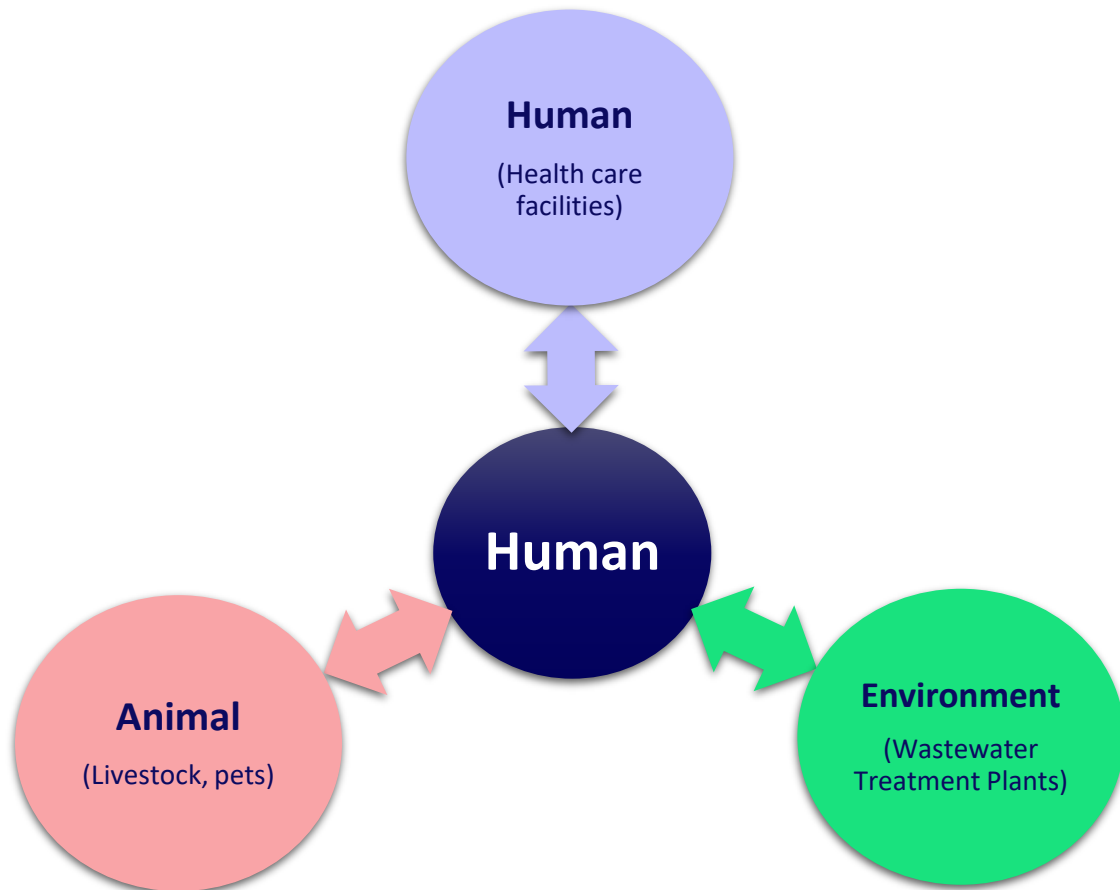


Distribution of JPIAMR funded projects on the basis of pathogens studied

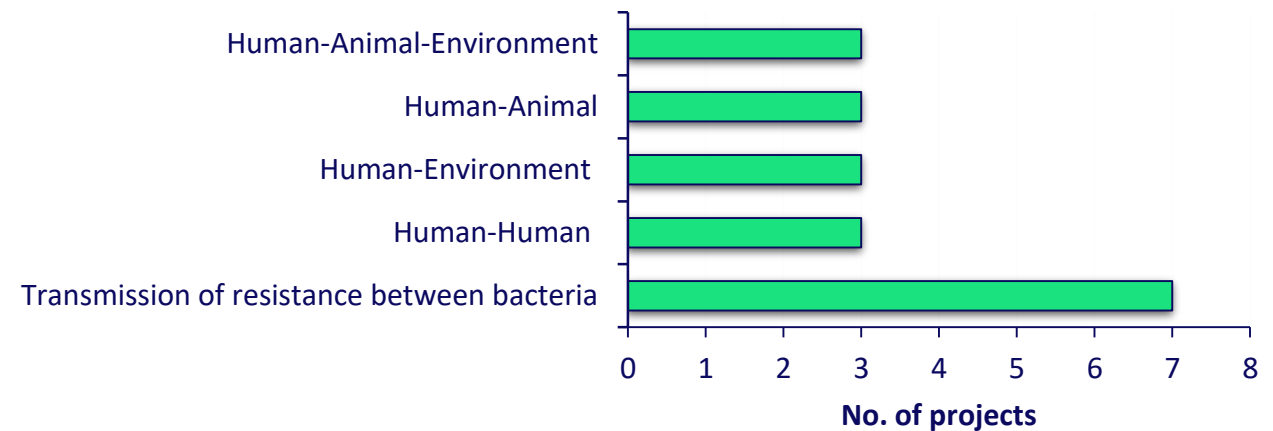


# JPIAMR funded 19 projects in Transmission research

- 118 partners in 17 countries
- 30M Euros invested



## Distribution of JPIAMR supported projects on Transmission

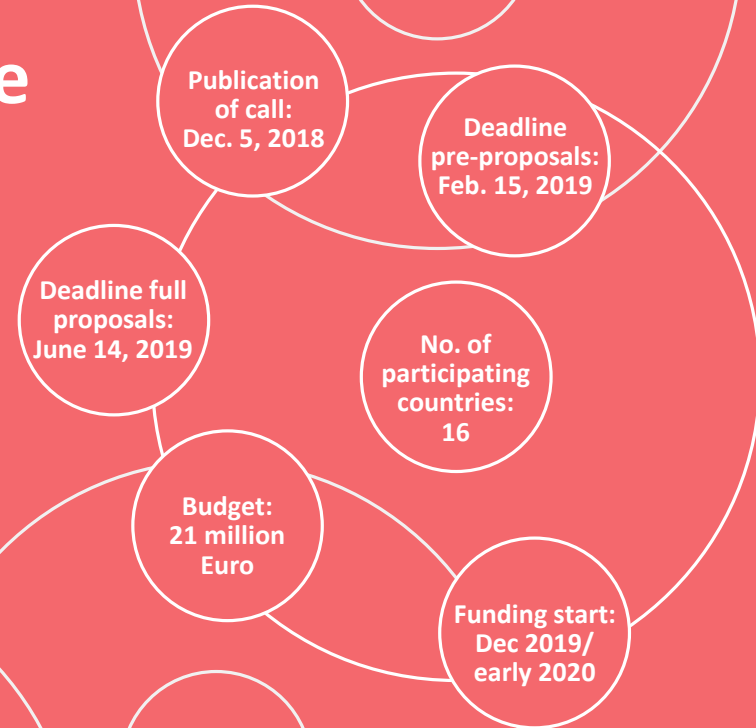


Pre-announcement of the Joint Transnational Research Call 2019

# Diagnostics and Surveillance of Antimicrobial Resistance

Funding research projects addressing the development of diagnostic and surveillance tools, technologies and methods to detect AMR. Projects should address the diagnosis of AMR infections in clinical and veterinary settings or the surveillance of AMR in humans, animals and the environment.

**Promoting projects with impact in LMIC settings in Asia and Africa.**



# JPIAMR call on Diagnostics highlights

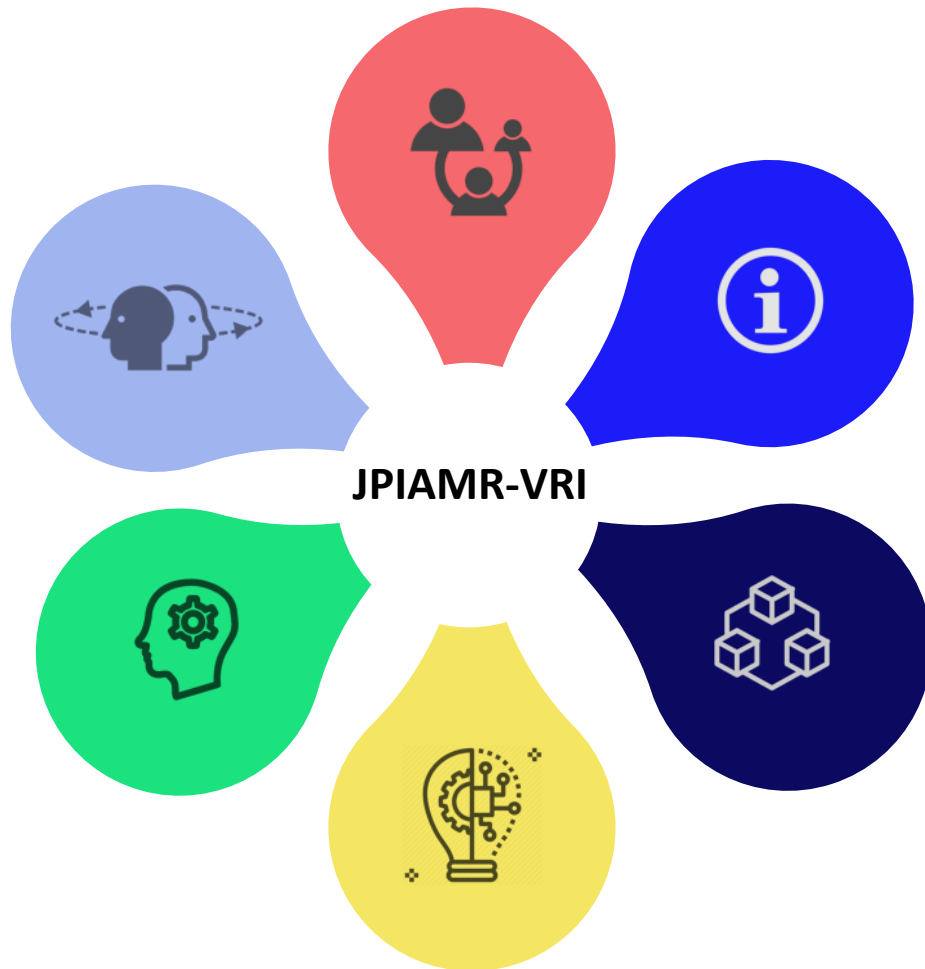
- Applications: 71 consortia 344 partners in total (we have additional 12 applications under eligibility check)
- Partners from 53 countries applying.
- Strong participation from China (8 projects) and India (9 projects)
- 36 projects have LMIC from Africa. 37 projects include Asian partners funded by Canada. Only 7 projects lack participation from Africa or Asia.
- 2 coordinators from Tanzania, 2 from Uganda, 1 from Ethiopia, 2 from South Africa, 1 from India, 2 from China and 1 from Bangladesh - Non-Europeans 15% of all coordinators.
- One consortia is coordinated by Romania.



# JPIAMR Calls 2019-2023

Year	Funding scheme	Call Name	Priority topics	Investment (M €)
2019	Projects	Development of diagnostic and surveillance tools, technologies and methods to detect antimicrobial resistance (AMR)	Diagnostics Surveillance	>20M
2020	Projects	ERAnet Emerging Pollutants and Pathogens 2019 1st calls (jointly call with JPIWATER and JPIOCEANS)	Environment Transmission	
2021	Projects	JPIAMR ACTION: AntimiCrobial Transmission InterventiONs	Intervention Transmission	

# JPIAMR-Virtual Research Institute



## Connecting

Bridging Partnerships, Collaborations, Forums, Workshops, Webinars



## Knowledge Access

Enabling Global Access, Mappings, Frameworks, Blueprints, Expertise, Knowledge Transfers



## Data Sharing

Online Sharing Platforms, Libraries, Catalogues



## Scientific Innovation

Building Evidence in all One Health domains of AMR



## Capacity Building

Training, Virtual Education, Train the Trainers, Exchange Programs



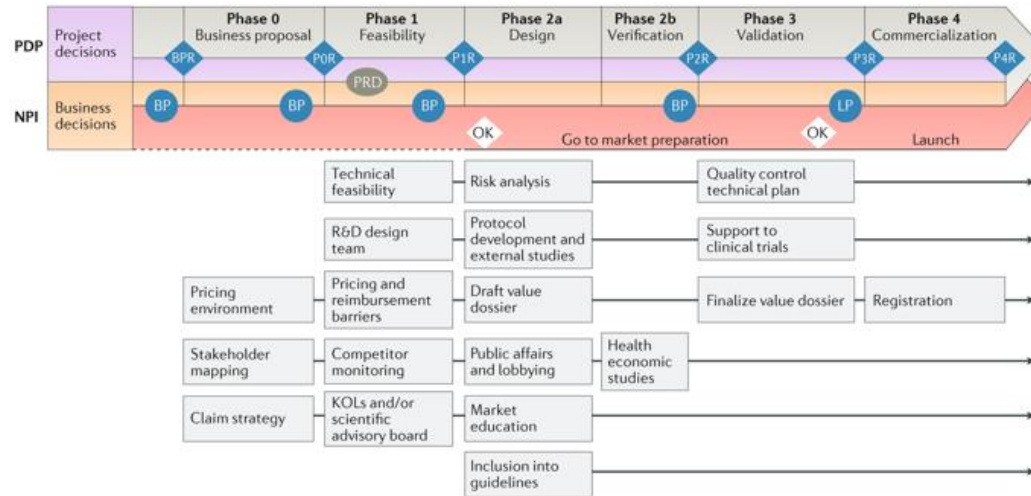
## Awareness

Developing and Sharing research results, Promoting AMR in the Global Agenda

# Example Network towards the VRI: JPIAMR supported network AMR Rapid Diagnostic Tests (AMR-RDT)

50 organisations from 15 countries worldwide

## Schematic overview of the development process for products in the in vitro diagnostics market



*Nature Reviews Microbiology, 2018*



Consensus Statement | OPEN | Published: 17 October 2018

## Developmental roadmap for antimicrobial susceptibility testing systems

Alex van Belkum, Till T. Bachmann, Gerd Lüdke, Jan Gorm Lisby, Gunnar Kahlmeter, Allan Mohees, Karsten Becker, John P. Hays, Neil Woodford, Konstantinos Mitsakakis, Jacob Moran-Gilad, Jordi Vila, Harald Peter, John H. Rex, Wm. Michael Dunne Jr & the JPIAMR AMR-RDT Working Group on Antimicrobial Resistance and Rapid Diagnostic Testing

*Nature Reviews Microbiology* (2018) | Download Citation

## Next step: capacity building

-Strategic Action Plan on training for diagnostics

-Structure data collection

-Blueprint for the JPIAMR-VRI virtual School of Diagnostics

## JPIAMR Funded Network: Surveillance

**WAWES** 



WILDLIFE  
AGRICULTURE  
WASTEWATER  
ENVIRONMENTAL  
SURVEILLANCE

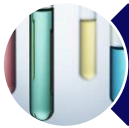
**Network Coordinator:** Stefan Börjesson, National Veterinary Institute, Sweden

**JPIAMR priority areas:** Environment Surveillance Transmission

**Objective:** To find a way to perform global comparative surveillance of AMR in the environment and wildlife, which is furthermore applicable in the majority of countries irrespective of economic resources

**Outputs:** White paper: Guidelines and Method Protocols

# Next steps: JPIAMR Roadmap of Actions 2019-2023



Calls: Research



Calls: Networks



Workshops



Mapping research centres



JPIAMR-VRI actions (capacity building, courses, networking ...)

# Thank you

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