Transatlantic Taskforce on Antimicrobial Resistance



TATFAR was created in 2009 to address the urgent threat of antimicrobial resistance (AMR). TATFAR's technical experts from Canada, the European Union (EU), Norway, and the United States (U.S.) collaborate and share best practices to strengthen domestic and global efforts in the fight against antimicrobial resistance (AMR).

KEY AREA 3: Strategies for Improving the Pipeline of New Antimicrobial Drugs

Working together, members strengthen the drug pipeline through actions like:

- Engaging in regular communication and focused collaboration among funders and the research community to facilitate research and product development opportunities and enable clinical research.
- Publishing papers that summarize economic incentives for antibacterial drug development.
- Transatlantic communication on research and development of new pharmaceuticals, new diagnostic tests, and clinical trials.
- Supported drug development programs collaboratively to meet EU, Canada, and U.S. regulatory requirements more efficiently.
- Exchanging information on approaches to authorizing alternatives underway to promote access to market for such products while ensuring appropriate levels of quality, safety, and efficacy.

Canada

- Continues to be a top funder within the Joint Programming Initiative on Antimicrobial Resistance (JPIAMR) and leads the JPIAMR Virtual Research Institute (VRI) task with eight other member states.
- Engaged in a number of international efforts in the area of AMR and has supported declarations focused on AMR and framed Canada's position at the international table of the WHO, WHA, UNGA, G7, and G20, and is developing action plans and frameworks.
- Invested \$130.7 million in AMR-related research, including \$26.3 million in 2019-2020 alone.
- Launched a challenge as part of the Innovative Solutions Canada program that provided investments to support Canadian small business in the development of point of care diagnostics to combat AMR.

European Union

- Supports the functioning of the JPIAMR.
- Since its launch in 2011 the Innovative Medicines Initiative (IMI), a public private partnership, has invested around EUR 950 M in the development of new antimicrobials via its New Drugs for Bad Bugs and its AMR Accelerator programs (around half of that comes from the EC budget).
- Serves as a founding member of the Global AMR R&D Hub, which collects and presents information on AMR R&D investments and market interventions.

Norway

- Continues to invest in AMR-related research both through national funders and JPIAMR, Europe's IMI, and others, calculated at a Norwegian krone 537 million (€ 53 million) annual investment in 2017.
- Performs leadership roles in multiple initiatives with a focus of stimulating antibiotic innovation and improving access, including <u>DRIVE-AB</u> and the EU Joint Action on AMR and Healthcare-Associated Infections (EU-JAMRAI).
- Actively engages in UN, WHO, Global AMR R&D Hub, and other fora related to AMR.

United States

- Established <u>CARB-X</u>, an international public-private partnership focused on supporting the preclinical development of therapeutics, preventatives, and diagnostics. CARB-X has received \$303M from funders and has supported 86 antibacterial therapeutics, prevention, and diagnostics programs, including new classes of compounds, compounds that reach new targets or have new mechanisms of action, and non-traditional approaches. Seven programs have advanced into Phase 1 clinical development.
- Invested over \$1.5 billion in antimicrobial development both through CARB-X and the <u>Advanced Research and Development (ARD) portfolio</u> since its inception in 2010, to bring 3 new antibacterials to market. The portfolio stands at 13 partnerships developing 16 drug candidates/product candidates that address a majority of the drug-resistant pathogens identified by the CDC as "urgent" and "serious" threats.
- Awarded a Project BioShield contract to <u>Paratek Pharmaceuticals</u> to support the advanced clinical development and procurement of Omadacycline.
- Announced the Antimicrobial Resistance Diagnostic Challenge competition for \$20 million and in August 2020 and <u>awarded</u> the prize Visby Medical, Inc. for an innovative, rapid, point-of-need diagnostic test capable of accurately and reliably detecting *N. gonorrhea* and determining antibiotic susceptibility in less than 30 minutes.

Moving Forward

TATFAR partners will continue to:

- Communicate on incentives for antibiotic innovation and access.
- Collaborate on research to support the development of new antimicrobials, alternative
 approaches, and diagnostic devices, by fostering international research and product
 development to address challenging problems in the management of AMR.
- Discuss antibacterial drug development programs, clinical trial designs for studying new antibacterial drugs, emerging safety issues, and coordinated efforts on scientific meetings to facilitate antibacterial drug development.
- Discuss the particular challenges related to authorization of novel veterinary therapies presented as alternatives to antimicrobials.



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