EDAR8
Environmental Dimensions of Antimicrobial Resistance
Brisbane, 2-7 August 2026

WORKSHOP OVERVIEW

Workshop Title	Enhancing environmental risk assessment of antimicrobial resistance across the entire life cycle of antimicrobials
Facilitators and contributors Details of the individuals leading and contributing to the workshop, including: • Workshop facilitators • Guest speakers or contributors • Their roles in the session	Dr Aimee Murray, Senior Lecturer of Microbiology, University of Exeter, UK Dr Joanne Elmoznino, Environmental Risk Assessment, Pfizer Dr Andreas Häner, Environmental Risk Assessment, Roche Dr Kirsty Reid, Director of Science Policy, European Federation of Pharmaceutical Industries and Associations (EFPIA) Mr Steve Brooks, Antimicrobial Resistance Industry Alliance (AMRIA) Advisor Speakers (e.g., for the panel discussion) will be approached upon workshop acceptance.
Background An overview of the context and rationale for the workshop, outlining the key issue, challenge, or opportunity it addresses, and why this topic is timely and relevant.	Antimicrobials have been considered as emerging contaminants of concern for several years, with growing evidence that selection for antimicrobial resistance (AMR) can occur at sub-therapeutic concentrations, like those in the environment. Tangible progress has been made in the last decade in implementing environmental risk assessment (ERA) schemes for manufacturing of antibiotics, including the AMR Industry Alliance Standard and the WHO's guidance on wastewater and solid waste management. However, there is still significant debate over the suitability, specificity, reliability and narrow context of these guidelines. The revised EU General Pharmaceutical Legislation (GPL), with expected adoption by the end of 2026, proposes evaluating AMR risks across the entire antimicrobial life cycle, including antibiotics, antifungals, antivirals, and antiprotozoals. This workshop addresses the pressing need to bridge the gaps between scientific research and cross-regulatory practice by facilitating dialogue between researchers and industrial stakeholders to critically discuss current ERA frameworks and future research priorities.
Workshop Aims A description of the purpose of the workshop and its intended focus. This section highlights what participants can expect to explore, learn, or develop during the session.	This workshop aims to critically examine existing ERA frameworks for antimicrobials, with a particular focus on identifying gaps and opportunities for improvement. It will facilitate interdisciplinary dialogue between pharmaceutical industry representatives, regulatory experts, and academic researchers. Participants will explore if and how ERAs might be contextualised across different stages of the antimicrobial life cycle (i.e., from production and use to disposal and environmental release). Through structured discussions and breakout activities, participants will develop their understanding of current cross-regulatory landscapes, methodological challenges, and emerging scientific evidence/knowledge gaps. The workshop will also support participants in identifying areas where their research might contribute to more robust, actionable ERA frameworks that better address the environmental dimensions of AMR.
Participant Takeaways A summary of what participants will gain from attending the workshop. This may include new knowledge, practical skills, tools, frameworks, or shared resources, as well as any tangible outputs (e.g. ideas, draft materials, or collaborative outcomes).	Participants will leave the workshop with improved understanding of the current guidance, standards, and certification processes related to AMR ERA, as well as the evolving regulatory landscape, including proposed changes to EU's GPL, and the potential global implications. Participants will also have a clearer sense of how their work can inform and influence real-world decision-making in AMR mitigation. It will also provide industrial stakeholders with access to emerging scientific insights that can inform responsible innovation and compliance.

	The workshop will provide access to shared resources, including summaries of key frameworks, recent policy developments, and current examples of best practice. Those who participate in breakout sessions will have the opportunity to contribute to a collaborative draft of a critical review or opinion article that will synthesise workshop discussions and identify future research and policy priorities. The manuscript will be finalised post-conference and submitted to a peer-reviewed journal.
Expected Impact An outline of the broader value of the workshop, including how it may: • Influence research, policy, or practice • Support collaboration and knowledge exchange • Contribute to future work or ongoing initiatives	The workshop will enable interdisciplinary collaboration and knowledge exchange at a key moment for AMR policy and regulation. By bringing together stakeholders from academia, industry, and regulatory bodies, it will help align scientific research with emerging legislative priorities, particularly those outlined in the proposed amendments to the EU GPL. The workshop's focus on the full antimicrobial life cycle will encourage participants to consider more holistic, systems-based approaches to AMR mitigation. This could lead to the development of more contextualised and effective ERA tools, that better capture the complexities of environmental exposure and resistance selection. The peer-reviewed opinion piece will serve as a reference point for future work, highlighting key gaps and opportunities in current ERA frameworks. It is hoped the piece may also inform likely upcoming amendments to regulatory guidance, such as the European Medicines Agency's ERA guidelines, and support the continued development of antimicrobial and environmental stewardship in pharmaceutical manufacturing. In the longer term, the workshop aims to establish a community of researchers and relevant stakeholders around AMR ERA, that will support ongoing dialogue between these groups.
Who should attend? Information on the intended audience for the workshop, including: • Relevant backgrounds, sectors, or expertise • The level of participation expected (e.g. discussion, group work, problem-solving)	Individuals from diverse but complementary backgrounds, including environmental microbiologists, pharmaceutical industry professionals, regulatory scientists, and policy advisors. Participants should have experience and/or interest in AMR and ERA/environmental regulation. We would appreciate assistance with recruitment/advertisement by the EDAR8 organising committee, but the workshop organisers will also share invitations with key stakeholders and open calls through relevant networks. Active participation will be expected in structured discussions and breakout group work. Those attending breakout sessions will be invited to contribute to a draft opinion piece or critical review, with authorship opportunities for those who remain involved post-workshop.
Workshop Schedule and Duration A summary of the structure and flow of the workshop, including: • Key session components • Interactive or breakout activities	A draft outline is below: • Welcome, introduction and ice breaker (interactive) • Brief, scene setting presentations to recap pre-workshop content (see below) • Panel discussion Q&A: challenges and gaps in ERA. (Interactive, with audience submitting questions orally or online). Panel members will be selected in advance and balanced across academic/research/industry/etc backgrounds. BREAK • *Breakout session 1 – mapping the antibiotic life cycle and identifying key intervention points for ERA. (Interactive) • *Breakout session 2 – identifying priority areas for ERA research. (Interactive) • Group reconvenes to share breakout insights and drafting key messages for manuscript. (Interactive) • Wrap up and close – writing plans and close.

	*The preference for the breakout sessions is that they will be run separately, so all can contribute – however, if time constraints arise these can be run concurrently.