Mechanistic Safety Assessment of Antimicrobials
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Key Drivers

Unilever Product Portfolio

Microbes Used as Actives & Preservatives in Home and Personal Care Products

External Environment

- There is increasing concern globally about bacterial resistance to microbes, and the risk of cross-resistance to antibiotics used in clinical treatment.
- Mounting expectation that manufacturers can assess their products for potential to promote development of resistance.

Global Concern: Antimicrobial Resistance
Risk that many infectious diseases become untreatable and uncontrollable.

8 Years
Number of years resistant pathogens have emerged in hospitals after a new antibiotic has been introduced to market.

10 Million Lives
A year taken by 2050 (more than current annual deaths to cancer) unless action is taken.

Aim, Challenges & Focus Areas

Relevance to Unilever?

To be prepared with a clear science-based approach and position to respond to any regulatory changes and/or challenges from other stakeholders, and put in place procedures that allow selection of antimicrobials/technologies that are acceptable from a safety perspective.

Currently, not possible to quantify risk of antimicrobial resistance (AMR) development associated with microbicide use and compare risk against other scenarios contributing to resistance development.

Need to develop methods/approaches to build evidence base
Focus on realism & factors representative of in-situ exposure
Need to develop approaches for risk assessment & management

Towards a Risk Assessment Framework

Scientific Output

Selected publications