

From Awareness to Action:

The Role of Academic Platforms in Combating Antimicrobial Resistance (AMR) in conjunction with World AMR Awareness Week (WAAW) 2025 “Act Now: Protect Our Present, Secure Our Future”

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Antimicrobial resistance (AMR) remains one of the most pressing and complex public health challenges of the modern era. The World Health Organization (WHO) has warned that AMR threatens to reverse decades of medical progress, potentially ushering in a post-antibiotic era where common infections could once again become fatal. To address this escalating crisis, WHO, established the World Antimicrobial Resistance Awareness Week (WAAW) every year from 18th to 24th November, to raise awareness and promote coordinated global action against AMR. The 2025 theme, **“Act Now: Protect Our Present, Secure Our Future”** highlights the significant need for collective commitment to preserve the effectiveness of existing antimicrobials and safeguard future generations.

Online Webinar
**REVOLUTIONIZING
ANTIMICROBIAL DOSE
OPTIMISATION**

Challenges, Breakthroughs, Opportunities

MODERATOR
MUHAMMAD FIKREE AHMAD
CLINICAL PHARMACIST, UNIVERSITI MALAYA MEDICAL CENTRE

DR. JANNATUL AIN JAMAL
Principal Lecturer, Universiti Teknologi MARA
OPTIMISING DOSING STRATEGIES WITHOUT THERAPEUTIC DRUG MONITORING:
Is “One Size Fits All” Enough?

DR. NUSAIBAH ABDUL RAHIM
Director, Malaya Translational and Clinical Pharmacometrics Group (MTCPG),
Dean, Faculty of Pharmacy, Universiti Malaya
MODEL INFORMED PRECISION DOSING (MIPD)
IN MALAYSIA
Current Landscape, Gaps, and Pathways for Improvement

MS. AMY LEGG
Clinical Pharmacist, Royal Brisbane and Women’s Hospital, Brisbane,
Research Officer, University of Queensland Centre for Clinical Research
PRACTICAL APPLICATIONS:
Dosing Software in Clinical Settings

**WEDNESDAY
29 OCTOBER, 2025**

**TIME
7:45 PM – 9:00 PM**

ZOOM PLATFORM
ACCESS LINK WILL BE SHARED ONLY WITH REGISTERED PARTICIPANTS.

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Limited seats available—claim yours today!

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WHY ACADEMIA MATTERS IN THE AMR CONVERSATION

Academic institutions play an essential role in the global response to AMR, extending well beyond their conventional role as centres of education, but also as key drivers of scientific discovery and innovation, and serving as important links between research evidence and policy development. Through research, training, and community engagement, academia bridges the gap between laboratory discoveries and real-world healthcare practices.

REVISITING THE OLDIES: PHARMACOMETRICS APPROACH AS A PROMISING TOOL TO COMBAT AMR

Pharmacometrics and population modelling are emerging as powerful scientific approaches in the global fight against AMR. With the steady decline in the discovery of new antibiotics, the focus has shifted toward optimizing and personalizing the use of existing antimicrobial agents to sustain their efficacy.

Pharmacometrics applies mathematical and statistical models to quantitatively describe the relationships between drug exposure, bacterial response, and patient variability, allowing researchers and clinicians to better understand how various factors influence treatment outcomes. By integrating pharmacokinetic (PK) and pharmacodynamic (PD) principles, pharmacometric models enable the development of more precise and rational dosing strategies.

Through model-informed precision dosing (MIPD), pharmacometrics supports the re-evaluation and optimization of established antimicrobials in a data-driven and cost-effective manner. This approach extends the clinical lifespan of existing drugs while reducing the need for new antibiotic development, which is often slow and resource intensive. MIPD is particularly beneficial for special populations, such as critically ill patients, children, and those with renal or hepatic impairment, where conventional “one-size-fits-all” dosing often fails to achieve therapeutic targets. By enabling individualized and adaptive dosing, pharmacometrics not only improves patient outcomes but also plays a crucial role in antibiotic stewardship, ensuring that existing therapies remain effective against evolving resistant pathogens.