

#02087

Intravenous-to-oral antibiotic switch practices in adult inpatients across Belgian hospital network : a multicentre observational study and development of an educational intervention

05. New antibacterial agents, PK/PD & Stewardship

05d. Antimicrobial stewardship and prescribing (incl interventions, monitoring, impact, decision-support/prediction tools, behavioural aspects)

M. Germai¹, L. Berger¹, F. Fripiat², S. Largana³, J.P. Limelette², J. Descy¹.

¹Clinique André Renard - Herstal (Belgium), ²CHU Liege - Liege (Belgium), ³Hopital de la Citadelle - Liege (Belgium)

Background

Optimising antibiotic prescribing is a key priority of antimicrobial stewardship (AMS) programmes. The intravenous-to-oral (IV-PO) switch, when clinically appropriate, reduces complications, costs, and environmental impact without compromising efficacy. However, implementation remains suboptimal, often due to limited awareness of switch criteria and misconceptions about IV superiority.

Methods

A multicentre observational audit was conducted to describe real-life IV-PO prescribing practices. Adult inpatients receiving intravenous antibiotics with an available oral alternative and meeting predefined IV-PO switch eligibility criteria were included. Data are being collected prospectively from electronic medical records across selected wards in three hospitals of the Elipse network (Liège, Belgium) during October–November 2025.

The audit assesses eligibility for IV-PO switch, frequency and timeliness of conversion, quality of antibiotic documentation and conformity with local AMS recommendations. The study aims to characterise current IV-PO switching behaviours and propose an educational corrective measure to harmonise prescribing practices.

Results

A total of 339 patients receiving intravenous antibiotics were screened. Among them, 165 had an available oral alternative and met all eligibility criteria for IV-PO switch. Overall, 83/165 (50.3%) were actually switched to oral therapy, meaning that 49.7% of eligible patients did not undergo a switch despite meeting criteria.

Among switches performed, 45/83 (54.2%) occurred within the optimal timeframe (≤ 24 hours after meeting criteria), while 36/83 (43.4%) were delayed.

Regarding prescribing quality, complete antibiotic documentation (molecule, indication, duration) was recorded in only 35/165 eligible patients (21.2%). Full conformity with local AMS recommendations—regarding antibiotic choice, dosing, and duration—was observed in 49/165 cases (29.7%).

These preliminary results will be finalised and expanded with additional data and statistical analysis at the end of November.

Conclusions

In response to the audit findings, a corrective action is underway: the development of an e-learning module on IV-PO switch (planned release: December 2025), validated by an interhospital AMS group to provide harmonised guidance and support continuing medical education. A post-intervention audit (February–March 2026) is planned to assess changes in prescribing behaviour and guide future AMS initiatives.

Keyword 1

Antibiotic stewardship (AMS)

Keyword 2

Treatment and clinical management

Keyword 3 (Please provide your suggestion)

IV-PO switch

References, 300 characters, including spaces (if exceeding 300 characters please provide DOI number only) :

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Conflicts of interest

Do any of the authors have conflicts of interest related to the studies presented in this abstract?

No