

Netflix and pills:

Innovative reimbursement mechanisms for antibiotics in Europe

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INTRODUCTION

- Bacteria causing common or severe infections are becoming increasingly resistant to antibiotics, severely reducing available treatment options for physicians
- Despite this, there has been limited innovation in novel agent development, mainly due to the lack of commercial incentives
 - Traditional funding mechanisms do not account for last-resort use, leaving manufacturers limited avenue in recuperating research and development costs
 - Innovative funding schemes have aimed to mitigate this over the recent years and incentivize manufacturers
- This research aims to identify and outline such country-specific innovative funding schemes in Europe, to inform a discussion on whether they provide a viable opportunity for antimicrobial manufacturers





METHODS

- Publicly-available information up until June 2024 was screened for information on antimicrobial funding schemes in Europe, using their respective websites to extract key information

RESULTS

Two innovative antimicrobial funding schemes from the UK and Sweden were identified (*Table 1*)

Table 1: Overview of innovative reimbursement schemes for antimicrobials in the UK and Sweden

			
 <p>In the UK, the antimicrobial products subscription model was piloted in 2019, with two drugs selected:</p> <p>✓ ceftazidime with avibactam ✓ cefiderocol</p> <p>➤ In May 2024, NHS England officially adopted the project under its new commission route for antimicrobials</p> <ul style="list-style-type: none"> – It offers companies four annual fixed fee rates based on award criteria (i.e., clinical priority, supply surety, antimicrobial stewardship, performance, payment terms, financial standing, probity, social value) 		 <p>Folkhälsomyndigheten PUBLIC HEALTH AGENCY OF SWEDEN</p> <p>In Sweden, the PHAS initiated a new reimbursement model in 2018, providing a minimum annual revenue (€356k) to manufacturers of five of critically important antibiotics</p> <p>✓ imipenem/ relabactam ✓ ceftolozane/tazobactam</p> <p>✓ meropenem/ vaborbactam ✓ fosfomycin</p> <p>✓ cefiderocol</p> <p>➤ The pilot ran until 2022 and was renewed for 2023 following a successful evaluation</p>	
Band 1	Band 2	Band 3	Band 4
Breakthrough antimicrobials	Critical new antimicrobial	Priority new antimicrobial	Important new antimicrobial
£20 mil/year	£15 mil/year	£10 mil/year	£5 mil/year
≥80% score against criteria	70-79% score against criteria	60-69% score against criteria	50-59% score against criteria

CONCLUSIONS

- The rise of antimicrobial resistance increases the urgency for innovative funding schemes that will foster novel antibiotic development
- The long-term benefits of the schemes identified in the UK and Sweden have not yet materialised, but initial pilots were deemed successful to warrant extension
- Nonetheless, greater financial incentives coordinated across countries may be needed to truly incentivize the global development of much needed novel antibiotics

Abbreviations: NHS: National Health Service; PHAS: Public Health Agency of Sweden



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