

Letterkenny University Hospital - LUH Antimicrobial Prescribing Policy/Guidelines: Reserve Antimicrobials

Reserve Antimicrobials

Reserve antimicrobials are antibiotics and antifungals that are restricted to indications outlined in the LUH antimicrobial prescribing guidelines **only** or may be prescribed following advice from a Consultant Microbiologist.

Red light antimicrobials are a subcategory of the reserve antimicrobial list in LUH that **require pre-authorisation** by Microbiology prior to use 24hours/7 days a week.

Background and Summary

- Overuse of antimicrobial agents is a widely accepted contributor to the development of antimicrobial resistance.
- A key aspect of a successful Antimicrobial Stewardship Program is mandatory additional expert opinion when using very broad-spectrum agents in order to protect utility. The effectiveness of such a measure is strongly evidence based, and recommended in national and international best-practice guidelines.
- Appropriate use of antimicrobials reduces the risk of patient harm from avoidable adverse reactions and interactions with other drugs, as well as reducing the risk of infection with multi-drug resistant organisms and *Clostridioides difficile*. Additionally, as antimicrobial resistant organisms can spread readily in a hospital setting, the antimicrobial prescribing practice of each individual impacts on the care of all patients.
- HSE policy **requires** that each hospital's antimicrobial prescribing guidelines must include a list that stipulates which antimicrobials are restricted (approval of a specialist is required). Criteria for restricted antimicrobials include spectrum of activity, potential toxicity, misuse or cost.
- Clinical Microbiology approval is **mandatory** prior to prescribing any Red light antimicrobial.
- In LUH the Red light antimicrobial prior approval service list includes many last line options for resistant gram negative, gram positive and fungal infections.
- This process applies to all patients when the agents are not recommended in the Empiric Treatment Guidelines i.e. if any of the Reserve Antimicrobial agents are being used outside of the empiric guidelines.
- The LUH **Reserve Antimicrobials** Agents policy was approved by the Chief Clinical Director in 2015 and updated in 2024. This list of LUH Reserve and Red light Antimicrobials is included in table below.

LUH Instructions and outline of process

1. Potential prescribers of these Red light agents must contact the Clinical Microbiology service to discuss before prescribing.
 - Access to Clinical Microbiologists is available 24/7 via LUH internal switchboard (Dr Mulhern ext 4090, Dr Sarma via switchboard)
 - This allows for a second objective expert review on the need for the antimicrobial, and will ensure that appropriate microbiological work-up has occurred.
 - If unable to establish contact with Clinical Microbiology, do not delay therapy and follow-up with them as soon as possible.
2. Document clearly the outcome of discussion with Clinical Microbiology in the patient's clinical notes.
3. Patient name, hospital number and confirmation of pre-authorisation is required for supply of all red-light agents from pharmacy. The Pharmacy Department/Clinical Pharmacy service will follow-up each patient newly commenced on any red light antimicrobial listed on a Monday to Friday basis to ensure consultation has occurred.
 - A clinical pharmacist or microbiologist will contact your team if there is no documented evidence of consultation in the clinical notes.
 - Supply of drug will not be delayed whilst undertaking this step.
4. Exceptions are outlined on the list below where consultation with Clinical Microbiology is not required based on the following:
 - Use within guidelines (e.g. caspofungin for neutropenic sepsis).
 - Formal Clinical Microbiology rounds already exist (e.g. ICU, Haematology rounds).
5. The Consultant with lead responsibility for the care of the patient has the right to prescribe a red light agent they consider is in the best interest of the patient contrary to the advice of the consultant microbiologist. This prescription should be **signed by the Consultant themselves** and supported by a note in the medical record written and signed by the consultant themselves.

During periods of exceptional short staffing, Clinical Microbiology may not be in a position to support this program – any suspension of this service will be communicated.

Letterkenny University Hospital Reserve List and Red Light Antimicrobial list (updated June 2025):

This list is subject to review and change in line with updates to antimicrobial prescribing policy.

LUH Reserve & "Red Light" Antimicrobial List			
Antifungals	Broad Spectrum	Gram-positive	Gram-negative
Red light list			
Requires Microbiology authorisation (note addressograph required when ordering from pharmacy)			
Ambisome [®] Anidulafungin Posaconazole Voriconazole	CeftAZidime/avibactam (Zavicefta [®]) CeftOLOzane/tazobactam (Zerbaxa [®]) Colistin IV Ertapenem Fosfomycin IV Meropenem (exception: Neutropenic sepsis in patients with a penicillin allergy with a delayed onset, non-severe reaction) Moxifloxacin Tigecycline	Dalbavancin Daptomycin Linezolid	Amikacin Aztreonam Temocillin
Reserve list			
Off guideline use requires Microbiology authorisation			
Caspofungin	CefAZOLin CefoTAXime CeftAZidime CefTRIAxone Chloramphenicol IV Ciprofloxacin Fosfomycin PO Levofloxacin	Clindamycin Fidaxomicin Teicoplanin Vancomycin	