

## **Amendment of AWARE antibiotic classification**

The current AWARE classification includes three categories ACCESS, WATCH and RESERVE. However, there are several antibiotics/antibiotic classes that are not included in the existing three categories. These are currently classified as “OTHER”. To address this issue, the EML Secretariat is proposing to amend the classification to include the following antibiotics into the three existing categories with goal of reflecting the 2019 EML Committee potential decisions and providing clarification to enhance the potential Stewardship interventions under development using AWARE.

Using the WHO ATC antibiotics that are not classified into existing three categories are identified.

**Second generation cephalosporins:** This class will be categorized into “WATCH” group. This is based on the EML application for surgical prophylaxis (which will be discussed in April), where cefuroxime, a second-generation cephalosporin is first choice (pending approval from the committee). However, considering the selection for ESBL organisms and increased risk of *C. difficile* when compared to first generation cephalosporins this antibiotic is suggested for inclusion in WATCH category. As cefuroxime is representative of second generation cephalosporins, other antibiotics in this class will also be included in the WATCH category.

**Fixed dose combinations (FDCs):** There are limited number of FDCs approved by WHO and US FDA. However, there are several FDCs available in LMICs. We suggest that these FDCs not approved by WHO and US FDA should be placed in a separate classification of “Not Supported by the EML”.

**Aminoglycosides other than gentamicin and amikacin:** These will be categorized as WATCH group considering the lack of indication as first-line of these agents.

**Rifampicin/Rifabutin:** will be placed in “WATCH” category. Although rifampicin is first-line agent for TB, it is not considered as sole agent for routine bacterial infections and generally used in combinations.

**Trimethoprim alone and WHO approved sulfa combinations:** Considering the narrow spectrum activity and similar spectrum as sulfamethoxazole-trimethoprim this will be categorized into ACCESS category

**First generation cephalosporins:** Antibiotics from this class will be categorized into ACCESS group as cefalexin and cefazolin which are representative of first generation cephalosporins are already included in existing ACCESS category.

**Penicillins:** There are several penicillin class antibiotics that are not included in the AWARE list. These have been sub-categorized into “narrow spectrum” and “broad spectrum” penicillins based on their spectrum of activity and resistant potential. Narrow-spectrum penicillins will be

included in ACCESS category whereas broad-spectrum penicillins will be included in WATCH category

**Tetracyclines:** All tetracyclines will be categorized into ACCESS category except IV minocycline which will be classified as WATCH due to its activity against multi-drug resistant bacteria. However, oral minocycline will be categorized into ACCESS category.

Antibiotics that are not mentioned in the current AWARE list but that belong to Quinolones, Macrolides, Ketolides, Glycopeptides will be classified into WATCH category

**Faropenem:** We suggest that faropenem should be re-categorized to RESERVE from WATCH as this an oral penem antibiotic which is poorly studied can cause cross resistance to several carbapenems based on invitro work which under review for publication.