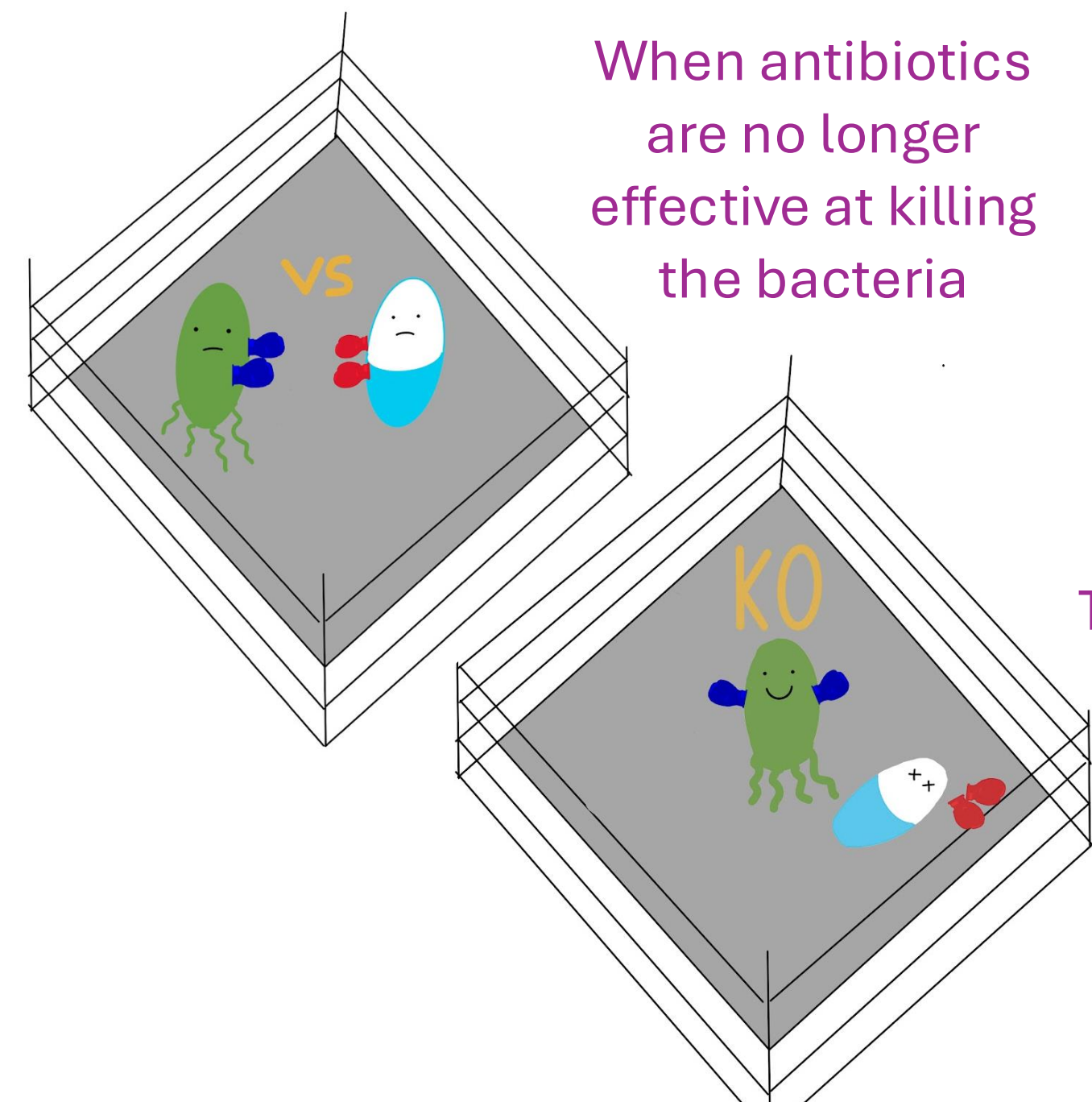


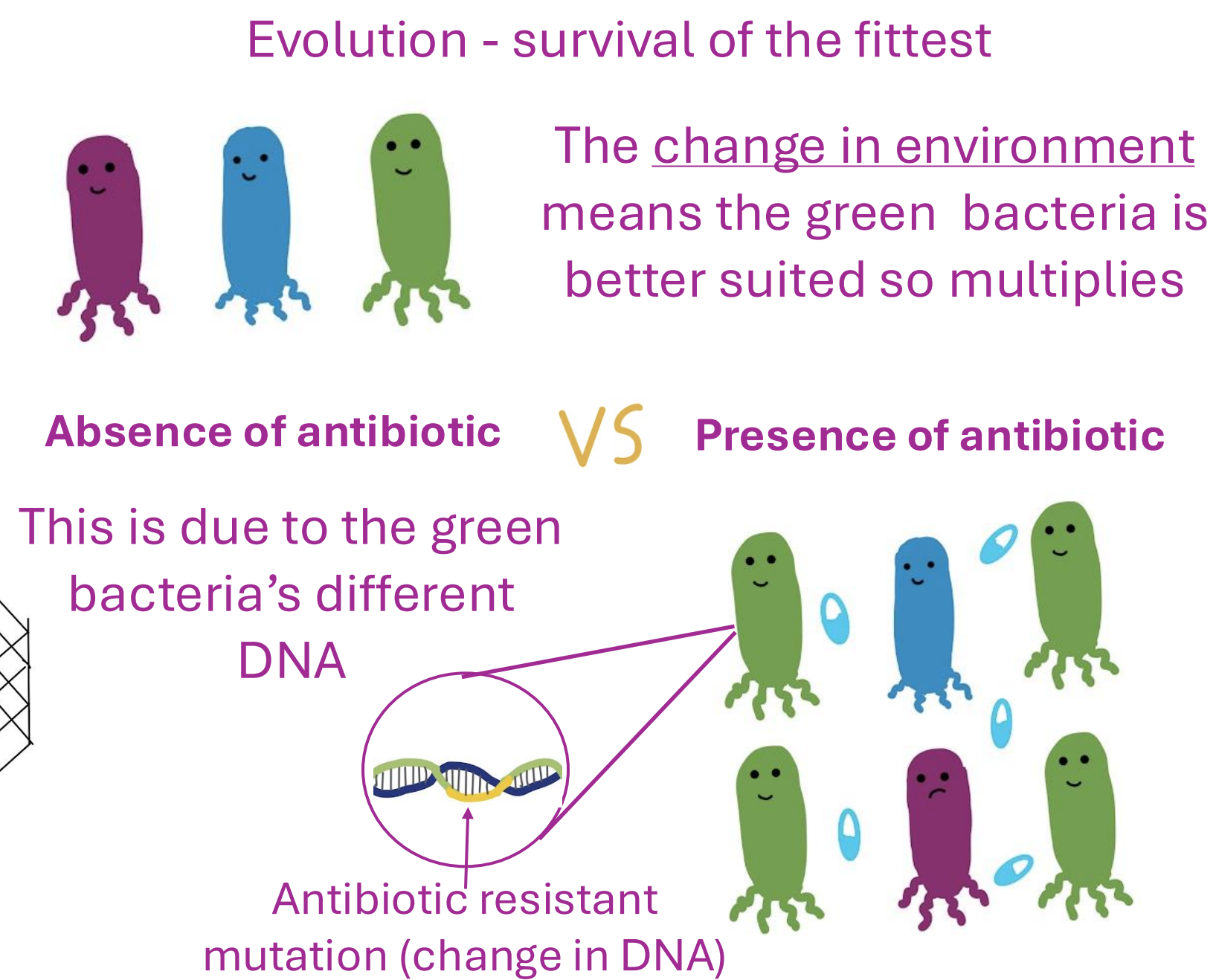
# Mimic, Mutate, Master: How human-like media dictates antibiotic resistance

## The problem: antibiotic resistance

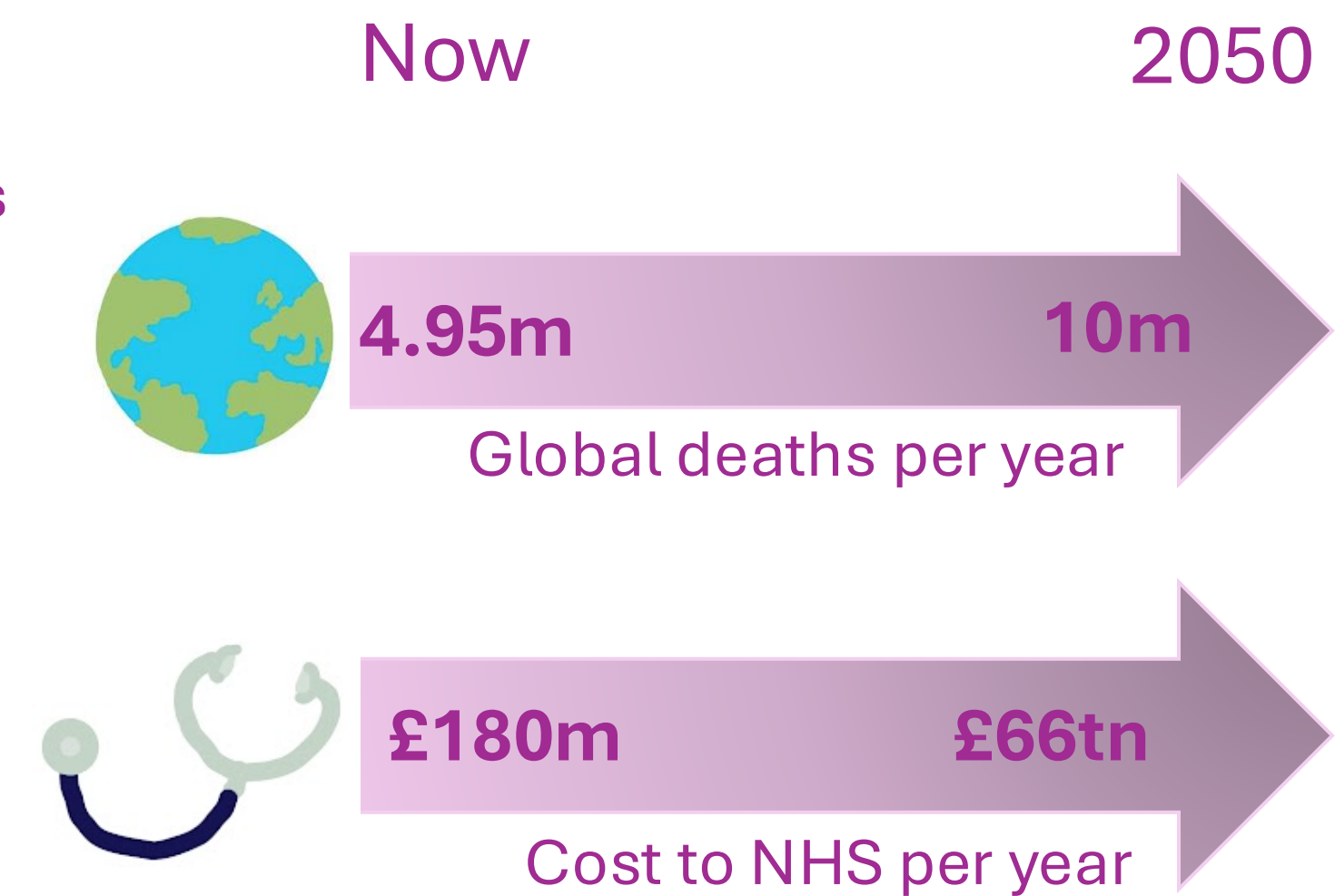
### What is antibiotic resistance?



### How does antibiotic resistance arise?

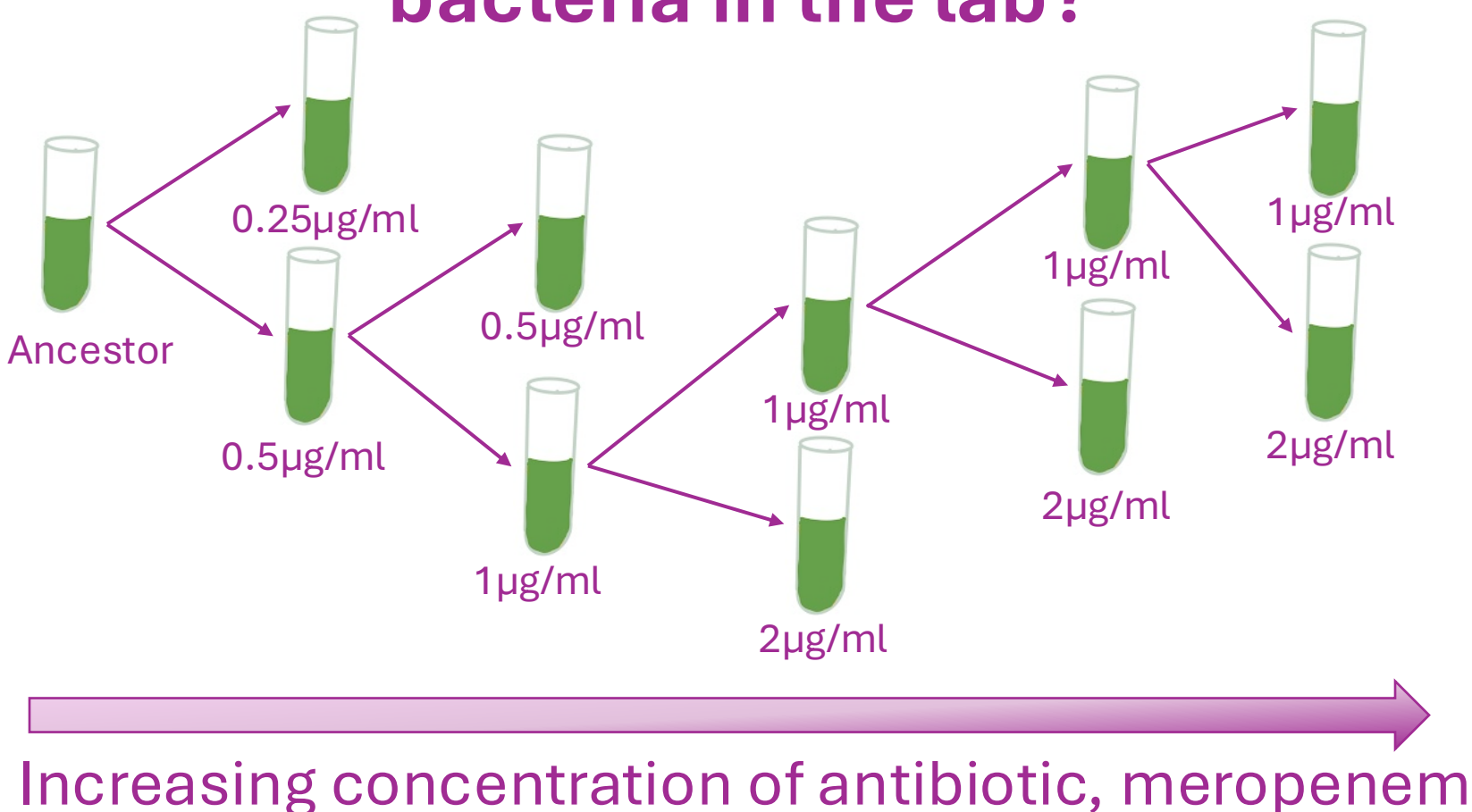


### Why is this topic important?

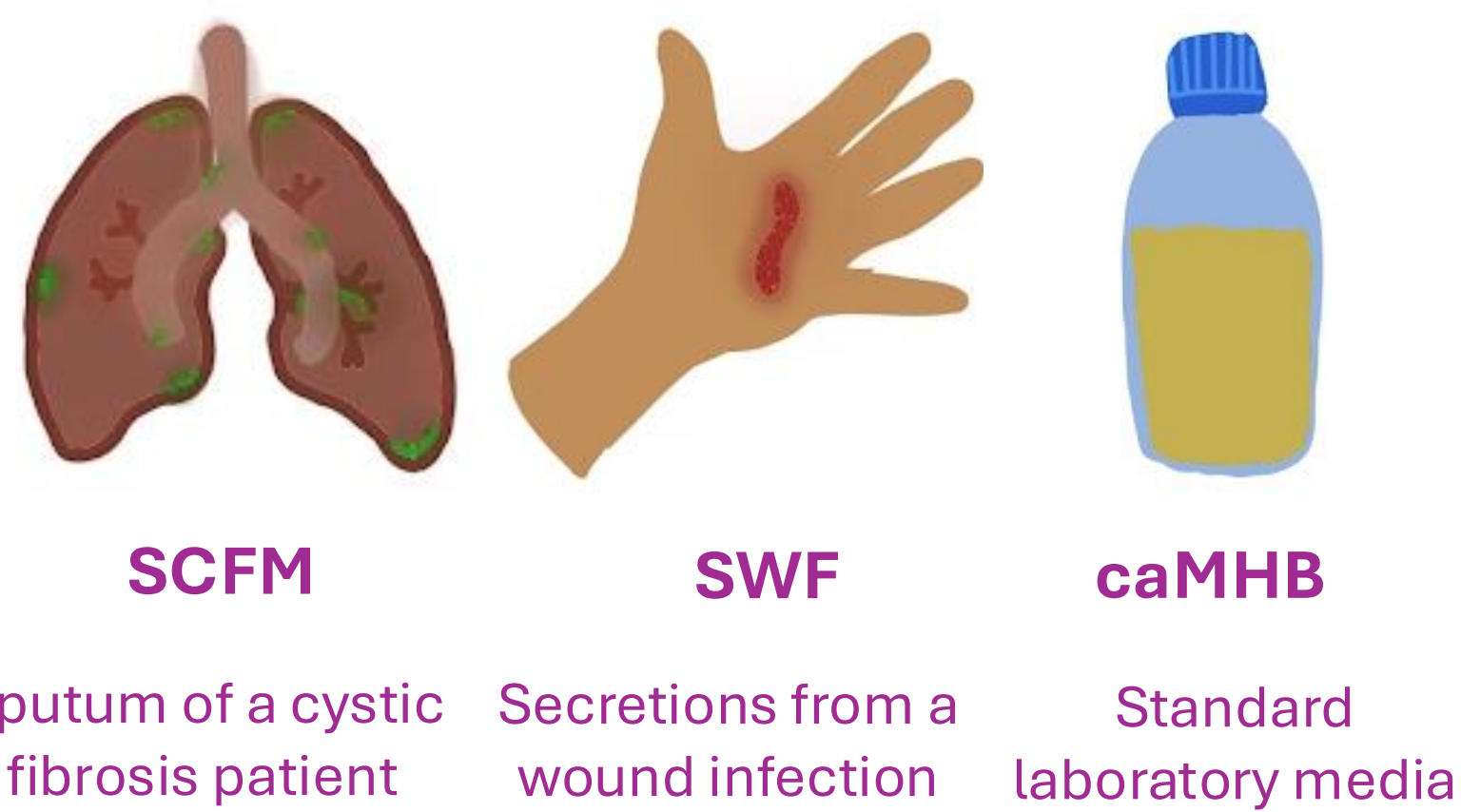


## Our approach: using human-like media to better represent antibiotic resistance evolution in humans

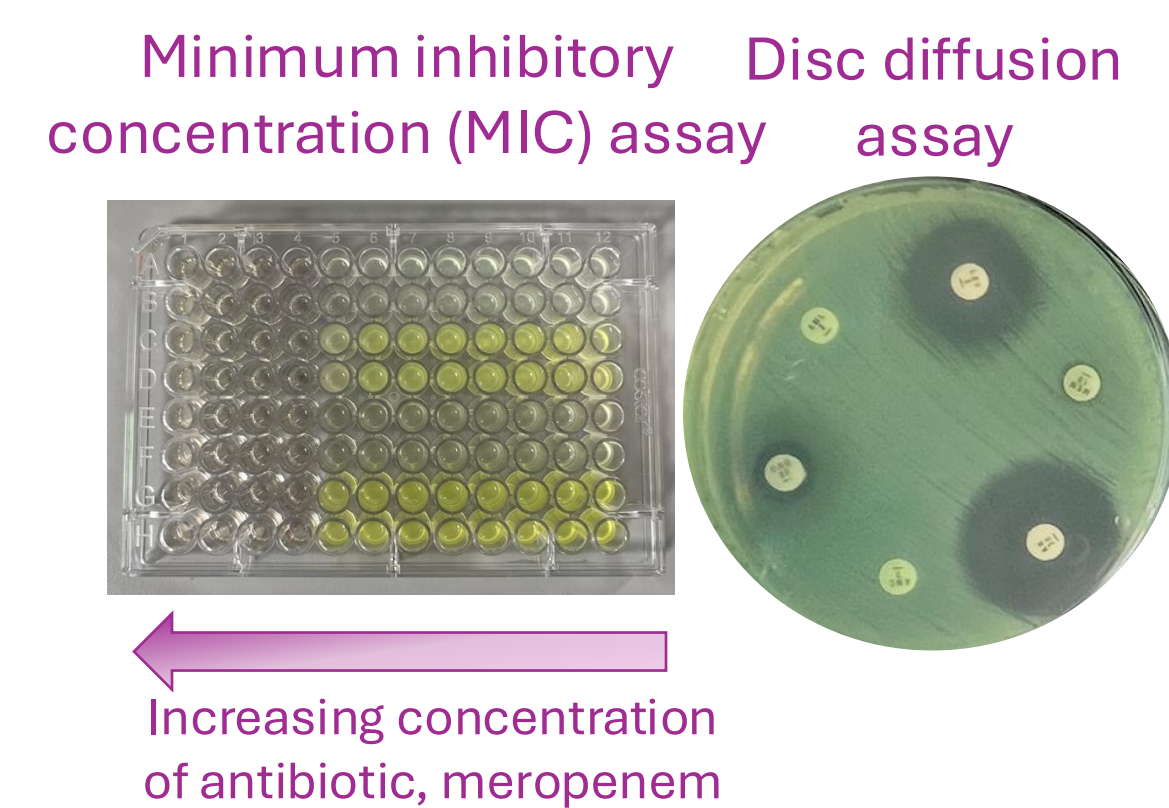
### How do we evolve *Pseudomonas* bacteria in the lab?



### What is human-like media?

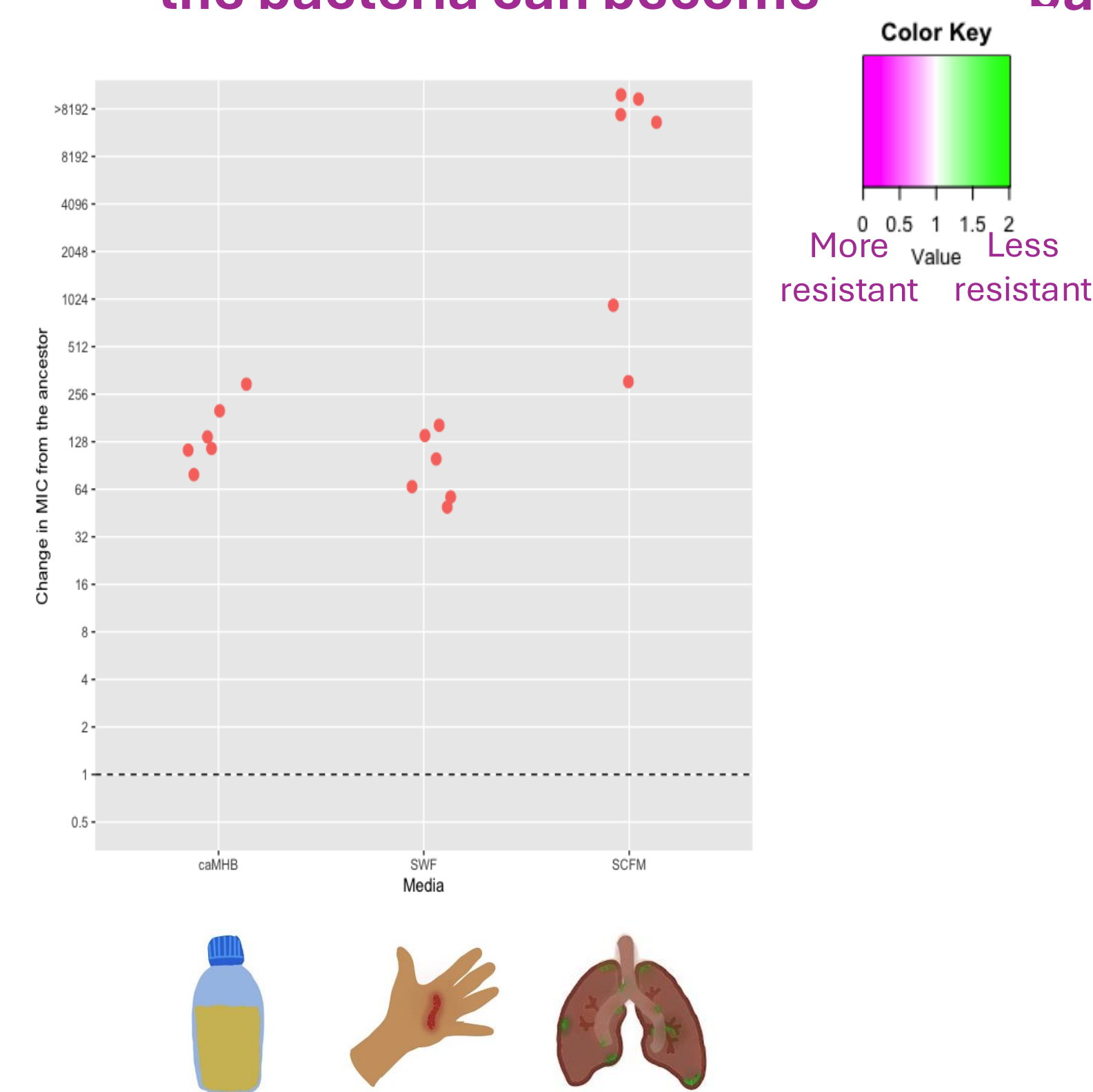


### How to measure antibiotic resistance?

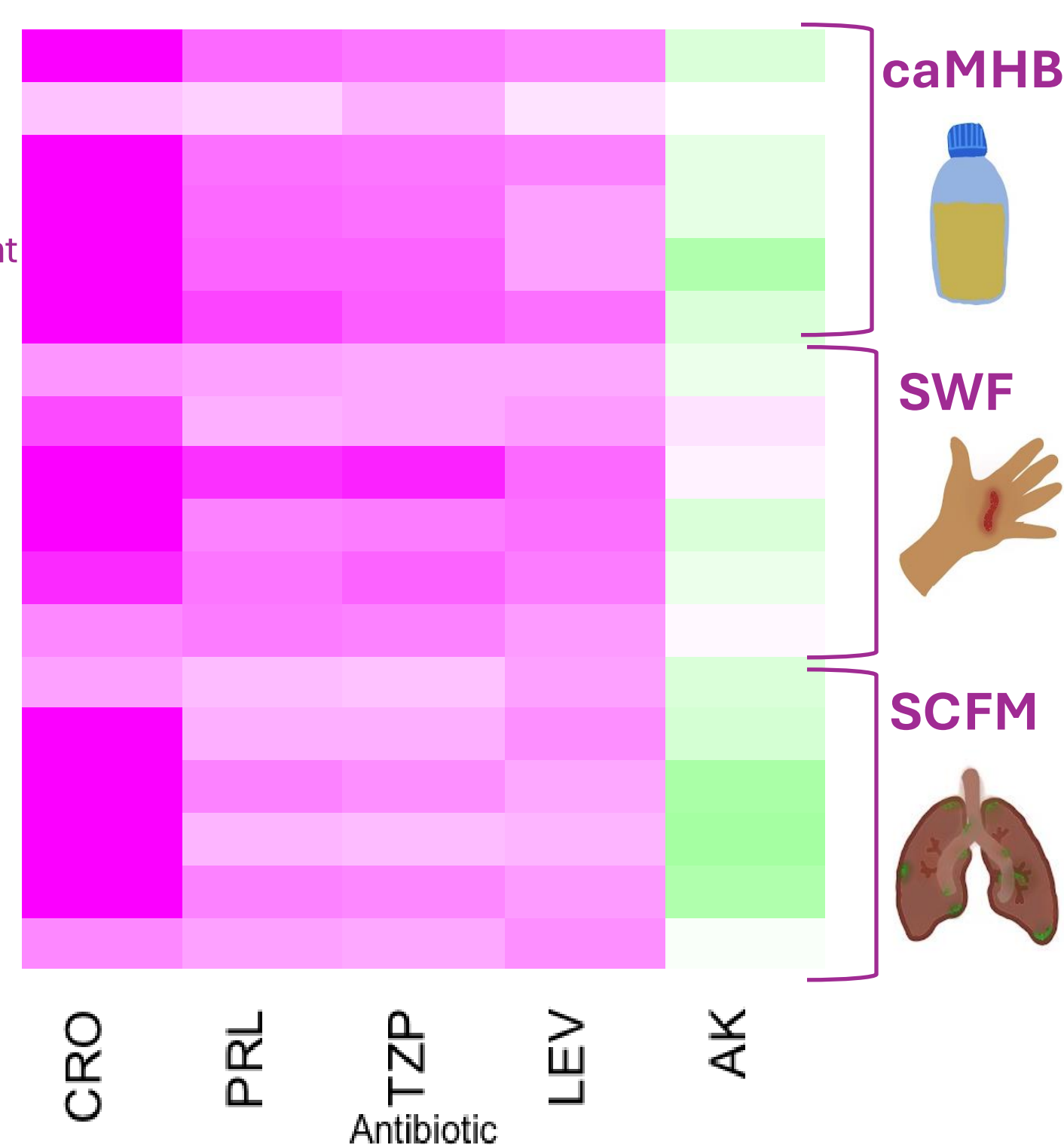


## Our results: human-like media is affecting the evolution of antibiotic resistance

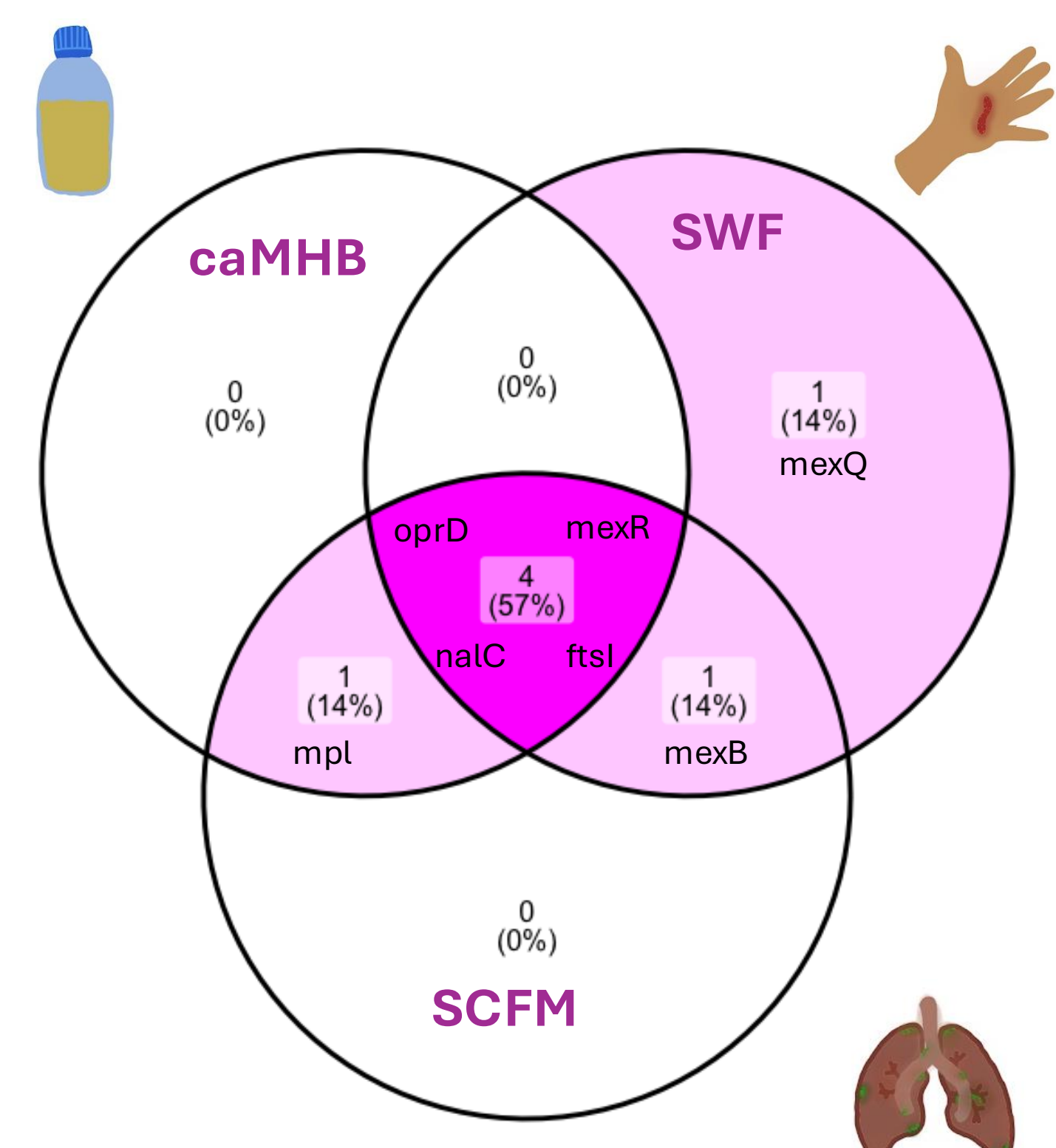
### 1. The media affects how resistant the bacteria can become



### 2. The media affects how the resistant bacteria responds to other antibiotics



### 3. The media doesn't affect the mutations that cause resistance



## How can this help prevent antibiotic resistance?

1. We could better choose which antibiotics to prescribe for different infections, conserving current antibiotics
2. We should test novel antibiotics in human-like media to identify how they could develop resistance in humans more accurately