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## OBJECTIVES:

To describe the recommendations of dosage and monitoring of Vancomycin used in the intensive care unit and to assess whether these are adequate to achieve optimal therapeutic levels early.

## MATERIAL AND METHODS:

Retrospective observational study (2016) in a Hospital with 21 beds of critical ill patients. This unit did not use any specific guide to the dosage of the antibiotic therapy with Vancomycin. For this reason, we assessed if the initial dosage was the ideal to achieve effective antibiotic levels.



Variables (collected from GestLab®):  
sex, age, weight, dosage prior to the monitoring, time from the beginning of the treatment until the first monitoring and time to target blood range levels

Initial Vancomycin trough serum level was recorded by classifying it according to its relationship with the target therapeutic range in:

Overdose(OD)  
In range(IR)  
Underdose(UD)

## RESULTS:

### Initial dosage of Vancomycin:

24.1±7.1(10-44) mg/kg/day

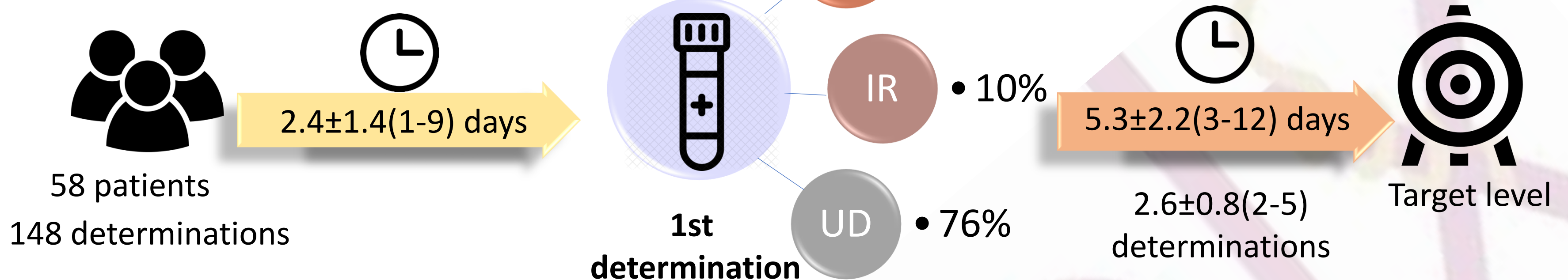
### Target range (mcg/mL):

10-15 ➔ 69%  
Serious infections:  
15-20 ➔ 31%

### Final dosage of Vancomycin:

29,9±18,5(6-89) mg/kg/day

Vancomycin 1g/12h ➔ 69%



## DISCUSSION AND CONCLUSION:

With the current dosage, 3 of every 4 first controls are UD delaying the proper treatment of the infection. To avoid this, you could consider an initial load dose of Vancomycin.

Plasma levels of systematically monitoring can be very useful to get rank levels as soon as possible.