Conclusions Most patients had grade 3–4 liver fibrosis. Most patients were recurrent or non-responders to previous treatment. Telaprevir was the most used protease inhibitor.

Patients using telaprevir got negative viral loads before patients using boceprevir.

A high percentage of patients using boceprevir required the dose of peginterferon–alfa to be reduced and treatment with G-CSF due to neutropenia.

No conflict of interest.

Background Antimicrobial resistance is frequently related to the high selective pressure of antimicrobials commonly used in hospitalised patients.

Purpose To analyse in-hospital consumption of antipseudomonal agents (AAC), trends and the relationship with increase in Pseudomonas aeruginosa (PA) resistant to imipenem or meropenem.

Materials and Methods Descriptive retrospective analysis (2002–2010) of the AAC in a 1,100-bed tertiary teaching hospital. Data on the use of antibiotics were obtained from the hospital pharmacy and expressed as defined daily doses per 100 bed-days (DDD/100 bed-days).

Resistance rates were obtained from Microbiology and expressed as percentage of total PA cultures resistant to imipenem or meropenem.

Pearson’s correlation coefficient (r) was used to determine the relationship between AAC and % PA resistant to imipenem or meropenem. Linear regression analysis was used to further analyse these relationships with \( r \geq 0.7 \).

Results Antipseudomonal agents represented 20.44% of all antibiotics in 2002 and 28.86% in 2010.

The relationship was studied between each AAC (2002–2010) and %PA resistant to imipenem or meropenem, and a positive relationship (\( r > 0.7 \)) was observed between the increase in P/T, MER, IMI and LEV consumption and increase in %PA resistant to meropenem. Linear regression analysis was used for these antibiotics. The strongest relationship was observed between levofloxacin and %PA resistant to meropenem (\( r^2 = 0.7970 \)). Coefficients of determination (\( r^2 \)) for P/T, IMI and MER were 0.6951, 0.5932 and 0.5313 respectively.

Conclusions During the period studied, the trend was for an overall increase in antibiotics consumption, in the use of antipseudomonal agents (principally piperacillin-tazobactam and levofloxacin), in the number of cases of PA and in resistance rates (mainly to meropenem).

Data suggest that increasing use of P/T, imipenem, meropenem and especially levofloxacin, means an increase in %PA resistant to meropenem.

Antibiotic consumption is important to explain trend in resistance rates, but other variables may also be involved, so we must to be prudent interpreting these types of studies. Despite the limits, more exhaustive studies may be done to determine the relationship between antibiotics consumption and resistance rates.