Does the Use of a Procalcitonin-Guided Antibiotic Protocol Safely Reduce the Use of Antibiotics in Patients With COVID-19?

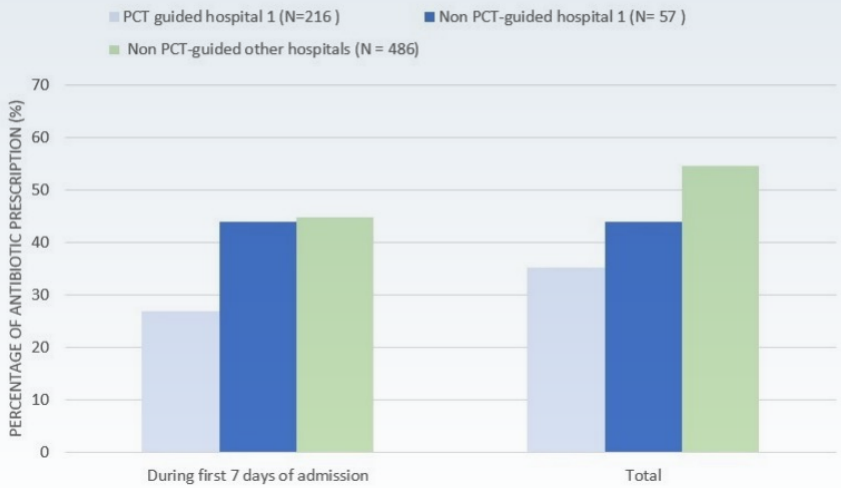
STUDY DESIGN

Multicenter cohort in the Netherlands comparing hospitalized patients with COVID-19 in a procalcitonin (PCT)-guided group vs control groups

PCT <0.25	**Antibiotics discouraged**
PCT 0.25 – 0.5	**Consider antibiotics**
PCT >0.5	**Antibiotics recommended**

RESULTS

Figure 1. Proportion (%) of patients receiving antibiotic prescriptions during the first 7 days of admission and during total admission according to study group.



- Antibiotic prescription during the first 7 days was **lower in the PCT group**
- Antibiotic prescription during hospital admission was **lower in the PCT group**
- **No difference** in length of stay, ICU admission, mechanical ventilation, or mortality, but **increase in readmission**

A PCT-guided approach for antibiotic prescription in hospitalized patients with COVID-19 in the first 24 hours of hospital admission resulted in a lower antibiotic prescription rate without any major safety concerns.

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