

# PROPOFOL INFUSION AND BLOODSTREAM INFECTIONS INCIDENCE IN THE INTENSIVE CARE UNIT PRELIMINARY RESULTS FROM AN OBSERVATIONAL STUDY

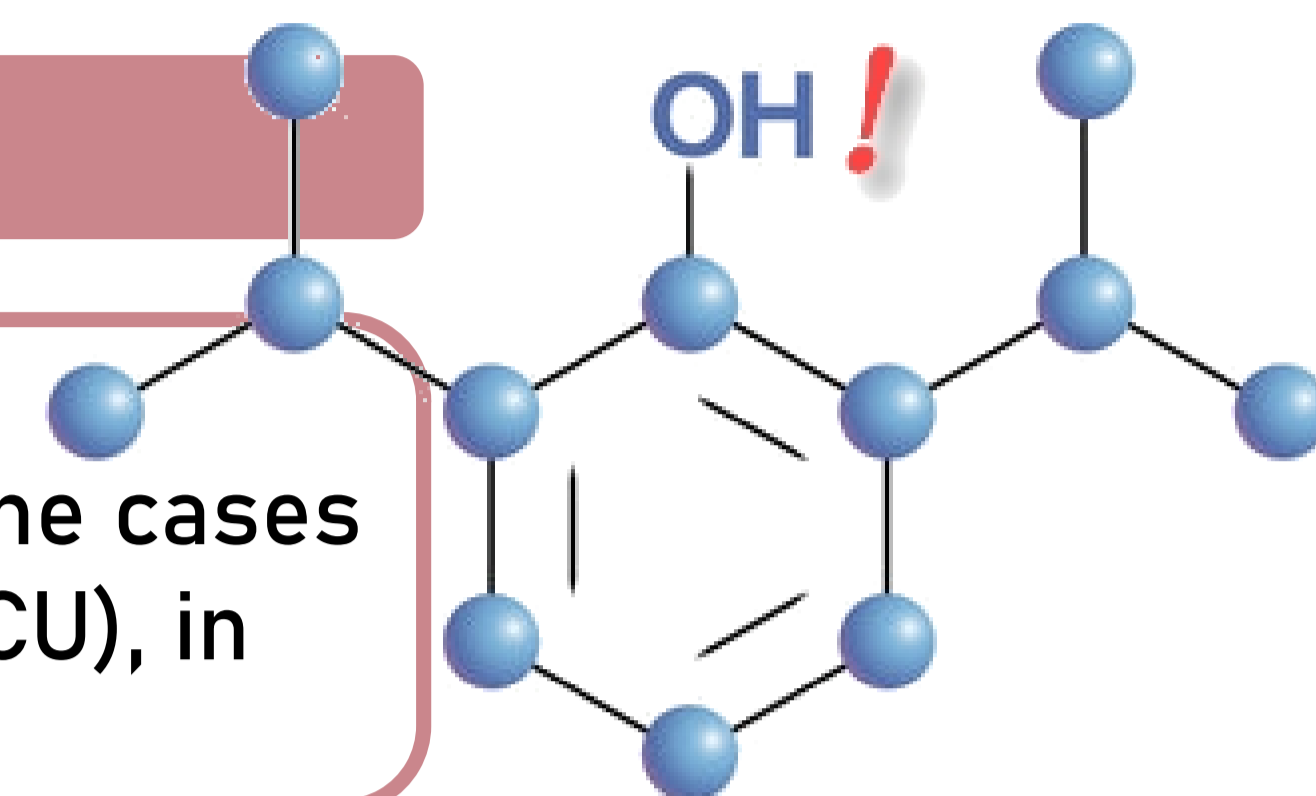
A.M. Saponaro, G. Lupo, A. Gisotti, N. Tortora, F. Vurchio, N. Di Venosa  
Intensive Care Unit, Bonomo Hospital, Andria - Department of Intensive Area and Emergency ASL BAT



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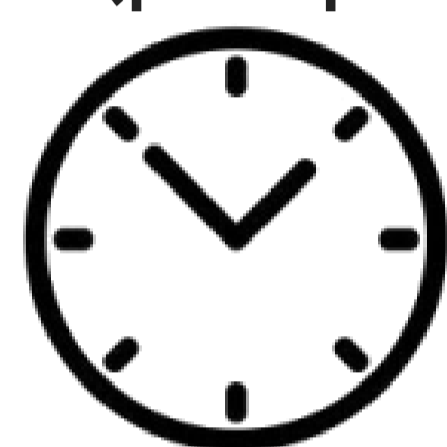
## BACKGROUND AND GOAL OF STUDY

Propofol has a highly lipophilic structure and microbial **contamination** is easy [1]. Blood stream infections (BSI) account for 15% of hospital acquired infections [2]: some cases have been related to the infusion of contaminated drugs in the intensive care unit (ICU), in past reports [3, 4]. We aim to find out whether this is **clinically relevant**.



## METHODS

In a **before-after** design, we recruited **two choorts** respectively admitted to ICU in 2021 (retrospective) and 2022 (prospective), when a bundle of *clean* measures for propofol administration was introduced.



- **Primary outcome:** BSI reduction
  - **Secondary outcome:** to describe the relation between propofol and BSI incidence
- The following are preliminary results from retrospective choort for secondary outcome only..

## RESULTS

Sixteen of 78 patients had BSI

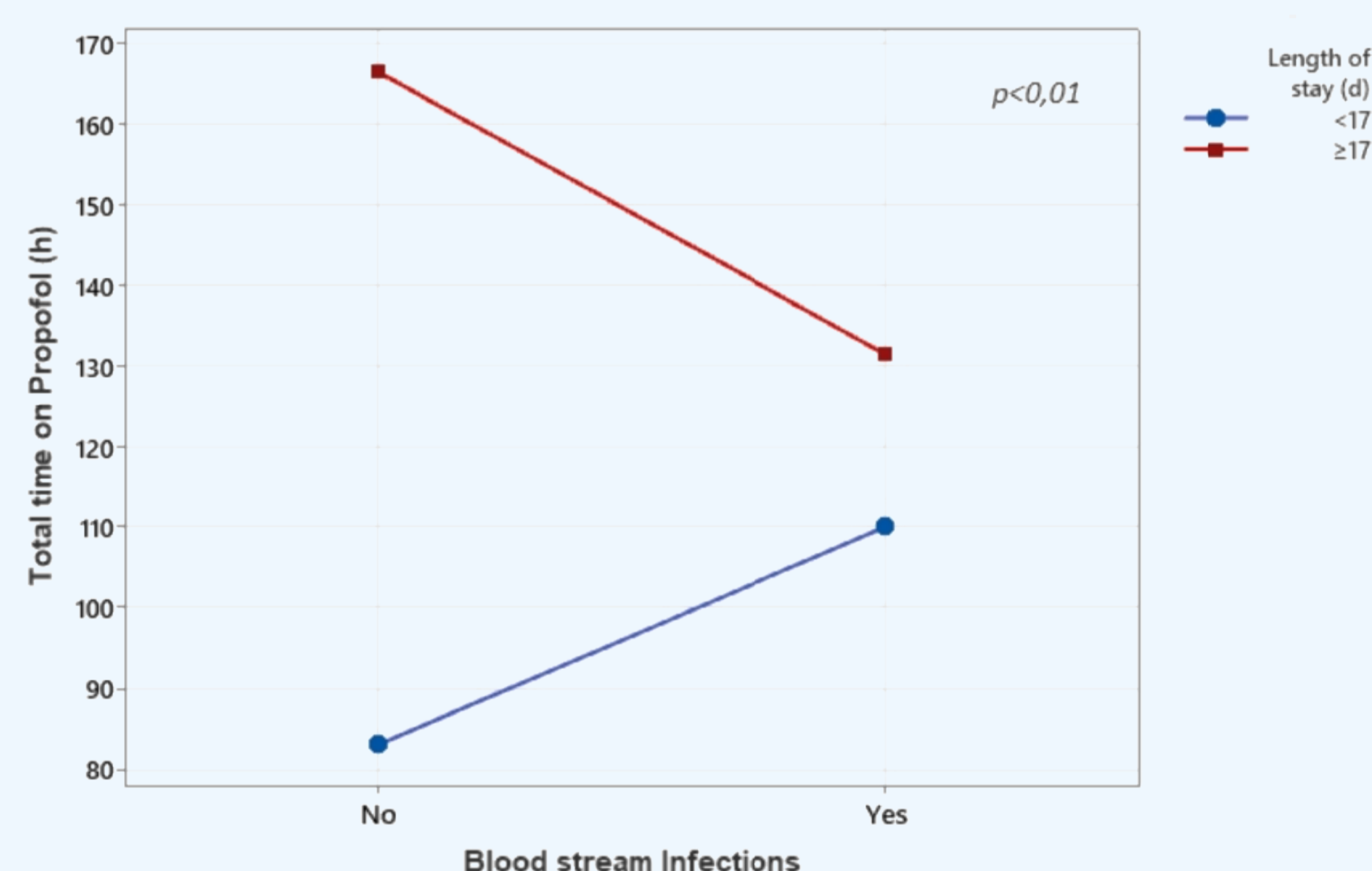


The **difference** in duration of propofol administration did not reach statistical significance (98,5 h [54,4-155,6] vs 124,3 h [103,8-177,3])

Length of stay was higher among subjects with BSI.

It **influences** the relationship between time on propofol and BSI, as shown by the interaction plot.

However, after calculating a cut-off at 17 days, the comparison of subgroups did not report differences.



## CONCLUSIONS

The analysis for secondary outcomes on a single choort of our observational study cannot confirm the effect of propofol infusion on bloodstream infections, although the influence of a longer ICU stay is likely to mask the result.

### REFERENCES

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2. Vincent JL et al. Prevalence and Outcomes of Infection among Patients in Intensive Care Units in 2017. *JAMA - J Am Med Assoc* 2020; 323
3. Zorrilla-vaca A et al. Infectious Disease Risk Associated with Contaminated Propofol Anesthesia, 1989–2014. *Emerg Infect Dis* 2016; 22
4. Macias AE et al. Contamination of intravenous fluids: A continuing cause of hospital bacteremia. *Am J Infect Control* 2010; 38