

# Study title: Partial oral treatment of left-sided infectious endocarditis - The POET trial

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# Declaration of interest

- I have nothing to declare

# Conclusions

- Efficacy and safety of shifting to oral antibiotic treatment was non-inferior to continued intravenous antibiotic treatment in
  - stabilized patients with left-sided endocarditis caused by
  - streptococcus spp, *Enterococcus faecalis*, *Staphylococcus aureus*, or coagulase-negative staphylococci
  - across co-morbidities, native vs prosthetic valve and surgically vs conservatively Tx
- Oral antibiotics may safely be administered during approximately
  - half of the recommended antibiotic treatment period
  - potentially as outpatient treatment
- More than 50% of patients with endocarditis may be candidates to partial oral antibiotic treatment



## Background

- Infectious endocarditis is treated with iv antibiotics for up to 6 weeks – in-hospital
- High in-hospital complication- and mortality rates - but mainly in the early phase
- After stabilization the main reason for staying in hospital is to receive iv antibiotics
- Hospital stays *per se* may cause complications

Purpose and key points about methods

We tested if

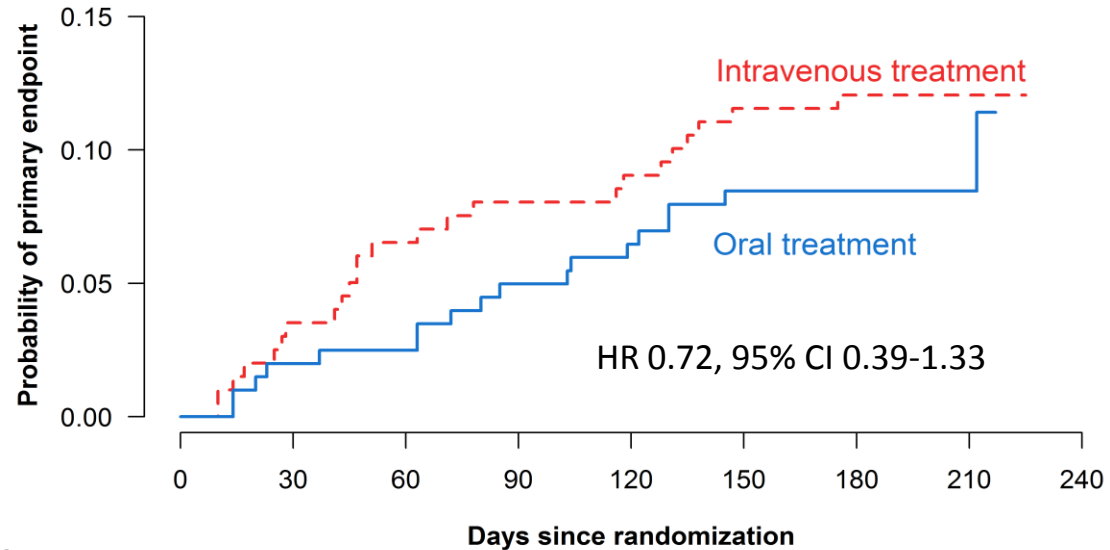
- Orally administered antibiotics and
- Intravenously administered antibiotics

have similar efficacy and safety - in a Danish nationwide randomised study of 400 stabilised patients with endocarditis

# Primary endpoint

(All cause mortality, unplanned cardiac surgery, embolic events or relapse of bacteremia)

Difference 3.1%, 95% CI: -3.4% - 9.6%, Non-inferiority met



## No. at Risk

|                       |     |     |     |     |     |     |     |    |   |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|----|---|
| Intravenous treatment | 199 | 192 | 186 | 183 | 181 | 176 | 174 | 28 | 0 |
| Oral treatment        | 201 | 197 | 196 | 191 | 188 | 184 | 183 | 36 | 0 |



# Key messages

- Oral antibiotics (tablets) are as effective as intravenous antibiotics in selected patients
- Impact on clinical practice: This new treatment may halve the hospital stays for patients with a heart valve infection
- Impact for man on the street: In most patients with even serious infections of heart valves treatment with antibiotics as tablets is as good as presently used injections of antibiotics.