

Novinky ve vnitřním lékařství


Gastroenterologie, nefrologie, intenzivní medicína

Bronislav Čapek



Gastroenterologie

Fecal microbiota transplantation for recurrent *Clostridioides difficile* infection in patients with concurrent ulcerative colitis

Serena Porcari^{a b}, Andrea Severino^{a b}, Debora Rondinella^{a b}, Stefano Bibbò^{a b},
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Sanguinetti^c, Antonio Gasbarrini^{a b}, Giovanni Cammarota^{a b 1}, Gianluca Ianaro^{a b 1}  

Conclusions

Most patients also experienced remission or amelioration of UC activity after FMT. Our findings suggest that a sequential FMT protocol may be used routinely in patients with UC and rCDI.

Effects of Early Versus Delayed Feeding in Patients With Acute Pancreatitis


A Systematic Review and Meta-analysis

Liang, Xi-Ying MD^{*,†}; Wu, Xin-An MB[†]; Tian, Ying MB[†]; Gao, Hang MB[†]; Chen, Jing-Jing MB[†]; Feng, Quan-Xin MD, PhD^{†,‡}


[Author Information](#) 

Journal of Clinical Gastroenterology 58(5):p 522-530, May/June 2024. | DOI: 10.1097/MCG.0000000000001886





Conclusion:

 In patients with severe pancreatitis, early feeding after 24 hours may be beneficial.

Efficacy of a computer based discontinuation strategy to reduce PPI prescriptions: a multicenter cluster-randomized controlled trial

[Julia Heisig](#) , [Bettina Bucker](#), [Alexandra Schmidt](#), [Anne-Lisa Heye](#), [Anja Rieckert](#), [Susanne Löscher](#),
[Oliver Hirsch](#), [Norbert Donner-Banzhoff](#), [Stefan Wilm](#), [Anne Barzel](#), [Annette Becker](#) & [Annika Viniol](#)

T0

Although PPIs are generally considered safe for short-term use, evidence of serious side effects with long-term use is mounting. These potential risks include increased risk of     and reduced absorption of vitamins and minerals [2, 9].

Interview

PPI: no

PPI: yes

Gastroprotection

Complaints

Diagnosis



58.1%



88.6%



96.0%



93.9%

43.0 %
57.9 %
20.6 %

50.9 %
49.4 %
30.4 %

38.8 %
57.0 %
31.5 %

41.4 %
60.2 %
28.8 %

PPI intake status and reason for intake as reported by the patients themselves at T1, stratified by the results of the arriba-PPI consultation at T0.



Association of Statin Use With Risk of Liver Disease, Hepatocellular Carcinoma, and Liver-Related Mortality

Mara Sophie Vell¹; Rohit Loomba, MD²; Arunkumar Krishnan, MBBS³; [et al](#)

Question Is regular statin intake associated with a reduced rate of new liver diseases and liver-related death in the general population?

Findings This cohort study, involving more than 1.7 million people after matching, found that regular use of statins was associated with a [REDACTED] compared with no statin use. Moreover, [REDACTED] in regular statin users compared with non-statin users.

0.55; 95% CI, 0.50-0.61; $P = .004$). In PMBB individuals ($n = 15007$), the HR for the association of HCC was reduced even further for statin users (HR, 0.26; 95% CI, 0.22-0.31; $P = .003$). The hepatoprotective association of statins was [REDACTED] with a significant association in PMBB individuals ($n = 11640$) for incident liver diseases after 1 year of statin use (HR, 0.76; 95% CI, 0.59-0.98; $P = .03$). Taking statins was particularly beneficial in men, individuals with

External validation and comparison of the Glasgow-Blatchford score, modified Glasgow-Blatchford score, Rockall score and AIMS65 score in patients with upper gastrointestinal bleeding: a cross-sectional observational study in Western Switzerland

Rivieri, Sirio^a; Carron, Pierre-Nicolas^{a,b}; Schoepfer, Alain^{a,c}; Ageron, Francois-Xavier^{a,b}

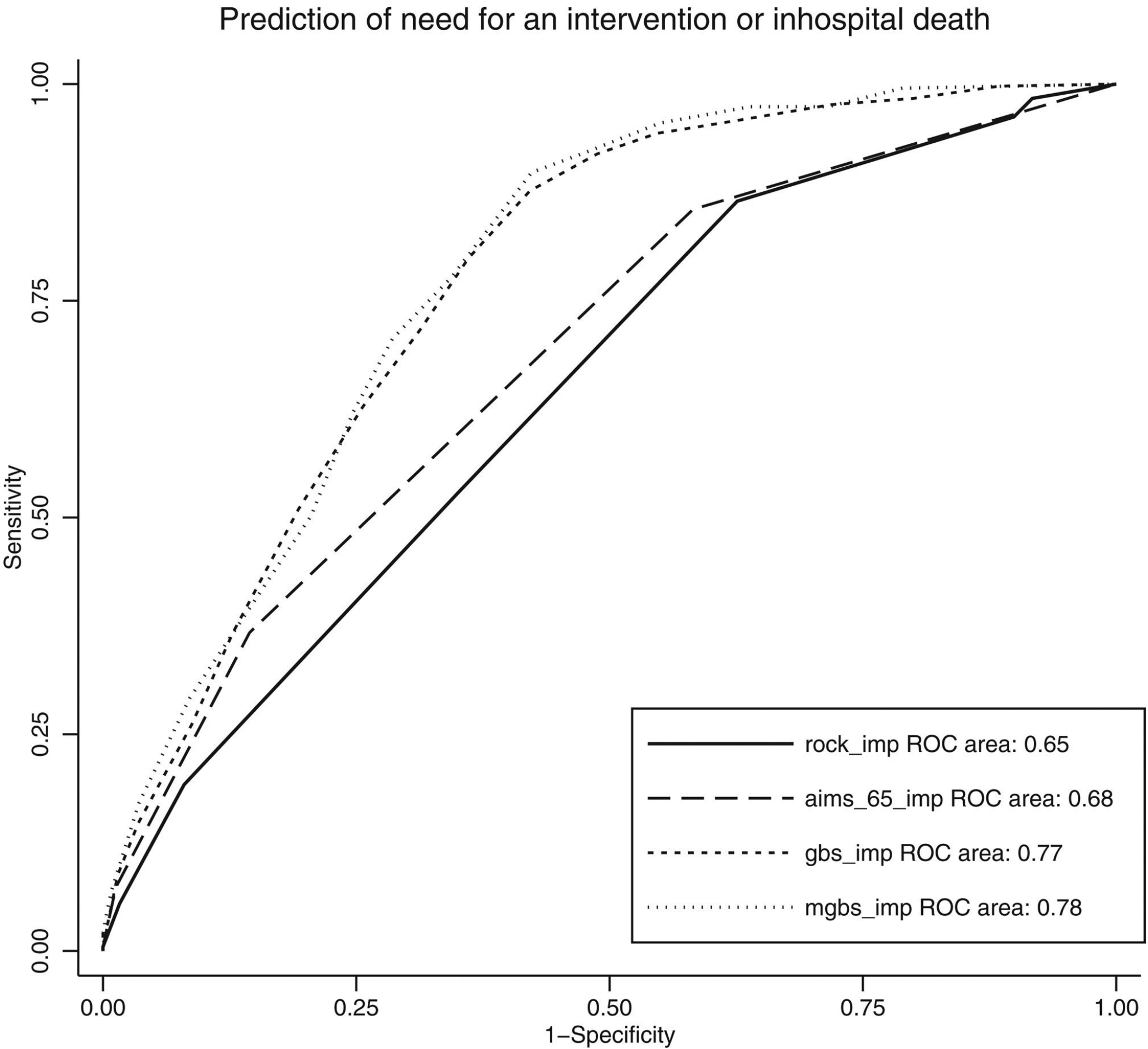
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European Journal of Emergency Medicine 30(1):p 32-39, February 2023. | DOI: 10.1097/MEJ.0000000000000983 

Regarding our primary outcome, the performance of AIMS65 and PERS was unsatisfactory and their clinical use cannot be recommended. However, *m*GBS and GBS presented a good performance with an AUC of 0.78 and 0.77, respectively. Concerning our secondary outcome, performance was good for AIMS65 and PERS, with an AUROC of 0.78 and 0.71 respectively. PERS showed a better calibration than AIMS65

Clinical implications

The *m*GBS and GBS seemed more accurate than others to predict the need for an intervention or death. Of note, these scores were developed to predict the need for an intervention, whereas PERS and AIMS65 were developed to predict mortality. It is clinically relevant to predict the need for an intervention rather than inhospital death as the main objective of risk stratification is to identify patients who can be discharged from the ED. We showed that a GBS or an *m*GBS of 0 was safe to exclude a patient with UGIB from the ED, with only one event for a GBS of 0 (0.06%) and this posttest prediction of less than 1% represents an acceptable probability. Current European guidelines recommend that patients with GBS < 1 can be safely managed as outpatients. This study



Nefrologie

Taurolidine/Heparin Lock Solution and Catheter-Related Bloodstream Infection in Hemodialysis

A Randomized, Double-Blind, Active-Control, Phase 3 Study

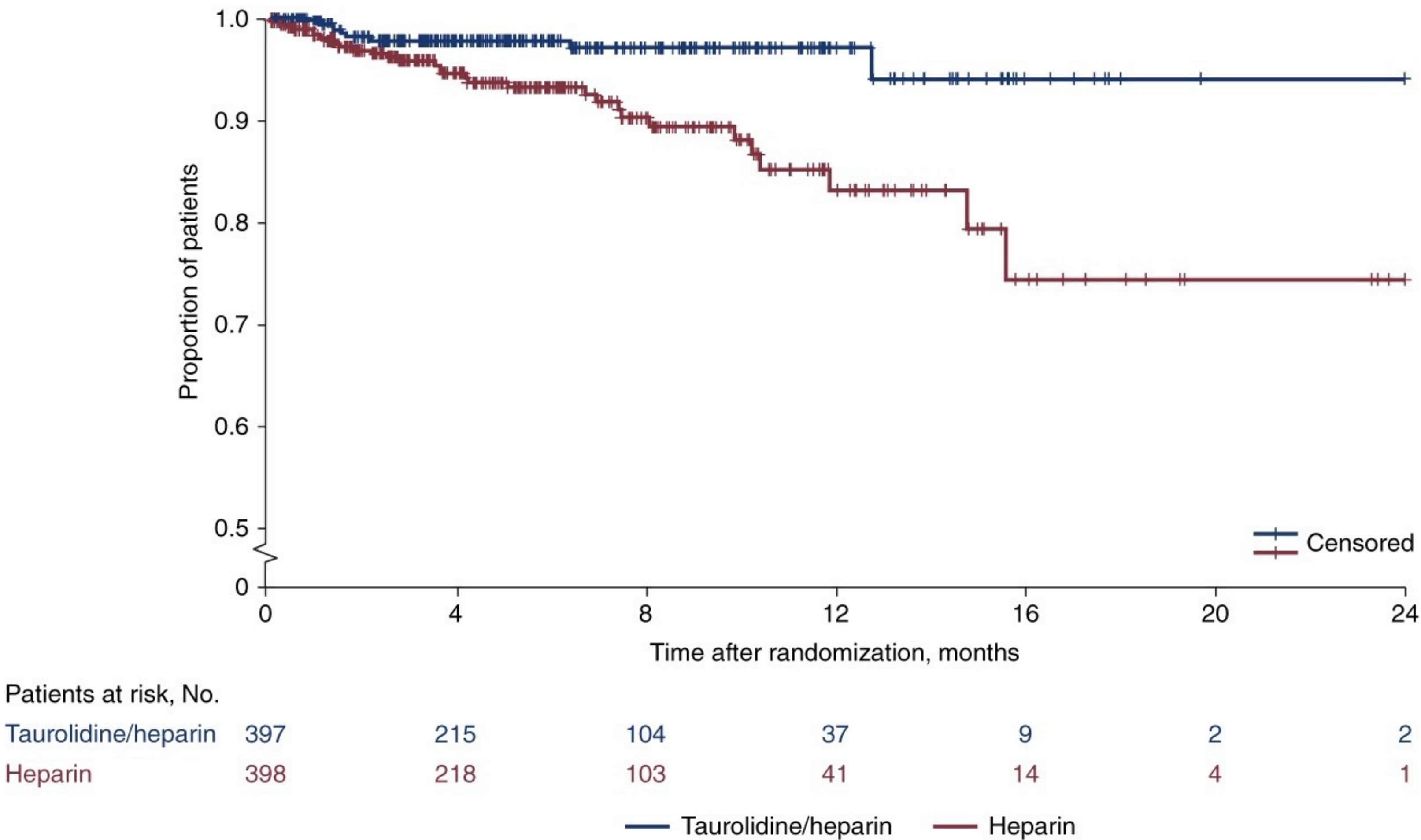
Agarwal, Anil K.¹; Roy-Chaudhury, Prabir^{2,3}; Mounts, Phoebe⁴; Hurlburt, Elizabeth⁴; Pfaffle, Antony⁴; Poggio, Eugene C.⁵

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Clinical Journal of the American Society of Nephrology 18(11):p 1446-1455, November 2023. | DOI: 10.2215/CJN.0000000000000278 

Results

In the full analysis population (N=795), nine participants in the taurolidine/heparin arm (n=397; 2%) and 32 participants in the heparin arm (n=398; 8%) had a CRBSI. Event rates per 1000 catheter days were 0.13 and 0.46, respectively, with the difference in time to CRBSI being statistically significant, favoring taurolidine/heparin ($P < 0.001$). The hazard ratio was 0.29 (95% confidence interval, 0.14 to 0.62), corresponding to a 71% reduction in risk of CRBSIs with taurolidine/heparin versus heparin. There were no significant differences between study arms in time to catheter removal for any reason or loss of catheter patency. The safety of taurolidine/heparin was comparable with that of heparin, and most treatment-emergent adverse events were mild or moderate.



71 %
redukce CRBSI

Trimetazidine as an adjunct to standard hydration reduces the incidence of contrast-induced acute kidney injury in patients with renal insufficiency undergoing coronary angiography or percutaneous cardiac intervention: a systematic review and meta-analysis.

Andrew Lukwaro¹, Yi Lu¹, Junzhe Chen¹ and Ying Tang^{1*}

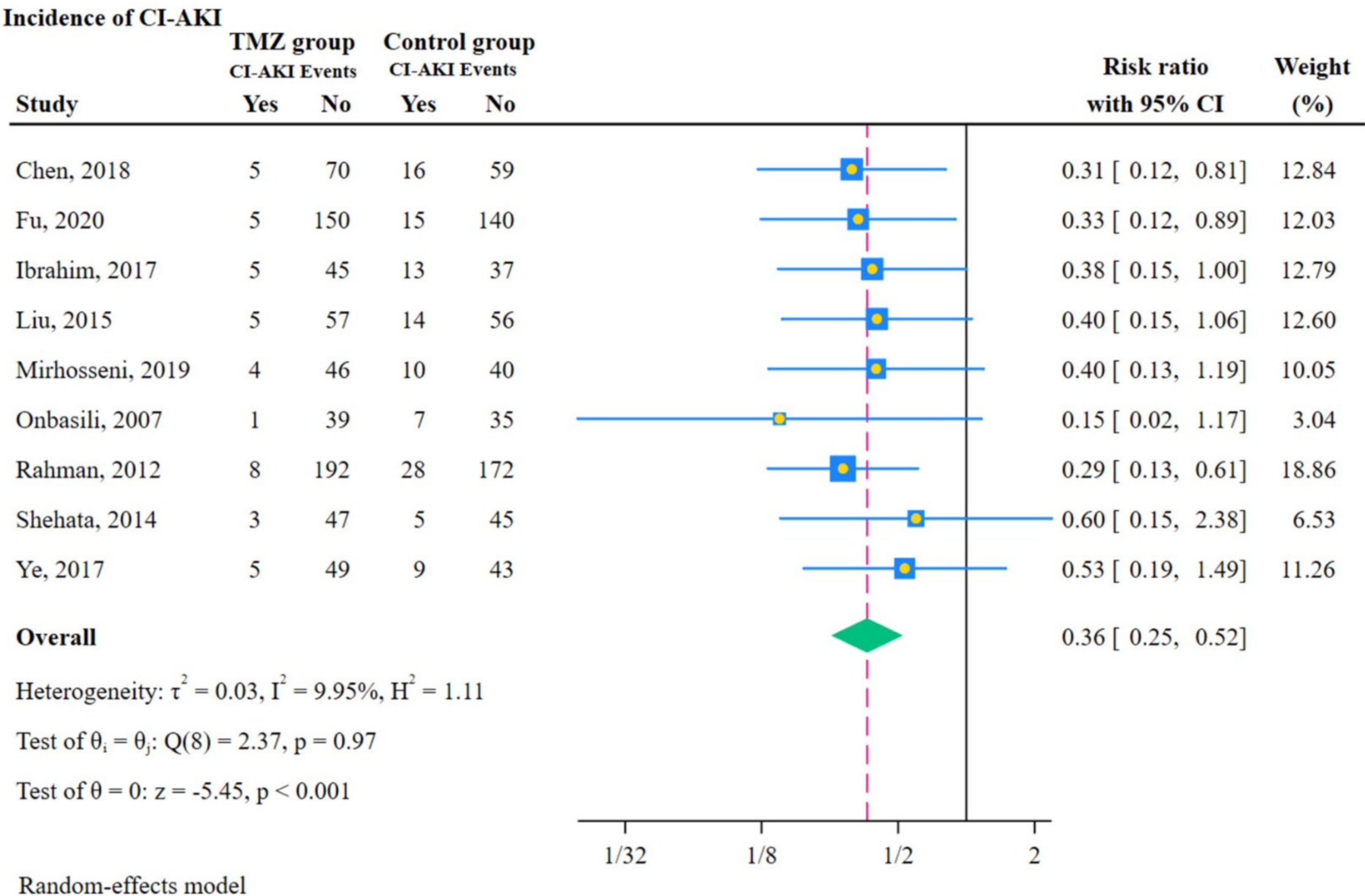


Fig. 2 Forest plot comparing the incidence of CI-AKI between the TMZ group and control group

Results Nine RCTs met the inclusion criteria and assessed the role of TMZ in patients with renal dysfunction who underwent CAG or PCI.

Changes in Scr at 24 h (SMD -0.33, 95% CI, [-0.56, -0.10], $P=0.01$), at 48 h (SMD -0.27, 95% CI, [-0.46, -0.09], $P=0.01$), and 72 h (SMD -0.32, 95% CI, [-0.56, -0.07], $P=0.01$) were statistically significant in the TMZ group compared to the control group. However, the changes in Scr beyond 72 h following CAG or PCI were statistically insignificant in the TMZ group when compared to the control group (SMD -0.22, 95% CI, [-0.52, 0.09], $P=0.16$). The incidence of adverse effects was lower in the TMZ group than in the control group, and the difference was statistically significant (RR 0.51, 95% CI, [0.29, 0.90]; $P=0.02$).

Risk of acute kidney injury after contrast-enhanced computerized tomography: a systematic review and meta-analysis of 21 propensity score–matched cohort studies

Mikal Obed¹ • Maria Magdalena Gabriel² • Eva Dumann¹ • Clara Vollmer Barbosa¹ • Karin Weißenborn² • Bernhard Magnus Wilhelm Schmidt¹

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Results Twenty-one articles were included, comprising data of 169,455 patients. The overall risk of AKI was similar in the contrast-enhanced and unenhanced groups (OR: 0.97 [95% CI: 0.85; 1.11], $p = 0.64$), regardless of baseline renal function and underlying disease. Substantial heterogeneity was detected ($I^2 = 90\%$, $p \leq 0.0001$). Multivariable logistic regression identified hypertension ($p = 0.03$) and estimated glomerular filtration rate (eGFR) ≤ 30 mL/min/1.73 m² ($p = 0.0001$) as factors associated with greater risk of post-contrast AKI.

Conclusions Based on propensity score–matched pairs obtained from 21 cohort studies, we found no evidence for increased risk for AKI, dialysis or mortality after contrast-enhanced CT among patients with eGFR ≥ 45 mL/min/1.73 m². In congruence with the emerging evidence in the literature, caution should be exercised in patients with hypertension and eGFR ≤ 30 mL/min/1.73 m².

Table 3 Results of meta-regression (mixed-effects regression)

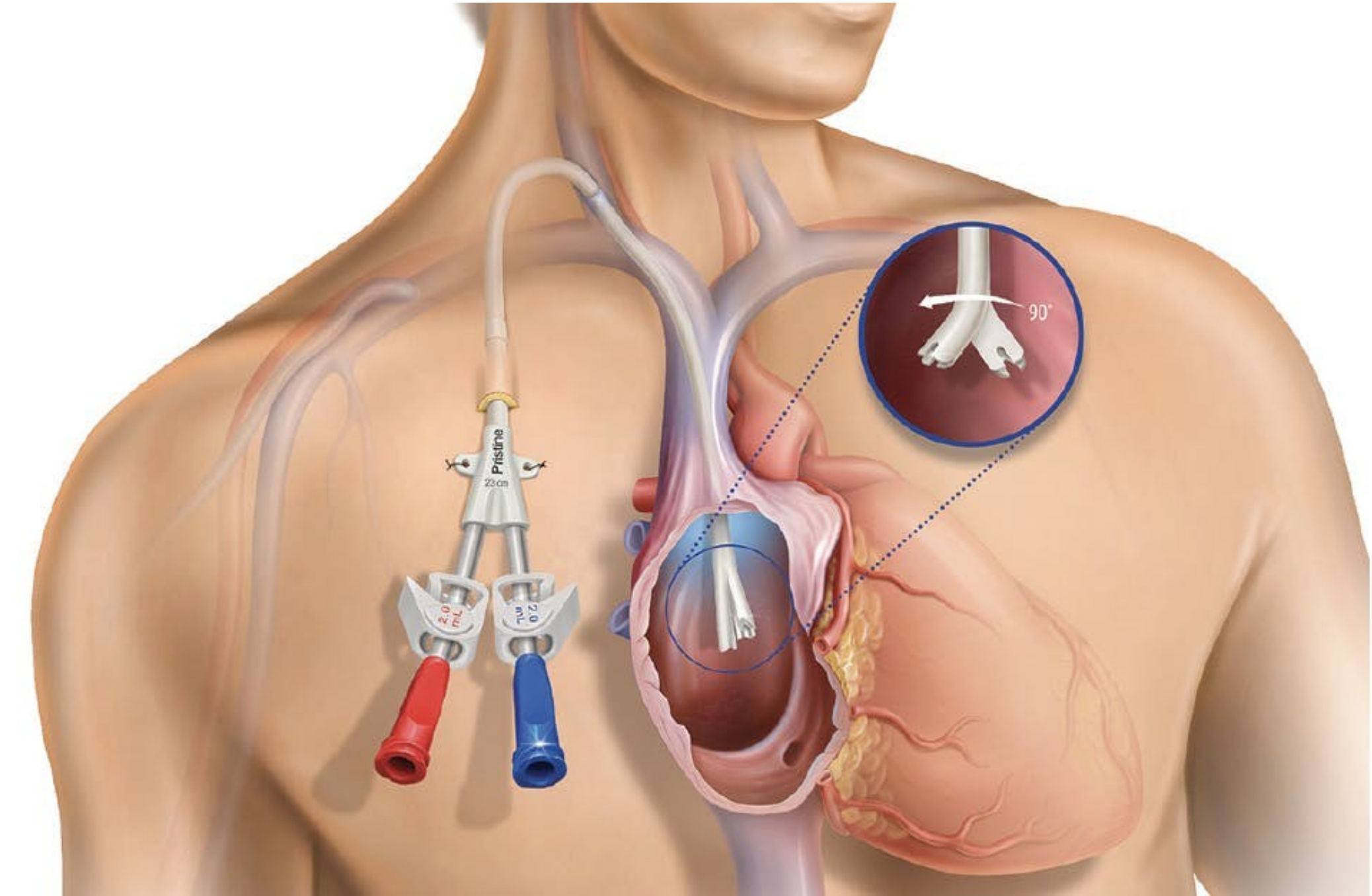
Covariates	<i>n</i> studies	Mixed-effects model		<i>p</i> value
		Point estimate	Standard error	
Female gender (%)	11	0.02	0.01	0.15
CHF (%)	11	0.00	0.00	0.88
Diabetes mellitus (%)	10	0.01	0.1	0.2
CKD (%)	11	0.00	0.00	0.88

Comparative study between the halfway technique and the standard technique for exchange of tunneled hemodialysis catheter

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Affiliations + expand

PMID: 39370625 DOI: [10.1177/11297298241286203](https://doi.org/10.1177/11297298241286203)



Results: The frequency of peri-operative bleeding complications was better in the halfway group with comparable infection rate and late catheter dysfunction results between the two groups. One year patency rates were 87.5% in halfway technique group compared to 79.5% in standard technique group, yet without statistical significance. However, there was a statistically significant

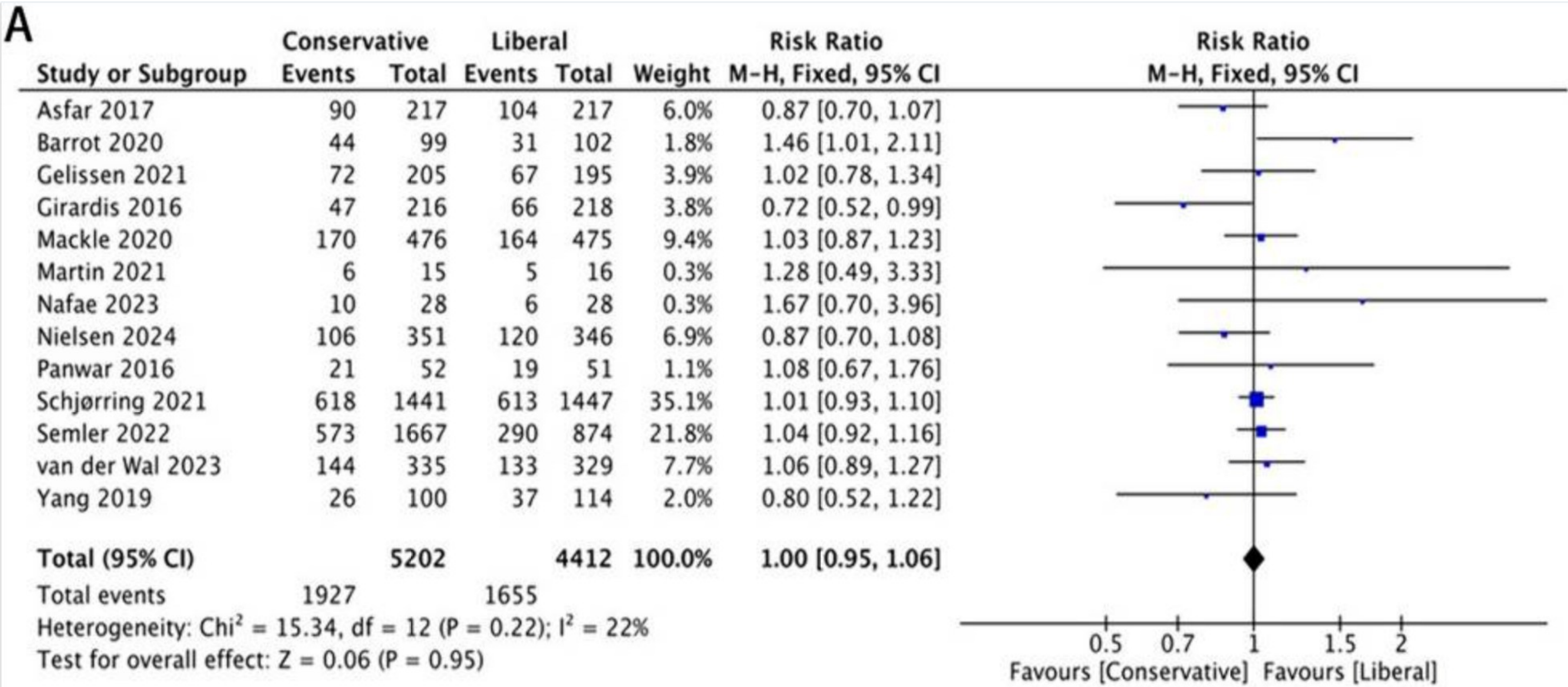
Intenzivní medicína

Conservative versus liberal oxygen therapy for intensive care unit patients: meta-analysis of randomized controlled trials

[Xin-yu Li](#)^{1,#}, [Bing Dai](#)^{1,#}, [Hai-jia Hou](#)^{1,#}, [Hong-wen Zhao](#)¹, [Wei Wang](#)¹, [Jian Kang](#)¹, [Wei Tan](#)^{1,✉}

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PMCID: PMC11052962 PMID: [38668955](#)



Further RCTs are urgently needed to confirm the impact of COT strategy on specific populations.

Antibiotic Treatment for 7 versus 14 Days in Patients with Bloodstream Infections

Authors: The BALANCE Investigators, for the Canadian Critical Care Trials Group, the Association of Medical Microbiology and Infectious Disease Canada Clinical Research Network, the Australian and New Zealand Intensive Care Society Clinical Trials Group, and the Australasian Society for Infectious Diseases Clinical Research Network [Author Info & Affiliations](#)

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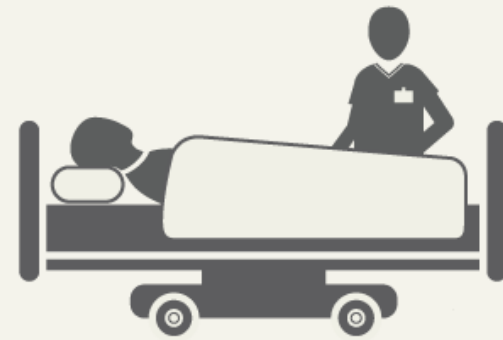
(Funded by the Canadian Institutes of Health Research and others; BALANCE ClinicalTrials.gov number, NCT03005145.)

QUESTION Is there a difference in mortality between continuous and intermittent infusions of β -lactam antibiotics in critically ill patients with sepsis?

CONCLUSION In critically ill patients with sepsis, continuous vs intermittent β -lactam antibiotic infusions did not significantly reduce 90-day mortality in the primary analysis. A clinically important benefit with continuous infusions is possible.

POPULATION

4608 Men
2423 Women



Critically ill adults aged
≥18 years treated for sepsis

Mean age: 59 years

LOCATION

104
ICUs worldwide



INTERVENTION



3498

Continuous infusion

Continuous infusion
(over 24 hours) of either
piperacillin-tazobactam
or meropenem

7031 Patients randomized



3533

Intermittent infusion

Intermittent infusion
(over 30 minutes) of either
piperacillin-tazobactam
or meropenem

PRIMARY OUTCOME

All-cause mortality within 90 days after randomization

Ulcer Prophylaxis during Mechanical Ventilation

A PLAIN LANGUAGE SUMMARY

Based on the NEJM publication: Stress Ulcer Prophylaxis during Invasive Mechanical Ventilation
by D. Cook et al. (published June 14, 2024)

In this trial, researchers compared the effect of a proton-pump inhibitor on the risk of gastrointestinal bleeding with that of placebo in patients undergoing mechanical ventilation.

Critically ill patients in the intensive care unit have an increased risk of stress-induced gastrointestinal ulcers, which can cause gastrointestinal bleeding.

WHY WAS THE TRIAL DONE?

For critically ill patients in the intensive care unit, proton-pump inhibitors such as pantoprazole are typically used to prevent stress ulcers and bleeding. However, some studies have suggested that although such treatment reduces bleeding episodes, it increases the risk of death in the most severely ill patients.



HOW WAS THE TRIAL CONDUCTED?

4821 critically ill adults undergoing invasive mechanical ventilation were assigned to receive infusions of either 40 mg of pantoprazole or placebo daily for up to 90 days. The primary efficacy outcome was clinically important upper gastrointestinal bleeding, and the primary safety outcome was death from any cause at 90 days.

Pantoprazole Group

40 mg, daily infusion



2417 Patients

Placebo Group

Normal saline, daily infusion



2404 Patients

PATIENTS



WHO Mean age, 58 years

Men: 64%; Women: 36%

CLINICAL STATUS 23% were receiving pre-hospital acid suppression

Median duration of infusion, 5 days

TRIAL DESIGN

- 68 CENTERS
- 8 COUNTRIES
- RANDOMIZED
- PLACEBO-CONTROLLED
- BLINDED TRIAL-GROUP ASSIGNMENTS AND ADJUDICATION OF BLEEDING EPISODES

LIMITATIONS AND REMAINING QUESTIONS

- The trial did not include data on patient-reported outcomes or on microbiome modification as a mechanism for infection risk.
- There is no universal definition of pneumonia.
- The findings may not apply to patients who breathe unassisted.

LINKS: [FULL ARTICLE](#) | [NEJM QUICK TAKE](#) | [EDITORIAL](#)

CONCLUSIONS

Among critically ill patients undergoing invasive mechanical ventilation in the intensive care unit, those who received pantoprazole had a significantly lower risk of clinically important upper gastrointestinal bleeding than those who received placebo, with no significant effect on mortality.

FURTHER INFORMATION

Trial registration: ClinicalTrials.gov number, NCT03374800

Trial funding: Canadian Institutes of Health Research and others

Full citation: Cook D, Deane A, Lauzier F, et al. Stress ulcer prophylaxis during invasive mechanical ventilation. *N Engl J Med* 2024;391:9-20.

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