

## Resumo da Comissão Científica SAERJ sobre o artigo:

# “Continuation vs Discontinuation of Renin-Angiotensin System Inhibitors Before Major Noncardiac Surgery”



**JAMA | Original Investigation**

**Continuation vs Discontinuation of Renin-Angiotensin System Inhibitors Before Major Noncardiac Surgery**  
The Stop-or-Not Randomized Clinical Trial

Matthieu Legrand, MD, PhD; Jérémie Falcone, MD; Bernard Cholley, MD, PhD; Hélène Charbonneau, MD, PhD; Amélie Delaporte, MD; Adrien Lemoine, MD; Matthias Barot, MD; Alexandre Joosten, MD, PhD; Claude Meistelman, MD; Delphine Cherot Leroy, MD; Jean-Philippe Rives, MD; Bruno Pastene, MD; Antoine Dewitte, MD, PhD; Stéphanie Sigaut, MD, PhD; Marc Danguy des Deserts, MD; Cyrille Truc, MD; Matthieu Boisson, MD, PhD; Sigmund Lasczik, MD, PhD; Philippe Civillon, MD, PhD; Ugo Schiff, MD; Samir Jaber, MD, PhD; Morgan Le Guen, MD, PhD; Anaïs Caillard, MD; Stéphanie Bar, MD, PhD; Edmundo Pereira de Souza Neto, MD, PhD; Vincent Colis, MD; Florin Dimache, MD; Thibaut Girardot, MD; Elsa Jozefowicz, MD; Simon Viquesnel, MD; Francis Berthier, MD; Eric Vicaut, MD, PhD; Etienne Gayat, MD, PhD; for the Stop-or-Not Trial Group

**IMPORTANCE** Before surgery, the best strategy for managing patients who are taking renin-angiotensin system inhibitors (RASIs) (angiotensin-converting enzyme inhibitors or angiotensin receptor blockers) is unknown. The lack of evidence leads to conflicting guidelines.

**OBJECTIVE** To evaluate whether a continuation strategy vs a discontinuation strategy of RASIs before major noncardiac surgery results in decreased complications at 28 days after surgery.

**DESIGN, SETTING, AND PARTICIPANTS** Randomized clinical trial that included patients who were being treated with a RASI for at least 3 months and were scheduled to undergo a major noncardiac surgery between January 2018 and April 2023 at 40 hospitals in France.

**INTERVENTION** Patients were randomized to continue use of RASIs ( $n = 1107$ ) until the day of surgery or to discontinue use of RASIs 48 hours prior to surgery (ie, they would take the last dose 3 days before surgery) ( $n = 1115$ ).

**MAIN OUTCOMES AND MEASURES** The primary outcome was a composite of all-cause mortality and major postoperative complications within 28 days after surgery. The key secondary outcomes were episodes of hypotension during surgery, acute kidney injury, postoperative organ failure, and length of stay in the hospital and intensive care unit during the 28 days after surgery.

**RESULTS** Of the 2222 patients (mean age, 67 years [SD, 10 years]; 65% were male), 46% were being treated with angiotensin-converting enzyme inhibitors at baseline and 54% were being treated with angiotensin receptor blockers. The rate of all-cause mortality and major postoperative complications was 22% (245 of 1115 patients) in the RASI discontinuation group (risk ratio, 1.02 [95% CI, 0.87-1.19];  $P = .85$ ). Episodes of hypotension during surgery occurred in 41% of the patients in the RASI discontinuation group and in 54% of the patients in the RASI continuation group (risk ratio, 1.31 [95% CI, 1.19-1.44]). There were no other differences in the trial outcomes.

**CONCLUSIONS AND RELEVANCE** Among patients who underwent major noncardiac surgery, a continuation strategy of RASIs before surgery was not associated with a higher rate of postoperative complications than a discontinuation strategy.

**TRIAL REGISTRATION** ClinicalTrials.gov Identifier: NCT03374449

**Visual Abstract**

**Supplemental content**

**Author Affiliations:** Author affiliations are listed at the end of this article.

**Group Information:** A list of the Stop-or-Not Trial Group appears in Supplement 4.

**Corresponding Author:** Matthieu Legrand, MD, PhD, Department of Anesthesia and Perioperative Care, Division of Critical Care Medicine, University of California, San Francisco, 521 Parnassus Ave, San Francisco, CA 94143 (matthieu.legrand@ucsf.edu). Etienne Gayat, MD, PhD, Department of Critical Care Medicine,

# Suspender ou continuar iSRA antes da cirurgia?

Um novo estudo no JAMA traz respostas!

O que são os iSRA?



Inibidores do sistema renina-angiotensina incluem os IECA (ex.: enalapril) e BRA (ex.: losartana), amplamente usados para hipertensão e insuficiência cardíaca.

O estudo STOP-OR-NOT analisou



2.222 pacientes

40 hospitais

iSRA mantidos vs. suspensos antes da cirurgia

Resultados



**Não houve diferença na taxa de mortalidade ou complicações (22% vs. 22%).**

Hipotensão intraoperatória foi mais comum no grupo que manteve os iSRA (54% vs. 41%).

O que isso significa na prática?



Suspender iSRA pode reduzir hipotensão intraoperatória.

Mas continuar também não aumenta complicações graves.

Decisão deve ser individualizada!

### Mensagem final:

Avalie o risco de hipotensão do paciente.

Se **preocupação com hipotensão**, suspender pode ser uma opção.

Em pacientes estáveis,  
**manter o iSRA pode ser seguro.**



Siga nossas redes sociais

