



DFASM3 Free Ride - Saloon

Épreuve de LCA ECNi 2017

Levosimendan for the Prevention of Acute Organ Dysfunction in Sepsis

<http://www.nejm.org/doi/pdf/10.1056/NEJMoa1609409>

Lecture rapide préparatoire : Proposition de corrigé

◆ Top-down approach

- Titre *Levosimendan for the Prevention of Acute Organ Dysfunction in Sepsis*
- Auteurs A.C. Gordon, G.D. Perkins, M. Singer, D.F. McAuley, R.M.L. Orme, S. Santhakumaran, A.J. Mason, M. Cross, F. Al-Beidh, J. Best-Lane, D. Brealey, C.L. Nutt, J.J. McNamee, H. Reschreiter, A. Breen, K.D. Liu, and D. Ashby
- Abstract Background/Methods/Results/Conclusions

◆ Scanning

- Study's objectives → Fin de la section **Introduction** : *To test whether the addition of levosimendan to standard care would reduce the severity of organ dysfunction among patients with septic shock and to assess its safety profile in patients with this condition*
- Study's design → Section **Methods**: *Multicenter, randomized, double-blind, placebo-controlled clinical trial*
- Recruitment and Randomization of the Patients → **Flowchart** Figure 1
 - Underwent randomization → 516
 - Assigned to receive levosimendan → 259
 - Assigned to receive placebo → 257
- Conclusions of the study → Fin de la section **Discussion** : *In adult patients with septic shock, the addition of levosimendan to standard care was not associated with less severe organ dysfunction or lower mortality.*

◆ Skimming

- **Background** → Définitions et objectifs
 - Sepsis
 - Levosimendan
 - Objectifs de l'étude
- **Methods**
 - **Trial Design and Participants**
 - In 34 general adult intensive care units (ICUs) in the UK
 - Funded by the National Institute for Health Research and Tenax Therapeutics sponsored by Imperial College London
 - **Enrollment Criteria and Randomization**
 - Adult patients with septic shock + vasopressors for at least 4 hours
 - Enrollment, randomization, and data collection
 - **Clinical Treatment**
 - Blinded infusion of levosimendan or placebo for 24 hours + standard care
 - Other aspects of clinical care at the discretion of the local physician
 - **Outcome Measures**
 - Mean daily Sequential Organ Failure Assessment (SOFA) score while patient in ICU
 - Individual SOFA components analyzed + several other clinical outcomes
 - **Statistical Analysis**
 - ...

- ...
- ...
- ...

- **Results**

- Trial Participants
 - ...
 - ...
 - ...
- Cardiovascular effects
- Outcomes
- **Figure 1** Flowchart Recruitment & randomization
- **Table 1** Baseline characteristics
- **Table 2** Acute Illness & Physiological Variables at baseline
- **Table 3** Secondary Outcomes
- **Figure 2** Kaplan–Meier Estimates of the Probability of Survival to Day 28

- **Discussion**

- Addition of levosimendan to standard care was not associated with less severe organ dysfunction in adult patients with septic shock
- Levosimendan is an inotropic agent with a mechanism of action that differs from that of catecholamines
- No evidence of beneficial effect on total SOFA score
- No evidence of beneficial effect of levosimendan on mortality in any prespecified subgroups
- Significantly higher heart rate in levosimendan group than placebo group
- Trial limitations
- **Conclusion:** in adult patients with septic shock, the addition of levosimendan to standard care was not associated with less severe organ dysfunction or lower mortality

◆ **Côté linguistique : cet article ne présente aucune difficulté linguistique**

- Pas de mots difficiles ou vraiment inconnus
- Pas de phrases longues
- Pas de chaînes de noms rendant la phrase difficile à comprendre
- Pas de pronoms personnels, possessifs & démonstratifs nécessitant la recherche du référent
- Les abréviations sont définies avant leur première utilisation sauf quelques-unes qui sont connues de tous (SD – Standard Deviation, OR – Odds Ratio, COPD – Chronic Obstructive Pulmonary Disease, ARDS Acute Respiratory Distress Syndrome, i.e.– that is to say, vs– versus)
- Cet article met en lumière **les caractéristiques du discours scientifique**
 - l'emploi du **passif** (BE + participe passé)
 - les structures de **comparaison** (comparatif et superlatif)
 - les **connecteurs logiques** (*although, despite, however, in contrast to, owing to, similarly, therefore*) qui structurent la démonstration, en particulier dans la partie discussion
 - les **modaux** et autres expressions modales également dans la partie discussion, qui révèlent le point de vue de l'auteur de l'article : ***may have contributed to the lack of overall clinical benefit*** : pas de réelle prise de position, 50% de chances d'après l'auteur

