



**ISAKOS**  
**CONGRESS**  
**2023**



**Boston**  
Massachusetts  
June 18–June 21

# Welcome

[isakos.com/2023](https://isakos.com/2023) • [#ISAKOS2023](https://twitter.com/ISAKOS2023)

2023



**ISAKOS**  
CONGRESS  
2023



**Boston**  
Massachusetts  
June 18–June 21

**Title: Newly formulated trehalose-hyaluronic acid provides longer-lasting effect than standard hyaluronate therapies. Evidence from a double-blinded prospective randomized study of knee osteoarthritis**

**Author/s: Anna Montagna PhD  
Leandra Bizzoco Dr.ssa  
Katarzyna Herman M.D.  
Alberto Gobbi M.D.**



[info@oasiortopedia.it](mailto:info@oasiortopedia.it)

[www.kneecartilagedoctor.com](http://www.kneecartilagedoctor.com)





**ISAKOS**  
CONGRESS  
2023



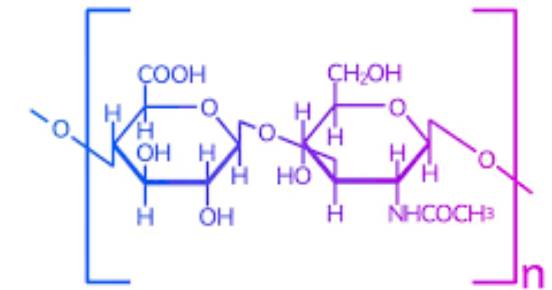
**Boston**  
Massachusetts  
June 18–June 21

# Disclosures: Authors have nothing to disclose

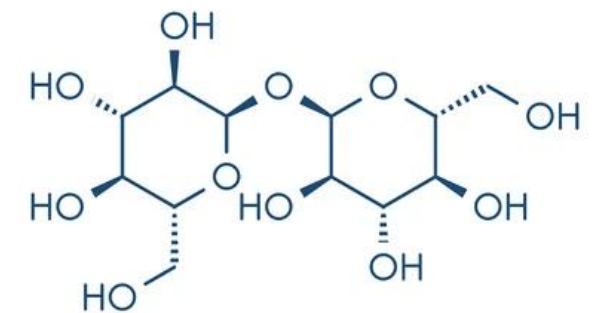


# Aim

- compare clinical outcomes of **trehalose hyaluronic acid (T-HA)** with standard non-trehalose hyaluronic acid (NT-HA)
  - evaluate **which one provides longer-lasting effects** when administered as infiltrative therapy in patients with **symptomatic OA of the knee.**



hyaluronic acid



trehalose



ISAKOS  
CONGRESS  
2023

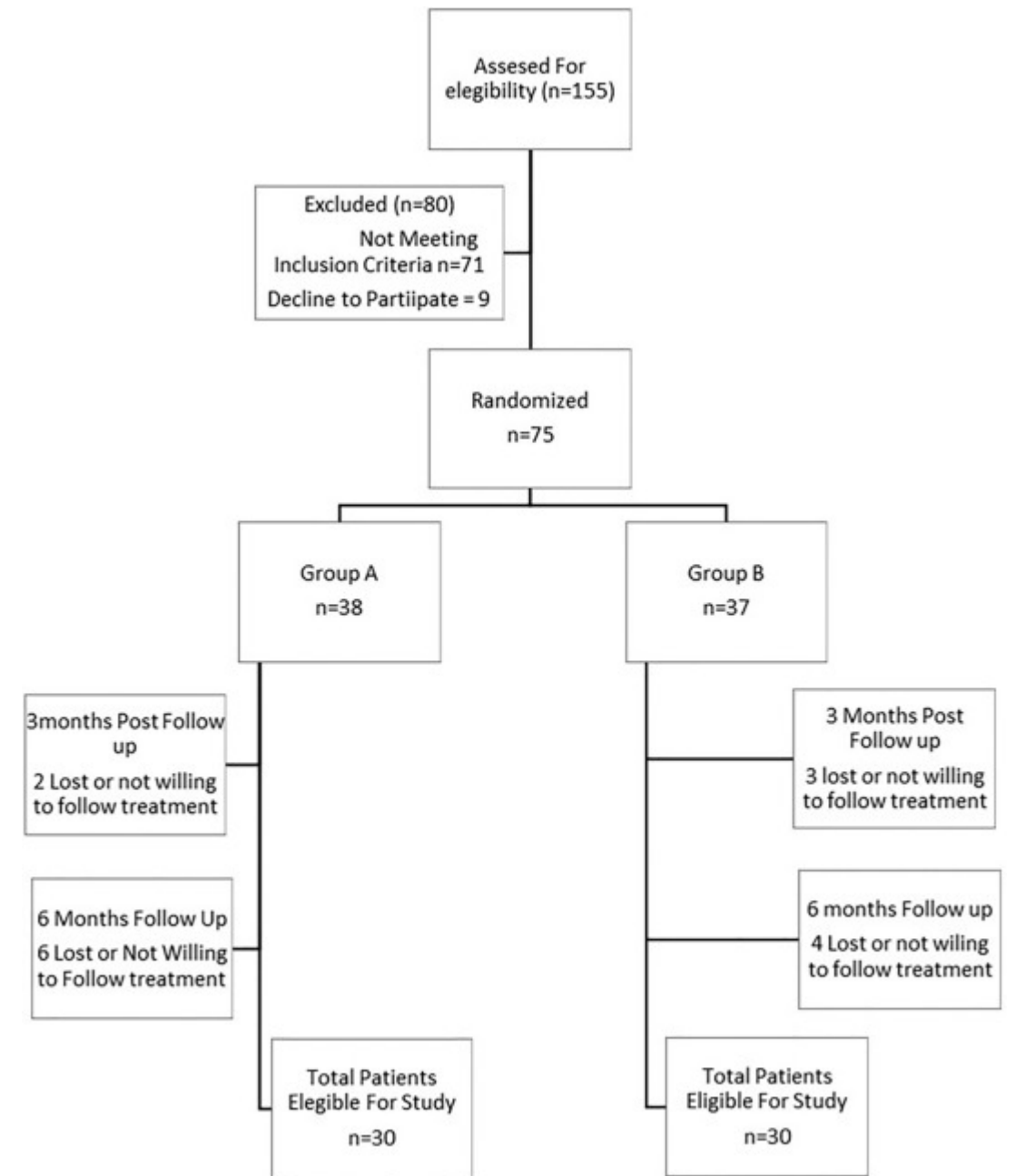


**Boston**  
Massachusetts  
June 18–June 21



# Methods

- **60 patients** (mean age:  $56.4 \pm 15.6$  years) **with OA** were randomized to trehalose- hyaluronic acid (T-HA) or non-trehalose hyaluronic acid (NT-HA) divided into 2 groups (30 per group).
- **HA administration** consisted of **3 doses** to every patient in 15 intervals, with a **follow-up at 3 (T1) and 6 (T2) months**.
- The **treatment efficacy** was measured with the **International Knee Documentation Committee (IKDC), Knee Injury and Osteoarthritis Outcome Score (KOOS) and Visual Analogue Scale (VAS)**.
- **Outcomes were compared with basal scores and between the treatments.** For safety evaluation, any adverse reaction was recorded during the study.



# Results

- **At 3 months**, IKDC, KOOS, and VAS improved for both groups ( $P < .05$ ). Median [IQR] IKDC improved from 57.47 to 65.16 and from 52.87 to 67.48 respectively.
- **At 6 months**, group **T-HA** continued to improve IKDC, KOOS, and VAS ( $P < .05$ ), while **group NT-HA scores decreased** ( $P < .05$ ). IKDC increased to 66.98 for T-HA, while it decreased to 59.77 for NT-HA.
- No significant adverse events were registered with either of the formulations.



**ISAKOS**  
CONGRESS  
2023

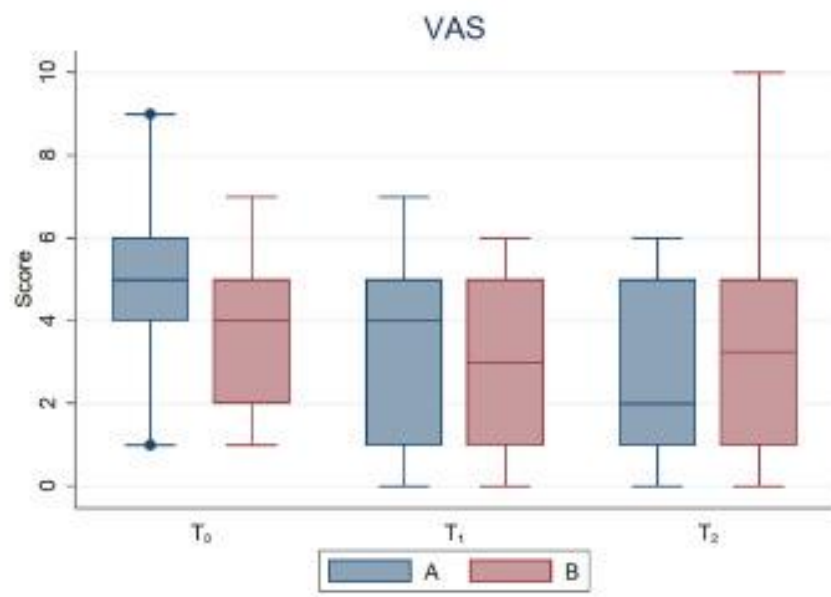


**Boston**  
Massachusetts  
June 18–June 21

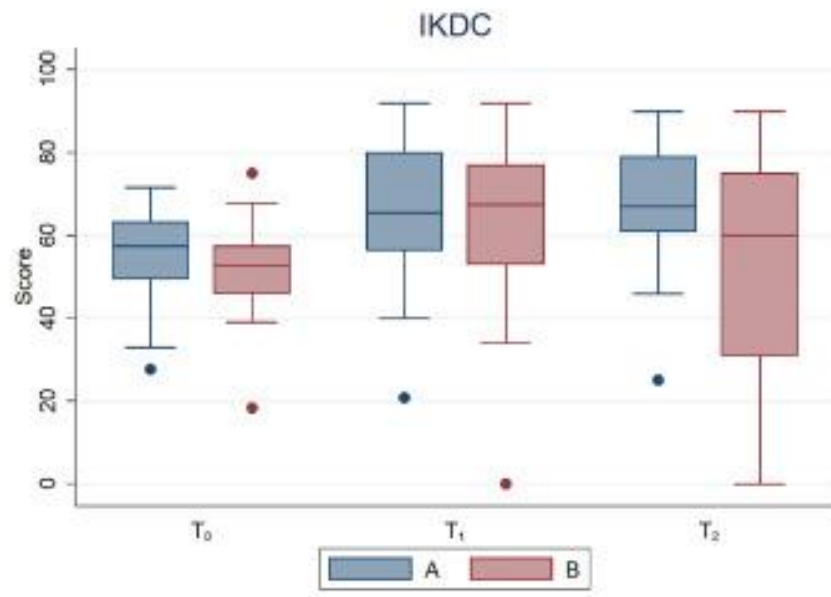


# VAS, IKDC, KOOS Symptoms score pre-op, at 3 months, at 6 months f.u.

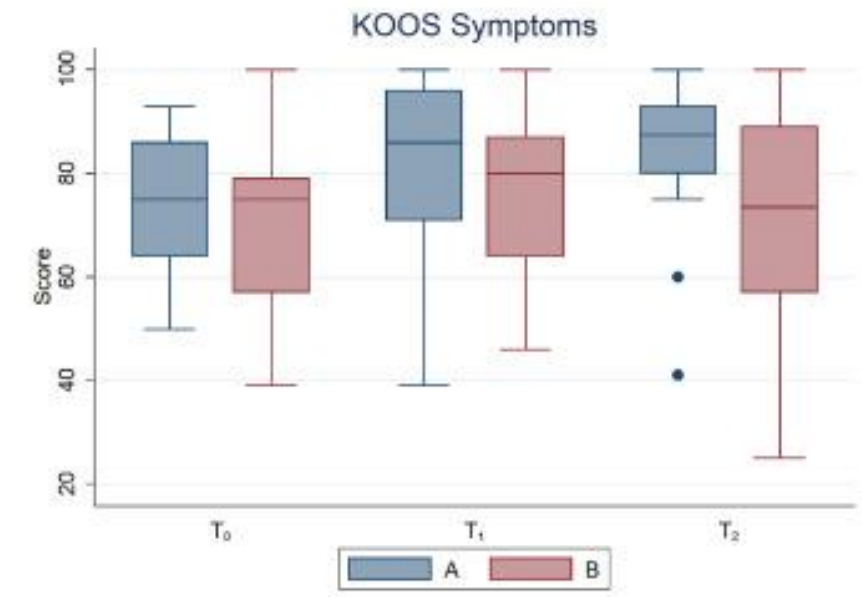
  
**T-HA**    **NT-HA**



**VAS score**



**IKDC score**



**KOOS Symptoms score**

# Conclusion

- Both hyaluronic acids are **safe** and **provide relief** in osteoarthritic **knee symptoms and function**.
- **T-HA** reduces early OA symptoms such as pain and loss of function and provides a **longer-lasting result** compared to NT-HA in symptomatic knee OA.



**ISAKOS**  
CONGRESS  
2023



**Boston**  
Massachusetts  
June 18–June 21





# References

- Gobbi A. et al. **"Double-blinded prospective randomized clinical trial in knee joint osteoarthritis treatment: safety assessment and performance of trehalose hyaluronic acid versus standard infiltrative therapy based on medium-weight sodium hyaluronate."** *Journal of Cartilage & Joint Preservation* 2.3 (2022)  
<https://doi.org/10.1016/j.jcjp.2022.100043>



**ISAKOS**  
CONGRESS  
2023



**Boston**  
Massachusetts  
June 18–June 21

