

Olanzapine vs. Aprepitant-Based Triple Antiemetic Regimens for CINV Prevention in Highly Emetogenic Chemotherapy

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studies included

1,557

patients · OLZ 779 vs. APR 788

RR 1.02

Complete response: comparable

RR 1.19

Nausea control: olanzapine superior

Olanzapine matches aprepitant on emetic control and outperforms it on nausea control at the 10 mg dose.

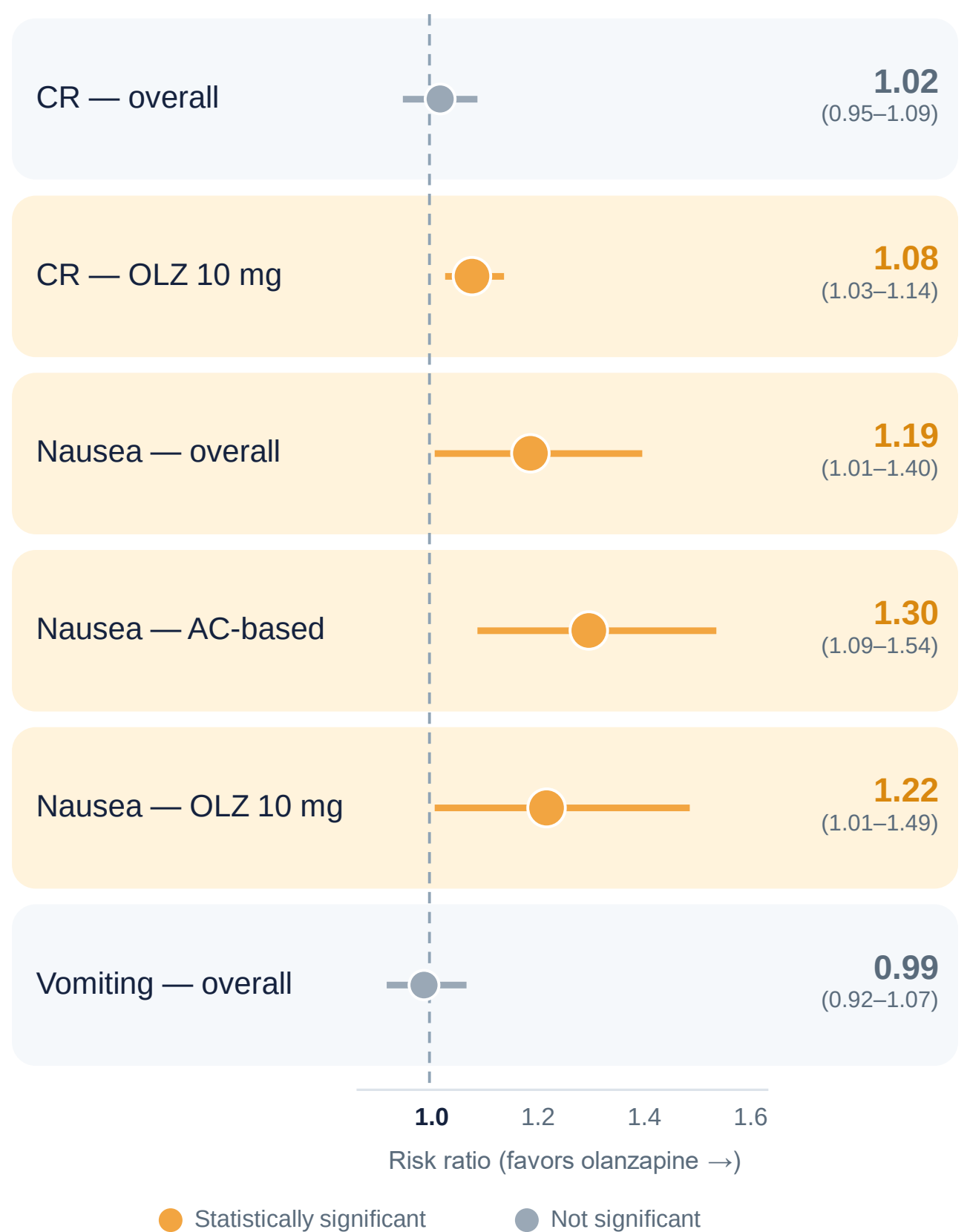
BACKGROUND

- CINV undermines treatment tolerance and quality of life in HEC
- ASCO guidelines: NK-1 RA + 5-HT3 RA + corticosteroid triple regimen
- Olanzapine (OLZ) is emerging as a lower-cost alternative to aprepitant (APR)
- Question: does an OLZ-based triple regimen match APR for CINV prevention?

METHODS

- PRISMA-compliant systematic review; PROSPERO CRD420261284983
- 5 databases searched for OLZ- vs. APR-based triple regimen trials
- Primary endpoint: Complete Response (CR) for CINV prophylaxis in HEC
- Statistical analysis in R (v2025.05.0+496, Posit)

RESULTS — POOLED RISK RATIOS (OLZ vs. APR)



CONCLUSION

OLZ-based triple antiemetic regimens deliver **comparable complete response and vomiting control** to APR, with **superior nausea control** — particularly in anthracycline–cyclophosphamide regimens and at the 10 mg dose. A viable, lower-cost alternative for HEC antiemetic prophylaxis.

