Findings We included data from nine trials including 4328 patients. In the intention-to-treat infected population, we noted a 21% shorter time to alleviation of all symptoms for oseltamivir versus placebo recipients (time ratio 0.79, 95% CI 0·74-0·85; p<0·0001). The median times to alleviation were 97·5 h for oseltamivir and 122·7 h for placebo groups (difference -25·2 h, 95% CI -36·2 to -16·0). For the intention-to-treat population, the estimated treatment effect was attenuated (time ratio 0.85) but remained highly significant (median difference -17.8 h). In the intention-to-treat infected population, we noted fewer lower respiratory tract complications requiring antibiotics more than 48 h after randomisation (risk ratio [RR] 0·56, 95% CI 0·42-0·75; p=0·0001; 4·9% oseltamivir vs 8·7% placebo, risk difference −3·8%, 95% CI −5·0 to −2·2) and also fewer admittances to hospital for any cause (RR 0·37, 95% CI 0·17–0·81; p=0·013; 0·6% oseltamivir, 1·7% placebo, risk difference –1·1%, 95% CI –1·4 to –0·3). Regarding safety, oseltamivir increased the risk of nausea (RR 1·60, 95% CI 1·29–1·99; p<0·0001; 9·9% oseltamivir vs 6·2% placebo, risk difference 3·7%, 95% CI 1·8-6·1) and vomiting (RR 2·43, 95% CI 1·83-3·23; p<0·0001; 8·0% oseltamivir vs 3.3% placebo, risk difference 4.7%, 95% CI 2.7–7.3). We recorded no effect on neurological or psychiatric disorders or serious adverse events.

Interpretation Our findings show that oseltamivir in adults with influenza accelerates time to clinical symptom alleviation, reduces risk of lower respiratory tract complications, and admittance to hospital, but increases the occurrence of nausea and vomiting.