

endTB clinical trial: results in key subgroups of patients with drug-resistant tuberculosis

Maelenn Gouillou, Epicentre, Epicentre

Background

endTB is a Phase 3, randomized, controlled, non-inferiority trial, comparing five 9-month experimental regimens consisting of 4-5 drugs (including bedaquiline, delamanid, clofazimine, linezolid, fluoroquinolones, and pyrazinamide) to the standard of care for rifampicin-resistant, fluoroquinolone-susceptible tuberculosis. Three experimental regimens (endTB1, endTB2, endTB3) were non-inferior to the control in the primary analysis. This analysis explores the efficacy results of the endTB clinical trial in key subgroups (HIV positive, low BMI, diabetes, severe disease) to help clinicians to make the choice between these three regimens for patients with a more difficult to treat form of disease.

Methods

For each subgroup, proportion of favourable outcome at Week 73 was calculated in each arm. Risk differences and 95% confidence intervals were estimated in the modified intention-to-treat population (mITT), which included all randomized participants who took at least one dose of study treatment and had a positive pre-randomization tuberculosis culture. Results in each arm were plotted on forest plots.

Results

In HIV-infected patients, efficacy results are consistent with the overall results in endTB1 and endTB2 while in endTB3 the effect of trt favours the control arm. No differences from the overall population were observed in any of the 3 arms in patients with a more severe disease, while treatment effect in patients with low BMI, favours the control arm in all 3 arms. Treatment effect in patients with diabetes, favours the experimental arm in all 3 arms.

Conclusion

All 3 arms could reasonably be used in patients with severe disease or diabetes. endTB1 and endTB2 appeared to be particularly efficacious in HIV positive patients. Longer or regimens with more drugs may achieve better results in patients with low BMI. Additional research is needed to confirm these findings.

endTB clinical trial main efficacy results hold in patients with severe disease or diabetes. 2 regimens could be recommended for HIV-infected patients.

