IPT during infancy has no adverse effect on growth among HEU children

Ashenafi S. Cherkos[1], Sylvia M. LaCourse[2], John Kinuthia[3,4], Jerphason Mecha[3], Daniel Matemo[3], Daniel A. Enquobahrie[2], Jaclyn N. Escudero[2], Grace John-Stewart[2]
[1]University of North Texas Health Science Center, Fort Worth, Texas, USA; [2]University of Washington, Seattle, WA, USA; [3]Research and Programs, Kenyatta National Hospital, Nairobi, Kenya; [4]Department of Obstetrics and Gynaecology, Kenyatta National Hospital, Nairobi, Kenya.

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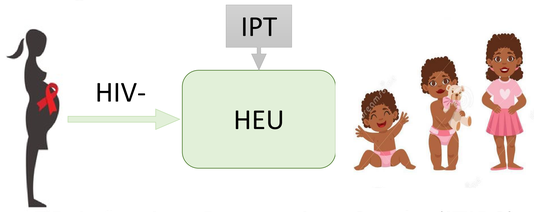
BACKGROUND

Isoniazid preventive therapy (IPT) decreases risk of tuberculosis (TB) disease.

In a recent randomized trial (RCT), we assessed IPT effects on infant growth.



METHODS

- The infant TB Infection Prevention Study (iTIPS) trial was a non-blinded RCT among HIV-exposed uninfected (HEU) infants (150 vs 150) in Kenya.
- Participants: Infants aged 6-10 weeks, birthweight >2.5 kg, and gestation >37 weeks
- Infants in the IPT arm received 10 mg/kg isoniazid daily for 12 months, while the control arm received no intervention.
- Post-trial observational follow-up continued through 24 months of age.
- We used intent-to-treat linear mixed-effects models to compare growth rates:
  - Weight-for-age z-score [WAZ], height-for-age z-score [HAZ], and weight-for-height z-score) between trial arms

RESULTS

- **There were no growth differences between trial arms, including in sex-stratified analyses.**
- **In longitudinal linear analysis, mean WAZ, HAZ, and WHZ z-scores were similar between arms.**
- **Infants in the IPT arm had a higher monthly WHZ increase (β to 24 months 0.02 [95% CI:0.01, 0.04]) than the no-IPT arm.**

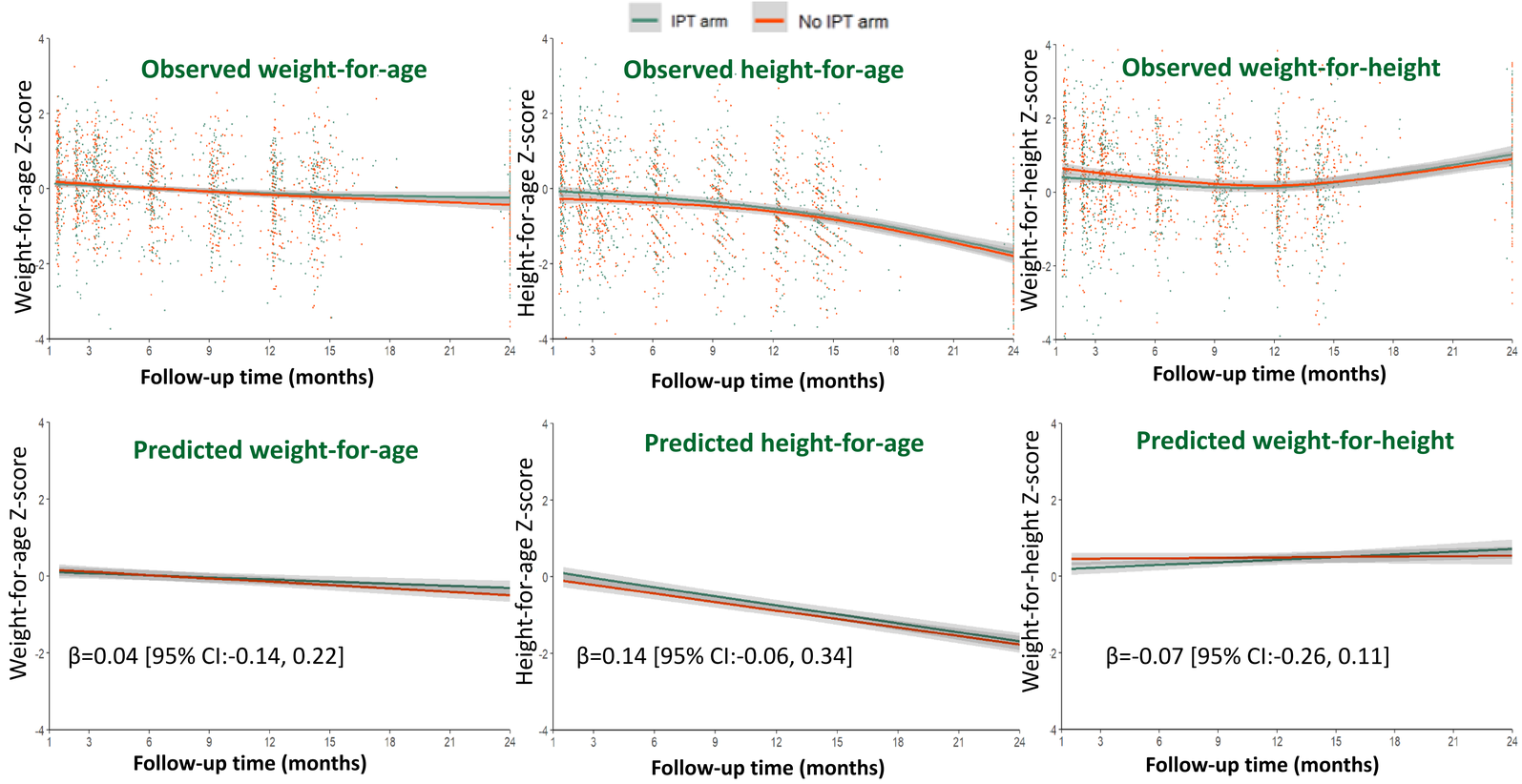


Figure: Scatter plots of change in WAZ, HAZ, and WHZ, over time by the randomized arm

CONCLUSIONS

- **IPT administered to HEU infants without known TB exposure did not significantly impact growth outcomes in the first two years of life.**

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