

# Monovalent rotavirus vaccine efficacy against different rotavirus genotypes

## A pooled analysis of Phase II and III trial data

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### Background

- Rotavirus vaccine efficacy seems lower in countries with high diversity of rotavirus genotypes
- Some evidence suggests VE is lower against specific rotavirus genotypes, like G2P[4]
- Most studies of genotype-specific VE are too underpowered to provide conclusive evidence
- G2P[4] is heterotypic with the most commonly used rotavirus formulation (RV1), which contains G1 and P[8] antigens

### Methods

- Pooled data from clinical trials of RV1
- Estimated non-specific, genotype-specific, and RV1-typic efficacy against any-severity and severe (Vesikari score  $\geq 11$ ) rotavirus gastroenteritis
- Logistic regression models adjusted for
  - Concomitant oral poliovirus and RV1 vaccination
  - Country's child mortality stratum

### Conclusions

- RV1 efficacy is diminished against fully heterotypic genotypes, include G2P[4]
- Efficacy against vaccine-type rotavirus is similar for any-severity and severe disease
- Need to evaluate cross-protection from other rotavirus vaccines

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### References

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