			Relative Efficacy of LAIV vs TIV (95% CI)	
Study	Age	N	Early (0–4 mo)	Late (4–8 mo)
Belshe et al	6–59 mo	7852	60% (-10, 87)	89% (53, 99)
Ashkenazi et al	6–71 mo	2085	34% (-56, 74)	61% (25, 80)
Fleming et al	6–17 y	2211	25% (-23, 54)	49% (1, 74)
Combined		12148	34% (3, 55)	62% (42, 76)

[Table]

Conclusions: For matched strains, the available data suggest that the relative efficacy of LAIV vs. TIV in children increases over time. Further research is needed to confirm these findings and to characterize the duration of protection provided by TIV in children. Sponsored by MedImmune.

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SEVERITY OF BREAKTHROUGH INFLUENZA ILLNESS AMONG CHILDREN AND ADULTS RECEIVING LIVE ATTENUATED INFLUENZA VACCINE AND TRIVALENT INACTIVATED INFLUENZA VACCINE

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Aims: The efficacies of live attenuated influenza vaccine (LAIV) and trivalent inactivated influenza vaccine (TIV) have been evaluated in children and adults in multiple studies; however, vaccine impact on illness severity has not been examined. This analysis compared illness severity among LAIV and TIV recipients who developed influenza illness using data from existing randomized studies. LAIV is approved for eligible individuals 2-49 years of age in the United States, Israel, Hong Kong, Macau, and South Korea.

Methods: Three studies in children, one wild-type challenge study in adults 18-45 years, and one study in adults ≥60 years compared LAIV and TIV efficacy and collected symptom duration and severity.

Results: In 2 studies of children < 6 years, a higher proportion of LAIV versus TIV breakthroughs were afebrile: 22% vs. 12% (P=0.001) and 28% vs. 5% (P=0.005). In one study, LAIV breakthroughs missed 1.6 (95% CI: 2.9, 0.2) fewer days of school/daycare and had less antibiotic use (17% LAIV vs. 33% TIV, P=0.11). No differences were seen in a study of children 6-17 years. In the adult challenge study, LAIV vaccinees tended to have lower mean symptom scores versus TIV and placebo recipients (2.7, 5.7, 9.2, respectively, P=NS except LAIV vs placebo). In the older adult study, LAIV breakthroughs had less feverishness (14% LAIV vs 46% TIV, P=0.05).

Conclusions: Among younger children, LAIV recipients who develop breakthrough influenza have less severe illness than TIV recipients. The same may be true among adults; however, more research is needed. Sponsored by MedImmune.

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THE INFLUENCE OF PROBIOTICS ON THE IMMUNOLOGIC RESPONSE TO VACCINATIONS IN INFANTS: A DOUBLE BLIND, PROSPECTIVE, PLACEBO CONTROLLED PILOT STUDY

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Background: Probiotics have been shown to be immunomodulatory and can affect antibody responses following vaccination. Several immunizations are associated with sub-optimal seroconversion rates leaving a substantial part of the population exposed to infection.

Objectives: to evaluate the influence of probiotic supplementation on the immune response of infants following Mumps, Measles, Rubella and Varicella vaccination.

Study design: a randomized, placebo-controlled, double blinded prospective trial was performed in a cohort of healthy infants. Study subjects were randomly assigned to receive probiotics or placebo for a total of five months, starting two months prior to vaccination. Antibody levels against vaccine components were measured three months after