

# Effect of maternal rotavirus immunization on milk and serum antibody titers

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This prospective study evaluated human milk and serum antirotavirus antibody concentrations following maternal rotavirus immunization. Postpartum women (33) were randomized into 3 groups and received a single oral dose of rhesus rotavirus monovalent reassortant vaccine (104pfu), tetravalent vaccine (104pfu), or placebo. Milk (secretory [s] IgA) and serum (IgA and IgG) specimens were tested for antirotavirus isotype-specific antibody. Sera also were tested for G1-to G4-specific antibody. Prevacine milk and serum isotype-specific antibody concentrations were not significantly different in the 3 groups. Postvacine sIgA log titers were significantly greater in the 2 vaccine groups than the placebo group ( $P = 0.002$ ). Mean  $\log_{10}$  titers at 1 week were 2.1 (95% confidence interval [CI], 2.0-2.3) in the 2 vaccine groups and 1.7 (95% CI, 1.5-1.9) in the placebo group. Milk titers did not differ between vaccine groups. There was no difference in reactogenicity between groups. The significantly hi