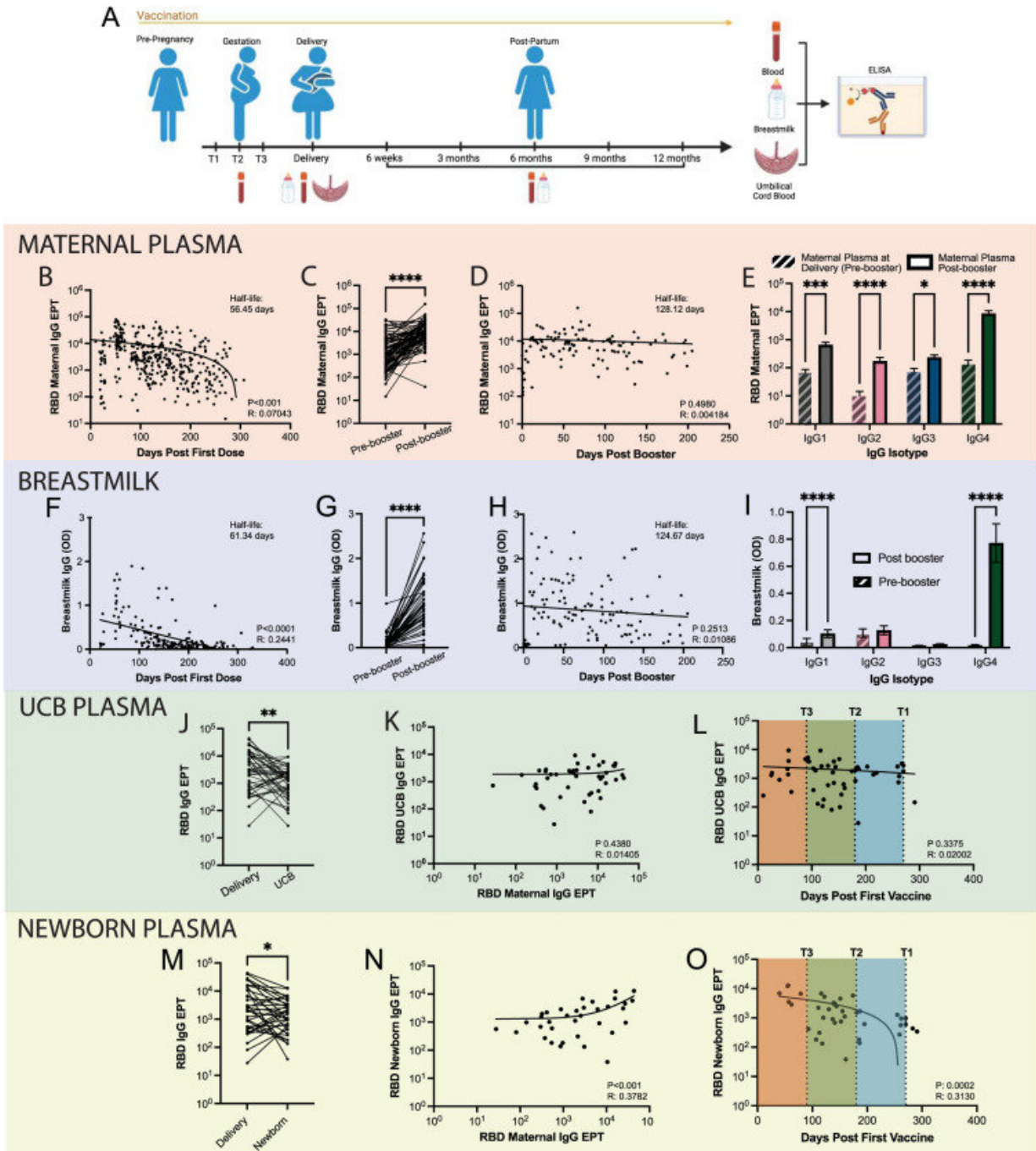


Researchers find vaccination protects mother and baby from COVID-19

January 11 2023, by Lindsay Travis



SARS-CoV-2 booster dose augments passive transfer of RBD-specific antibodies. A, Experimental design to investigate the impact of maternal SARS-CoV-2 vaccination on passive transmission of RBD-specific IgG antibodies by assessing antibody titers in maternal plasma, UCB plasma, newborn plasma, and breastmilk. B, RBD-specific IgG antibody titers in maternal plasma relative to days post first vaccination (n=370 samples). C, RBD-specific IgG antibody titers

50.59±4.46 days before and 55.74±4.14 days after booster dose (n=77 pairs). D, RBD-specific IgG antibody titers in maternal plasma relative to days post booster dose (n=112). E, IgG isotype levels 84.07±12.34 days before and 58.47±8.98 days after the booster dose (n=15 pairs). F, RBD-specific IgG levels in breastmilk after the first and second vaccine doses (n=179). G, Breastmilk IgG levels 37.84±3.80 days before and 55.32±5.30 days after booster (n=45 pairs). H, RBD-specific IgG antibodies in breastmilk after maternal booster vaccination (n=123). I, Levels of RBD-specific IgG isotypes in breastmilk 57.50±8.17 days before (n=28) and 117.23±11.32 days after the booster dose (n=44). J, RBD-specific IgG titers in maternal circulation and umbilical cord plasma at delivery (n=45 pairs). K, Correlation between UCB and maternal RBD-specific IgG titers at delivery (n=45). L, RBD-specific IgG titers in UCB relative to days since first maternal vaccine dose (n=48). M, Overall comparison between maternal RBD-specific IgG antibodies at delivery and newborn RBD-specific IgG titers, independent of trimester at initial vaccination (n=35 pairs). N, Correlation (n=35) between RBD-specific IgG titers in newborn and maternal plasma at delivery. O, RBD-specific IgG titers in newborn plasma relative to days post maternal vaccination. Bar graphs show median values with the standard error of the mean. Asterisk indicates P

Citation: Researchers find vaccination protects mother and baby from COVID-19 (2023, January 11) retrieved 13 February 2024 from <https://medicalxpress.com/news/2023-01-vaccination-mother-baby-covid-.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.