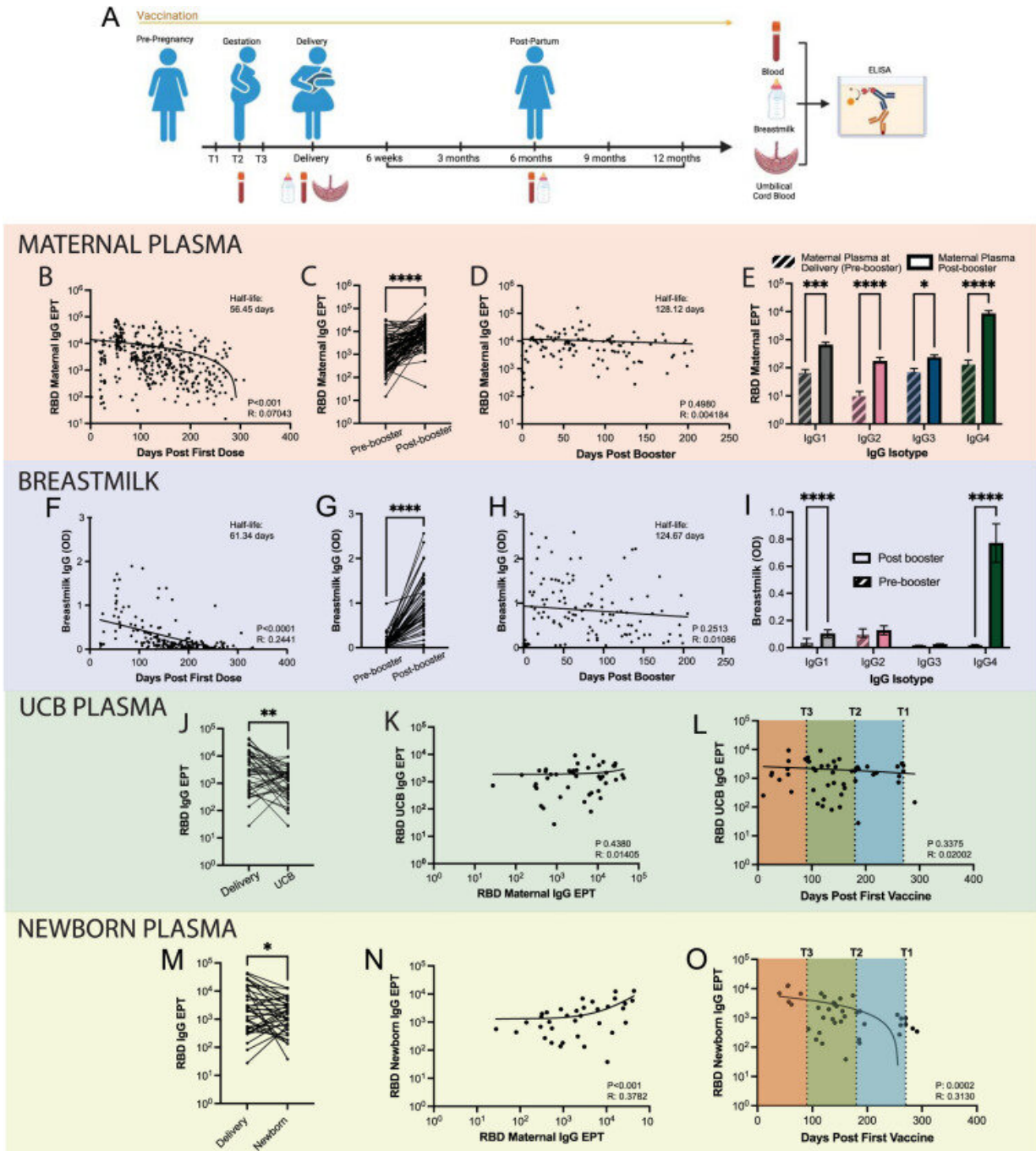


Researchers find vaccination protects mother and baby from COVID-19

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

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