

# Prevention of Mother-to-Child HIV transmission in African children in the first year of life



A recent study published in The Lancet showed the efficacy and safety of two infant drug regimens (lamivudine or lopinavir–ritonavir) to prevent postnatal HIV-1 transmission up to 50 weeks of breastfeeding in Africa. This is the first study to show the success of ARV provision to prevent mother-to-child transmission beyond six months.

The authors report on randomised controlled trial in four sites in Burkina Faso, South Africa, Uganda, and Zambia in children born to HIV-1-infected mothers not eligible for antiretroviral therapy (CD4 count  $>350$  cells per  $\mu\text{L}$ ). The study enrolled and randomised 1273 infants and analysed 1236; 615 assigned to lopinavir–ritonavir or 621 assigned to lamivudine. There were 17 HIV-1 infections diagnosed in the study period (eight in the lopinavir–ritonavir group and nine in the lamivudine group), resulting in cumulative HIV-1 infection of 1.4% (95% CI 0.4–2.5) and 1.5% (0.7–2.5), respectively.

These data show that Infant HIV-1 prophylaxis with lopinavir–ritonavir was equal in effectiveness to lamivudine and “both drugs led to very low rates of HIV-1 postnatal transmission for up to 50 weeks of breastfeeding.” The importance of this study is that infant pre-exposure

prophylaxis can be safely prolonged until the end of HIV-1 exposure, when many mothers are encouraged to exclusively breast-feed for up to the first year of life.

[Nagot, N. et al. 2015. Extended pre-exposure prophylaxis with lopinavir–ritonavir versus lamivudine to prevent HIV-1 transmission through breastfeeding up to 50 weeks in infants in Africa \(ANRS 12174\): a randomised controlled trial. \*The Lancet\*.](#)