# ABC-ZDV-3TC versus LPV-RTV + ZDV-3TC for PMTCT Mma Bana Trial



# ABC-ZDV-3TC versus LPV-RTV + ZDV-3TC for PMTCT Mma Bana: Study Design

#### **Study Design: Mma Bana**

- Background: Randomized, controlled trial comparing antiretroviral therapy regimens in pregnancy and breastfeeding to evaluate differences in efficacy, pregnancy outcomes, and toxic effects in mothers and infants
- Inclusion Criteria (n=560 + 170 observational)
  - HIV-infected pregnant women
  - Treatment-naïve
  - CD4 ≥200 cells/mm³ for randomized groups
  - CD4 <200 cells/mm<sup>3</sup> for observational group
- Treatment Arms
  - NRTI group: ABC-ZDV-3TC 300-300-150 mg BID
  - *PI group*: LPV-RTV 400/100 mg BID + ABC-ZDV-3TC 300-300-150 mg BID
  - -Observational group: NVP + ZDV-3TC 300-150 mg BID

PI group
LPV-RTV + ZDV-3TC
(n=275)

Observational group

NVP + ZDV-3TC

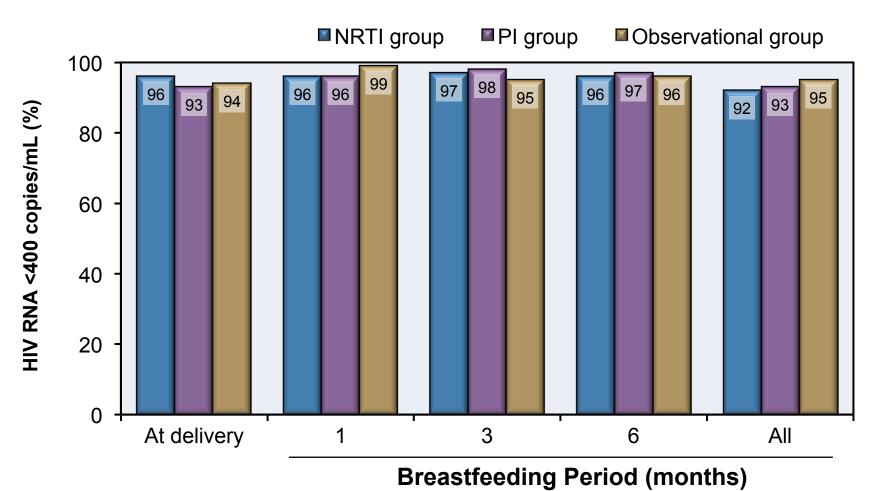
(n=170)

\*Women in NRTI and PI groups treated from 26-34 weeks' gestation through 6 months. All infants received single-dose NVP + 4 weeks AZT



#### ABC-ZDV-3TC versus LPV-RTV + ZDV-3TC for PMTCT Mma Bana: Result

Delivery and Breastfeeding Virologic Outcomes, by Study Group

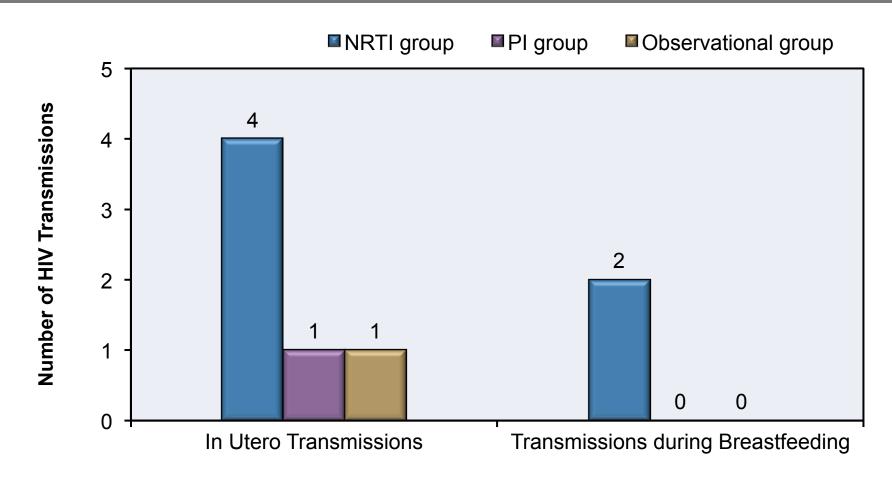


Source: Shapiro RL, et al. N Engl J Med. 2010;362:2282-94.



#### ABC-ZDV-3TC versus LPV-RTV + ZDV-3TC for PMTCT Mma Bana: Result

Through 6 Months Post-Partum: Mother-to-Child HIV Transmissions





## ABC/ZDV/3TC versus LPV-RTV + ZDV/3TC for PMTCT Mma Bana: Results

Mma Bana: Adverse Events at 6 Months				
Events in Mothers	<b>NRTI group</b> (n = 285)	<b>PI group</b> (n = 275)	Control group (n = 170)	
Death	<1	0	2	
≥1 grade 3 or 4 diagnosis	6	6	15	
Any grade 3 or 4 laboratory event	15	12	18	
Common grade 3 or laboratory event				
Anemia	5	4	11	
Neutropenia	6	2	11	
Elevated ALT, AST, or total bilirubin	1	1	1	
Elevated level of amylase or lipase	2	3	8	
Treatment-modifying adverse event	2	2	11	



## ABC/ZDV/3TC versus LPV-RTV + ZDV/3TC for PMTCT Mma Bana: Results

Mma Bana: Adverse Events at 6 Months				
Events in Infants	NRTI group (n = 283)	<b>PI group</b> (n = 270)	Control group (n = 156)	
Death	2	3	4	
≥1 grade 3 or 4 diagnosis	10	6	8	
Any grade 3 or 4 laboratory event	41	46	41	
Common grade 3 or laboratory event				
Anemia	13	16	20	
Neutropenia	15	18	22	
Elevated ALT, AST, or total bilirubin	12	16	3	



#### ABC/ZDV/3TC versus LPV-RTV + ZDV/3TC for PMTCT Mma Bana: Conclusions

**Conclusions**: "All regimens of HAART from pregnancy through 6 months post partum resulted in high rates of virologic suppression, with an overall rate of mother-to-child transmission of 1.1%."



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