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Question: Should AZT/3TC/NVP vs AZT (+/- single dose NVP) be used for HIV-1 Infected Pregnant Women With CD4<200?

Settings: Resource Limited

Bibliography: Hwan-Bae W, et al. Hematologic and Hepatic Toxicities Associated With Antenatal and Postnatal Exposure to Maternal Highly Active Antiretroviral Therapy Among Infants. AIDS 2008; 22: 1633- 1640.

Quality assessment							Summary of findings					Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No of patients		Effect		Quality	
							AZT/3TC/NVP	AZT (+/- single dose NVP)	Relative (95% CI)	Absolute		
HIV-Transmission or Death at 7 Months												
1	observational studies	no serious limitations	no serious inconsistency	no serious indirectness	serious ¹	none	7/69 (10.1%)	28/109 (25.7%)	RR 0.39 (0.18 to 0.85)	157 fewer per 1000 (from 39 fewer to 211 fewer)	⊕○○○ VERY LOW	CRITICAL
Maternal Grade 3/4 Severe Adverse Events - not reported												
0	-	-	-	-	-	none	0/0 (0%)	0/0 (0%)	-	-		CRITICAL
Clinical, Immunologic, and Virologic Response to Anti-Retroviral Therapy - not reported												
0	-	-	-	-	-	none	0/0 (0%)	0/0 (0%)	-	-		IMPORTANT
Infant Grade 3/4 Severe Adverse Events at Birth												
1 ²	observational studies	no serious limitations	no serious inconsistency	no serious indirectness	serious ^{1,3}	none	4/69 (5.8%)	5/109 (4.6%)	RR 1.26 (0.35 to 4.54)	12 more per 1000 (from 30 fewer to 162 more)	⊕○○○ VERY LOW	IMPORTANT
Prematurity												
1	observational studies	no serious limitations	no serious inconsistency	no serious indirectness	serious ^{1,3}	none	5/69 (7.2%)	14/109 (12.8%)	RR 0.56 (0.21 to 1.5)	57 fewer per 1000 (from 101 fewer to 64 more)	⊕○○○ VERY LOW	IMPORTANT
Mother to Child Transmission at Birth												
1	observational studies	no serious limitations	no serious inconsistency	no serious indirectness	serious ^{1,3}	none ⁴	1/69 (1.4%)	9/109 (8.3%)	RR 0.18 (0.02 to 1.36)	68 fewer per 1000 (from 81 fewer to 30 more)	⊕○○○ VERY LOW	NOT IMPORTANT
Mother to Child Transmission at 1 Month												
1	observational studies	no serious limitations	no serious inconsistency	no serious indirectness	serious ¹	none	2/69 (2.9%)	14/109 (12.8%)	RR 0.23 (0.05 to 0.96)	99 fewer per 1000 (from 5 fewer to 122 fewer)	⊕○○○ VERY LOW	NOT IMPORTANT
Mother to Child Transmission Cumulative by 7 Months												
1	observational studies	no serious limitations	no serious inconsistency	no serious indirectness	serious ¹	none ⁴	2/69 (2.9%)	21/109 (19.3%)	RR 0.15 (0.04 to 0.62)	164 fewer per 1000 (from 73 fewer to 185 fewer)	⊕○○○ VERY LOW	NOT IMPORTANT

¹ Small numbers of events.

² Hepatic severe adverse events were not provided at this timepoint, the authors provided hematologic severe adverse events only.

³ Confidence interval crosses one.

⁴ Although a large effect, there are few events from one small observational study