

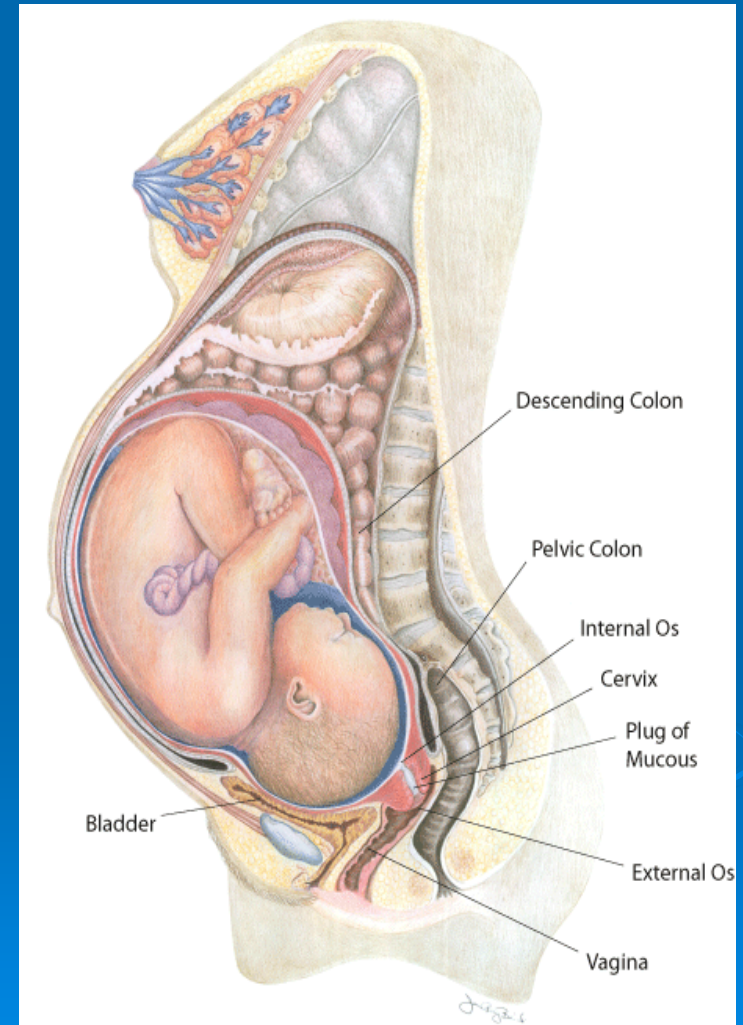
The Management of HIV-Positive Pregnant Women



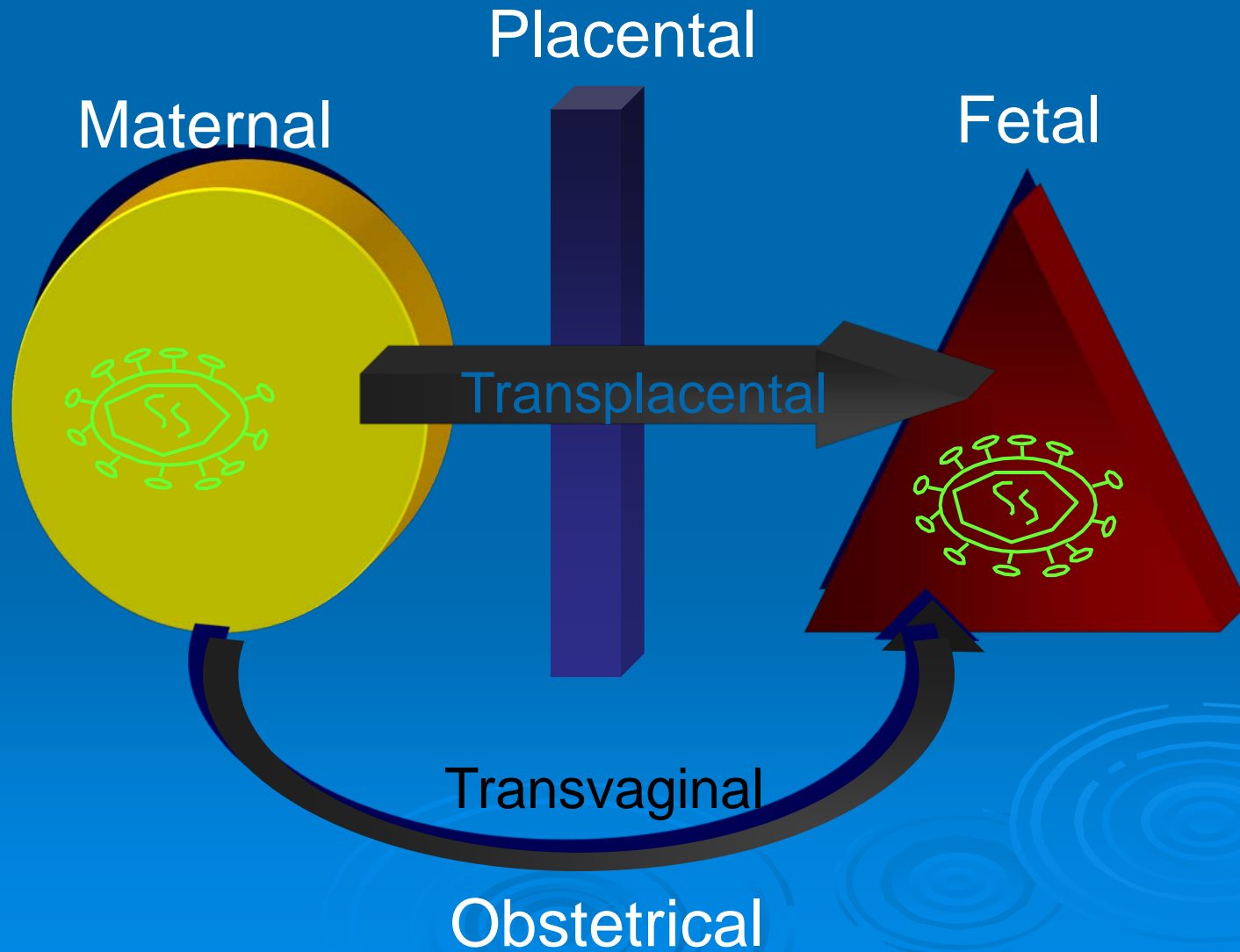
Goals of Antiretroviral Therapy

Treatment of mother

Protection of fetus



Mother to Child Transmission of HIV



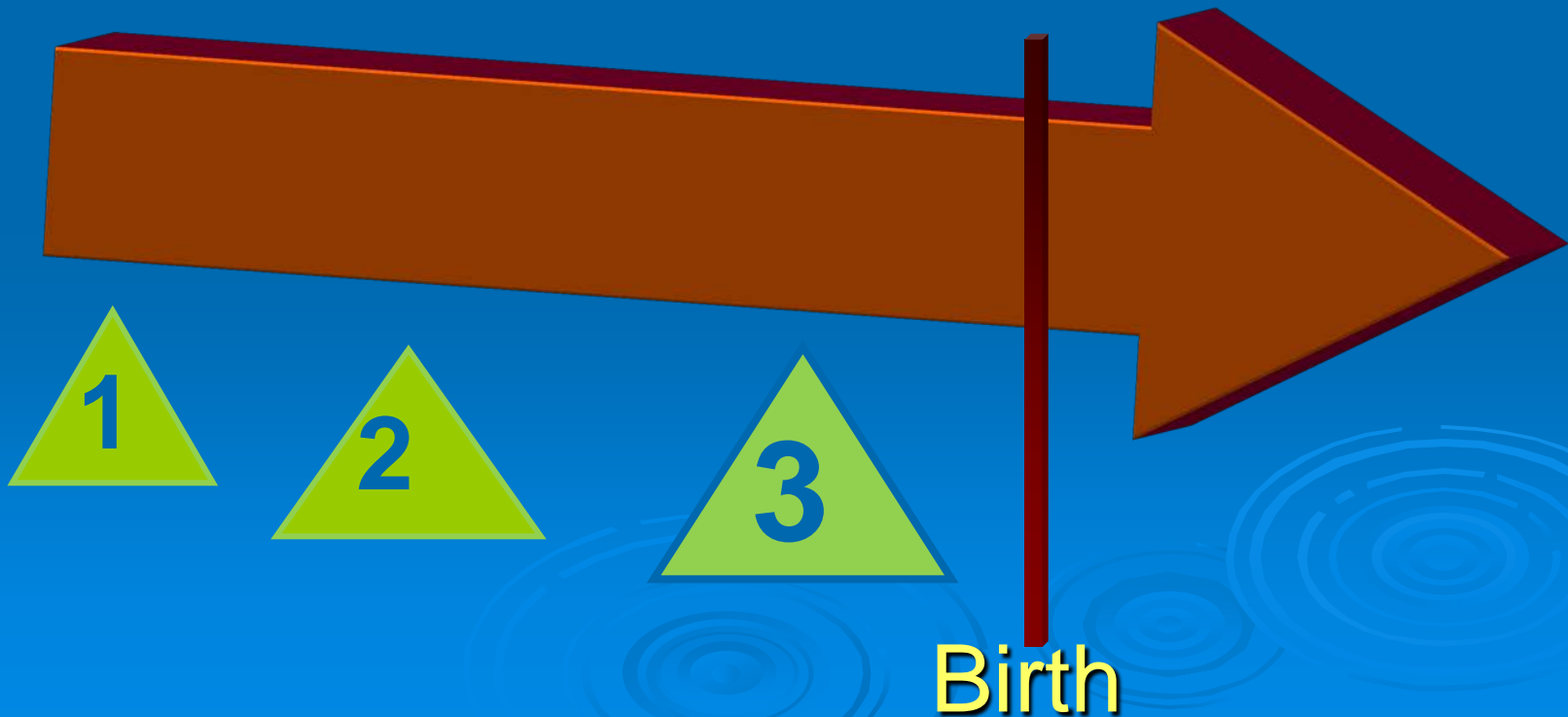
Timing of Transmission

1 / 3

2 / 3

Antepartum (in utero)

peripartum



Variables Associated with Perinatal Transmission

➤ Viral Factors

- Maternal HIV RNA level
- Strain Variation
- Plasma vs. Genital tract viral load
- Genotypic Resistance

➤ Maternal

- STDs
- Vitamin A Deficiency
- CD4 cell count
- Substance abuse
- Cigarette smoking
- Use of Antiretrovirals
- Sexual Behavior

➤ Obstetrical Factors

- Duration of Ruptured Membranes
- Placental disruption-including abruption or chorioamnionitis
- Invasive fetal monitoring
- Episiotomy, forceps
- Vaginal Delivery

➤ Fetal Factors

- Immature immune system
- Gestational Age at delivery

➤ Breastfeeding

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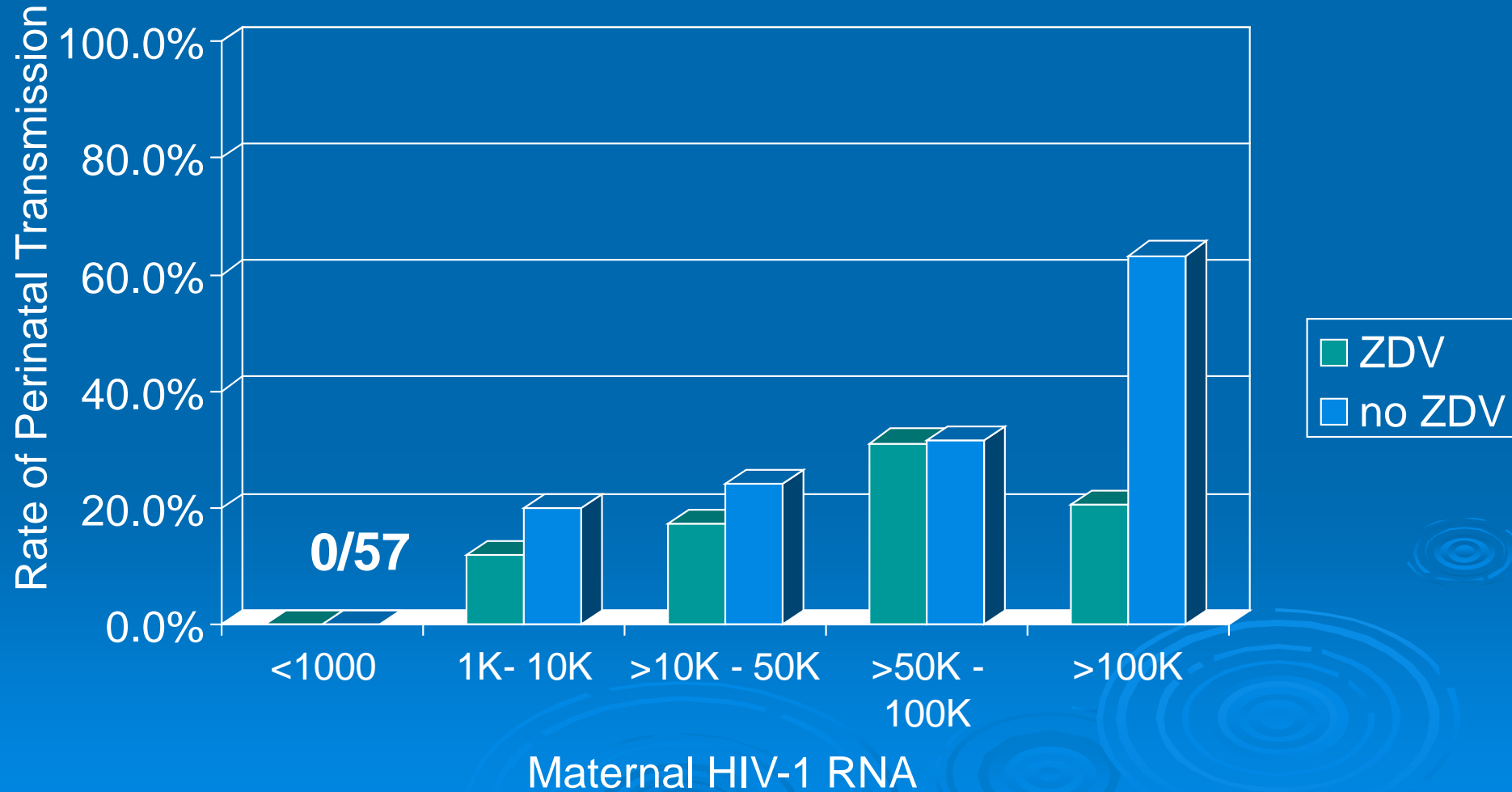
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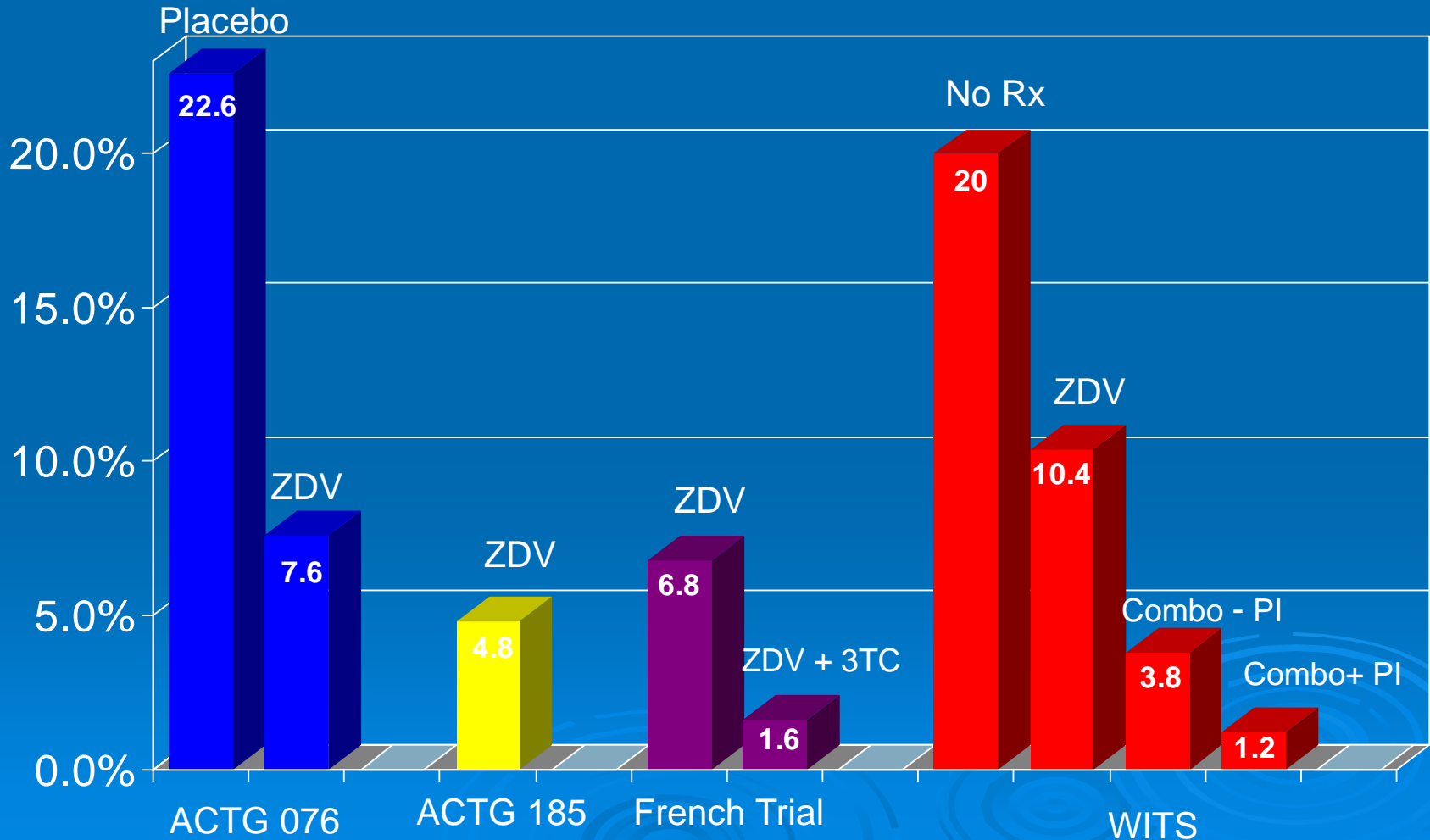
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Perinatal Transmission Rate by Maternal HIV-1 RNA - WITS



Rate of Perinatal HIV-1 Transmission by ARV Therapy category



AZT

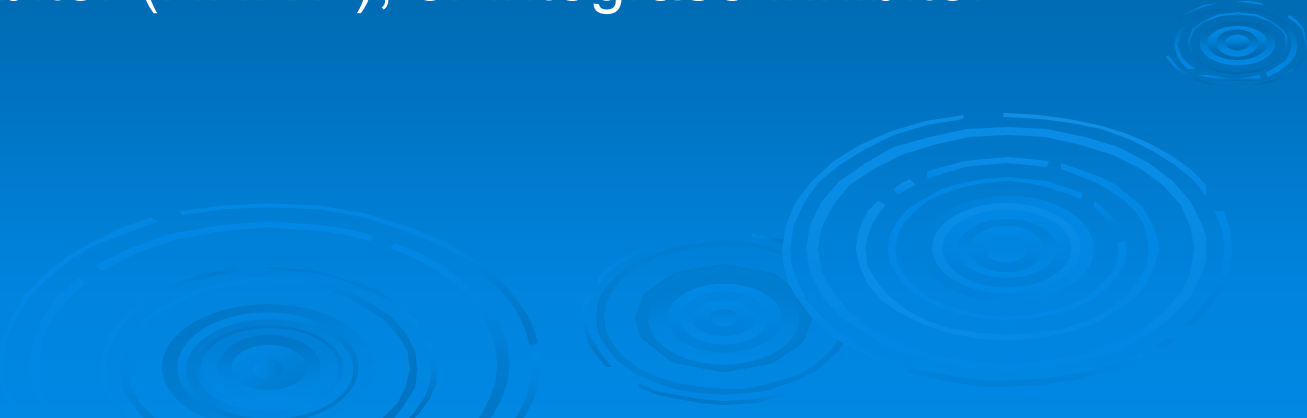
- Placental passage of AZT is excellent
- That of other ARVs is variable
- When combination ARV therapy is initiated during pregnancy, AZT should be included as a component of antenatal therapy whenever possible
- If antenatal AZT use is not possible, at least one agent with known transplacental passage should be part of the ARV regimen

Combination Therapy

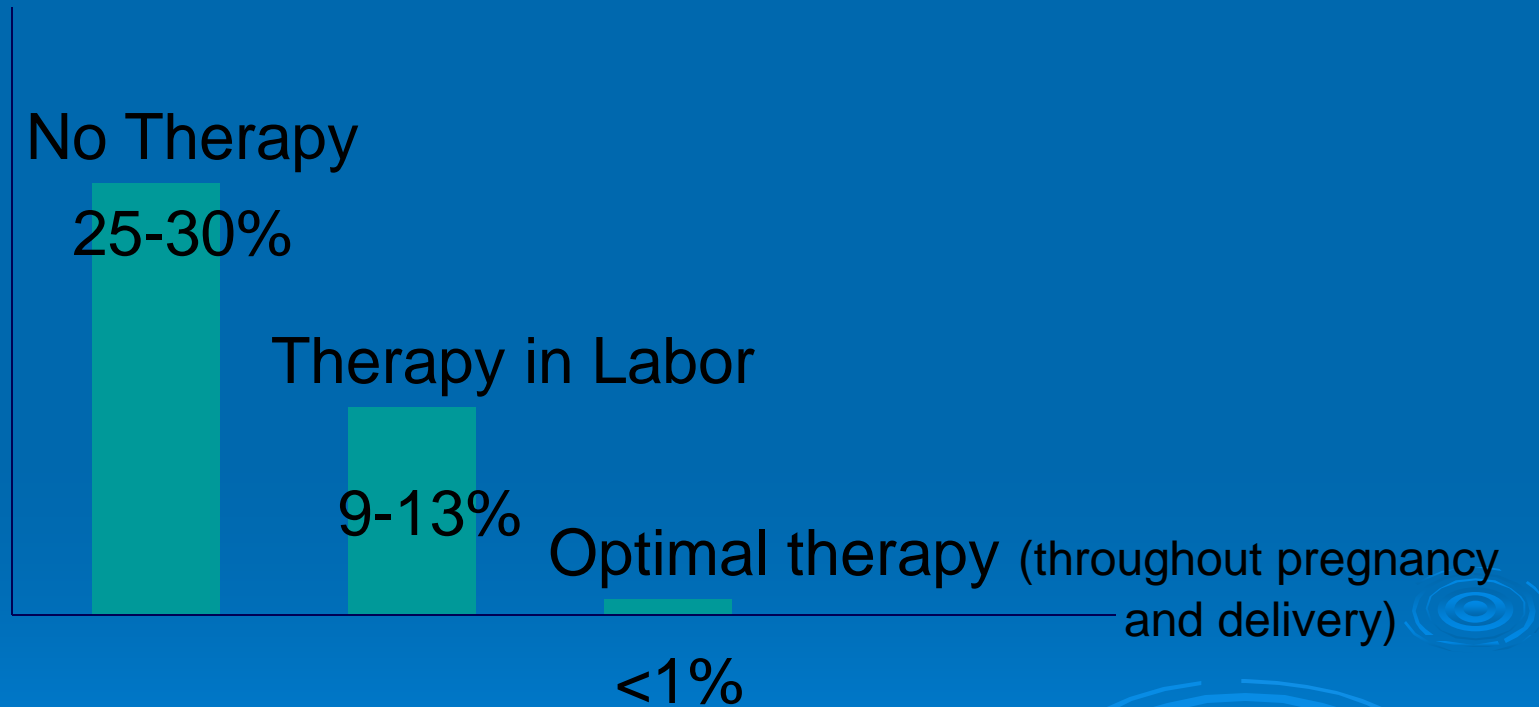
Two nucleoside/nucleotide reverse transcriptase inhibitors
(NRTIs)

plus

protease inhibitor (PI), non-nucleoside reverse transcriptase
inhibitor (NNRTI), or integrase inhibitor

A decorative graphic consisting of several sets of concentric circles, resembling ripples in water, located in the bottom right corner of the slide.

Optimal Intervention = Prevention of Transmission



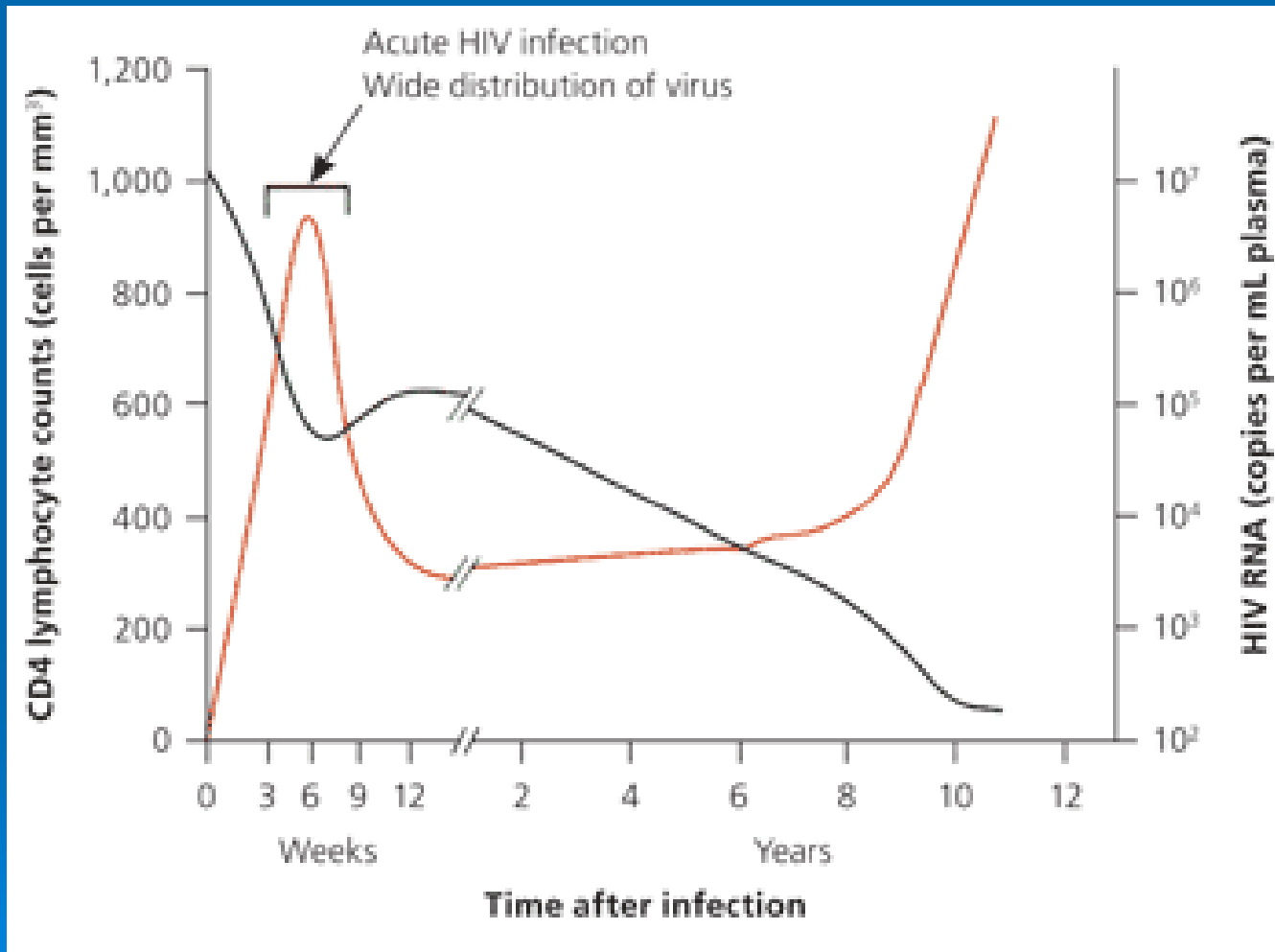
Wade, et al. 1998 NEJM 339;1409-14

Guay, et al. 1999 Lancet 354;795-802

Fiscus, et al. 2002 Ped Inf Dis J 21;664-668

Moodley, et al. 2003 JID 167;725-735

Acute HIV Infection



Seroconversion in Pregnancy

- Most seroconversions in pregnancy are not detected
- Viremia associated with acute infection increases risk of MTCT
- Many national guidelines do not recommend combination therapy for women with high CD4
- Generally few national guidelines for acute infection in pregnancy exist

IMPLICATIONS FOR ASPIRE

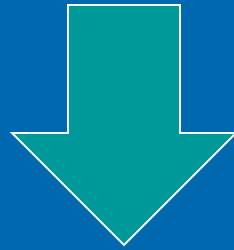


Implications for ASPIRE

- Pregnant women who seroconvert
 - Monthly HIV testing will lead to prompt diagnosis
 - These women will have high viral loads and high CD4 counts
 - National guidelines in place may not recommend combination therapy
 - It is our ethical obligation to see that our participants get optimal care

Implications for ASPIRE

Pregnancy + Seroconversion



Immediate Combination Therapy

Implications for ASPIRE

- Your site will have to negotiate with HIV providers
- Please notify PSRT of these situations



Implications for ASPIRE

- Seroconverters who become pregnant
 - Monthly pregnancy testing will lead to prompt diagnosis
 - Imperative that these women receive antiretrovirals in accordance with your national standard of care for the prevention of MTCT
 - Please notify PSRT of these situations

What Are Your Plans?

