

HIV PrEP Medications: Mechanism of Action

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Last Updated: January 4, 2024

HIV PrEP Medications

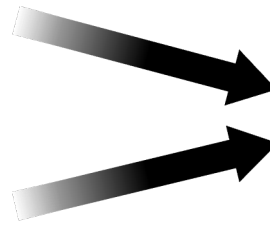
- Tenofovir disoproxil fumarate-emtricitabine (TDF-FTC)
- Tenofovir alafenamide-emtricitabine (TAF-FTC)
- Long-acting injectable cabotegravir (CAB-LA)

HIV PrEP Medications

Prodrugs

Tenofovir disoproxil fumarate

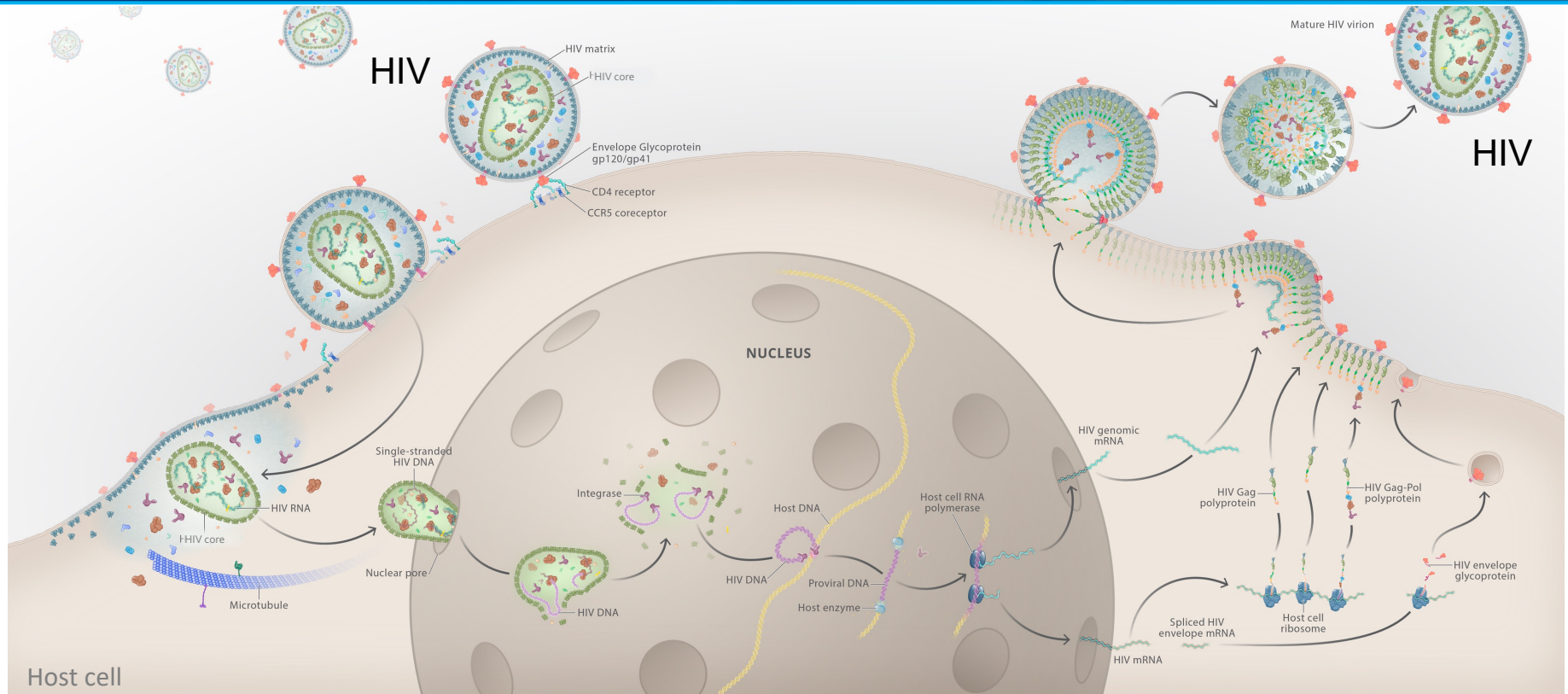
Tenofovir alafenamide



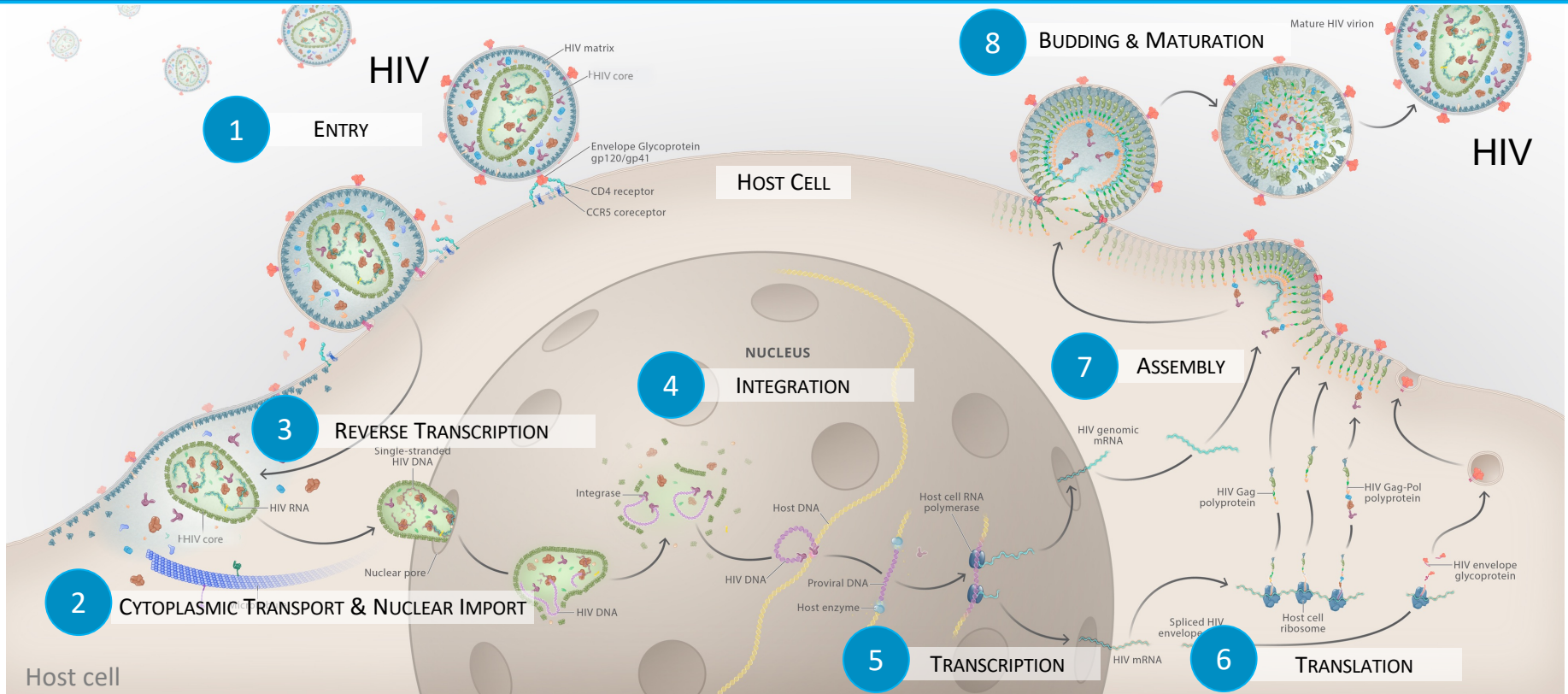
Drug Form

Tenofovir

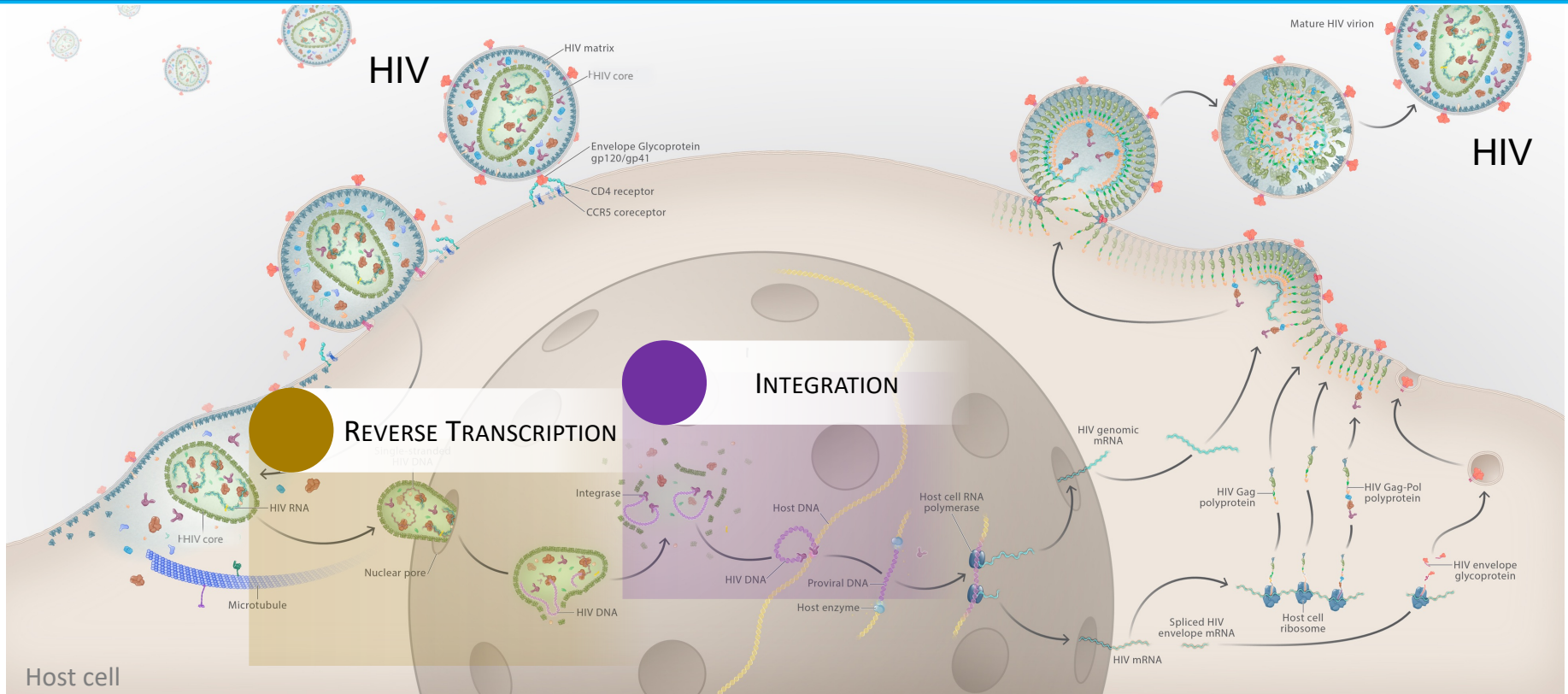
HIV Life Cycle



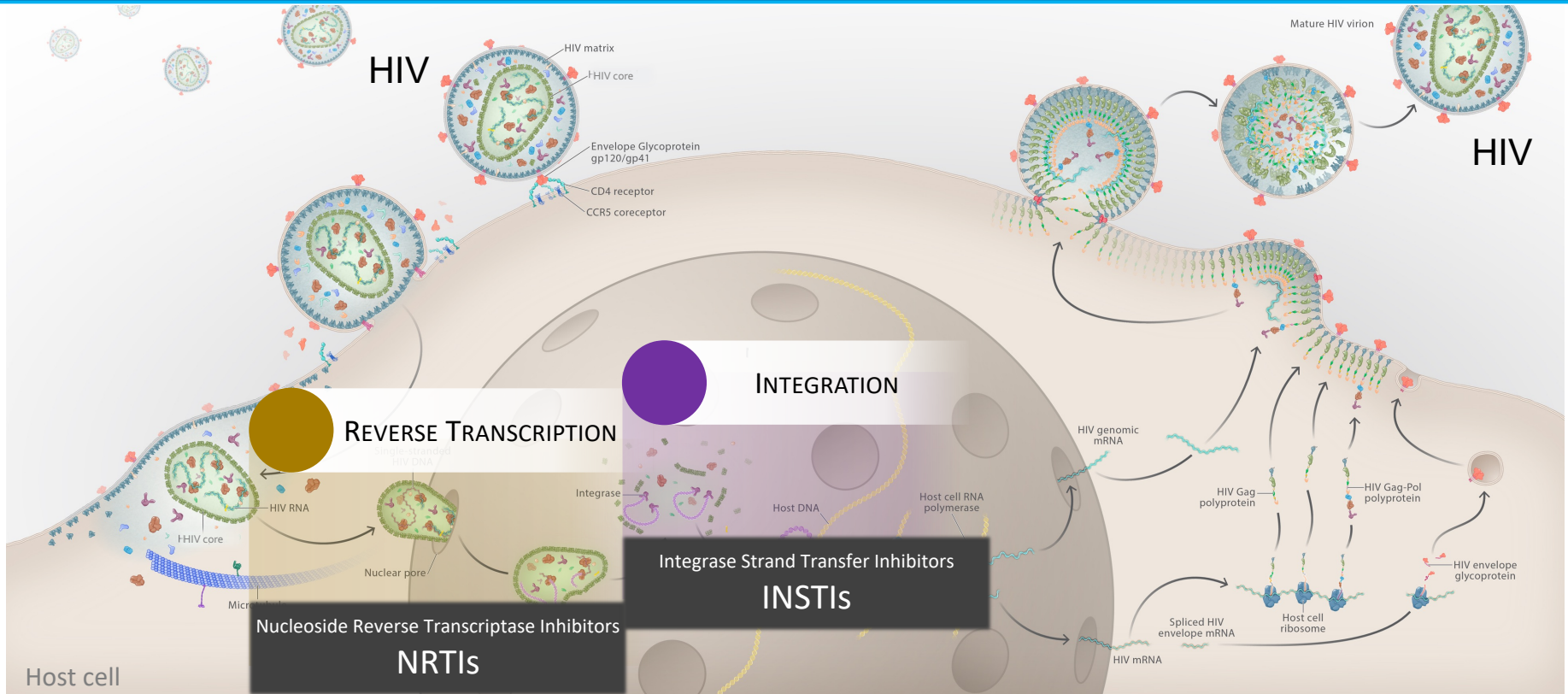
HIV Life Cycle



HIV Life Cycle



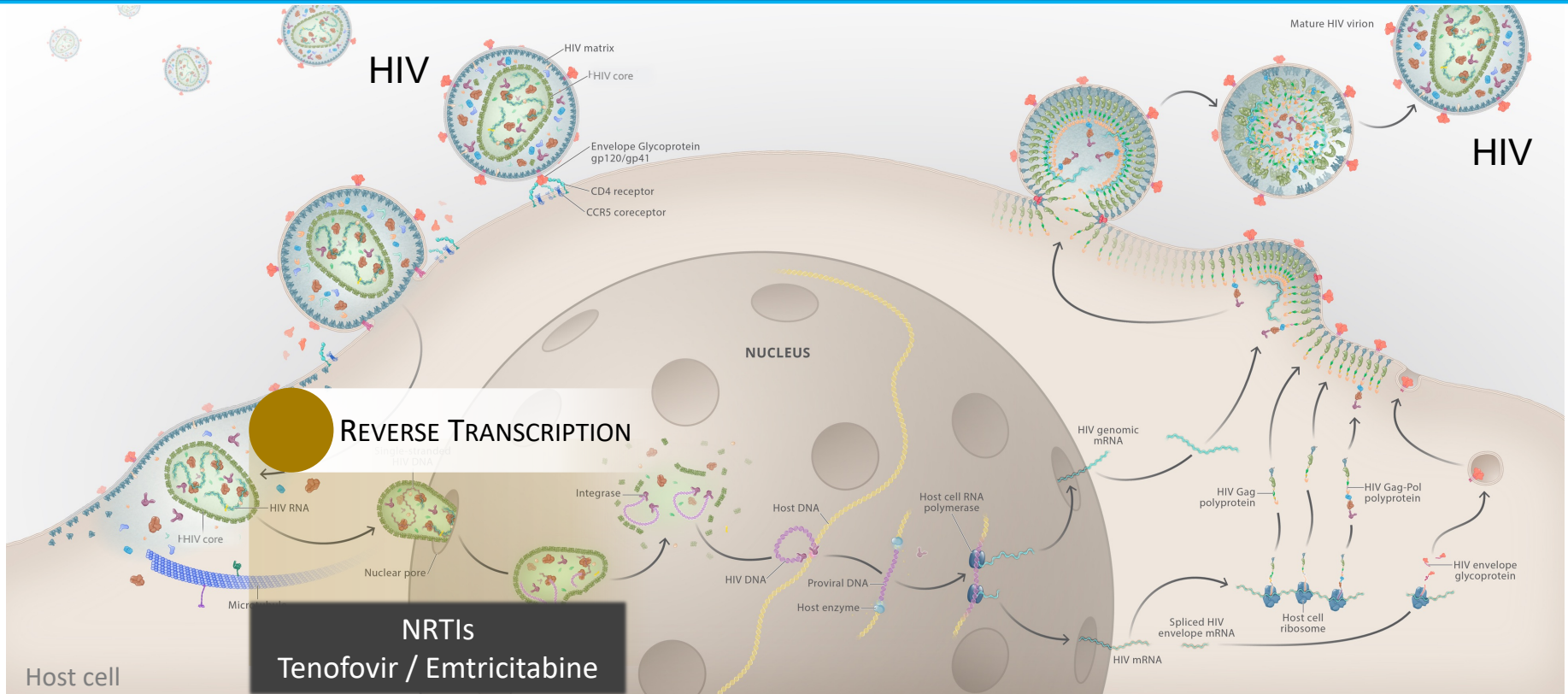
HIV Life Cycle: Sites of Action for HIV PrEP Medications



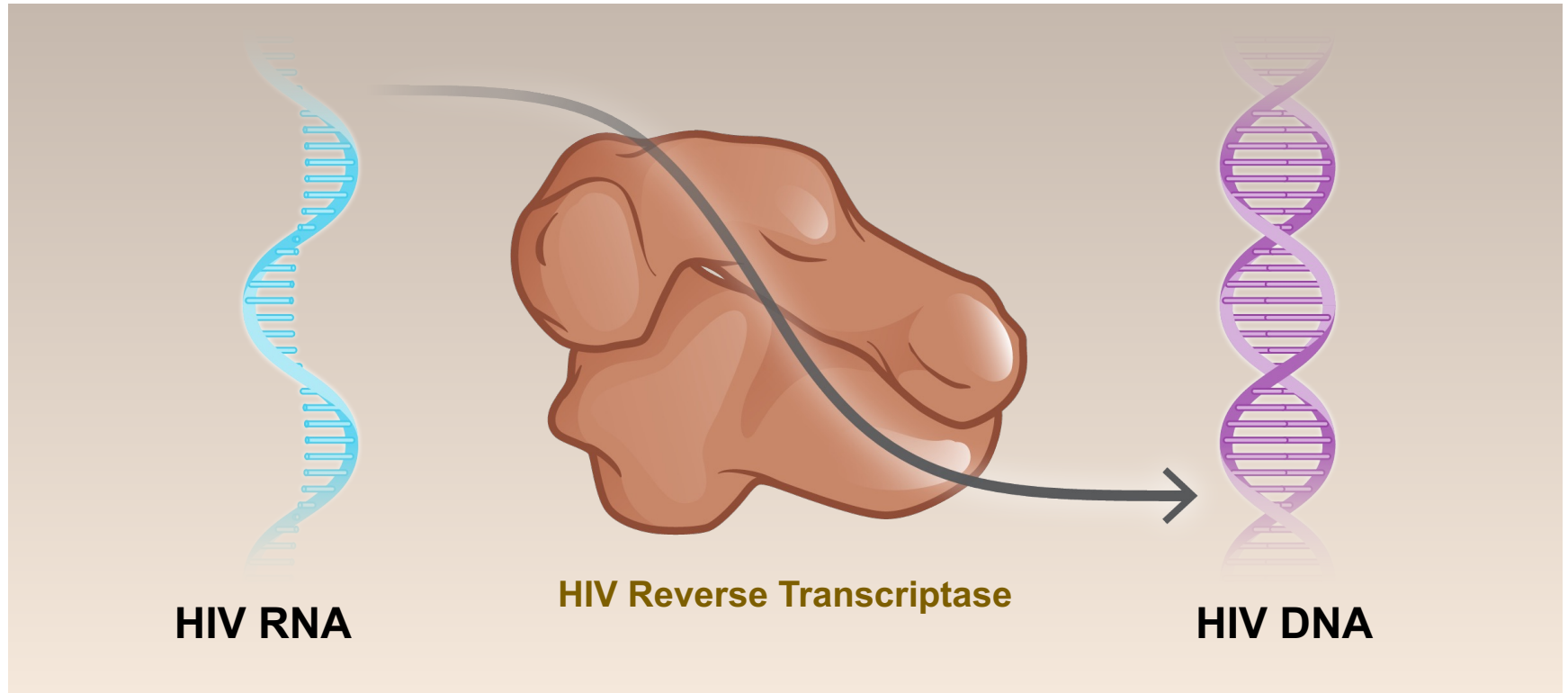
Mechanism of Action of HIV PrEP Medications

- **Nucleoside Reverse Transcriptase Inhibitors (NRTIs)**
 - Tenofovir
 - Emtricitabine
- **Integrase Strand Transfer Inhibitor (INSTI)**
 - Cabotegravir

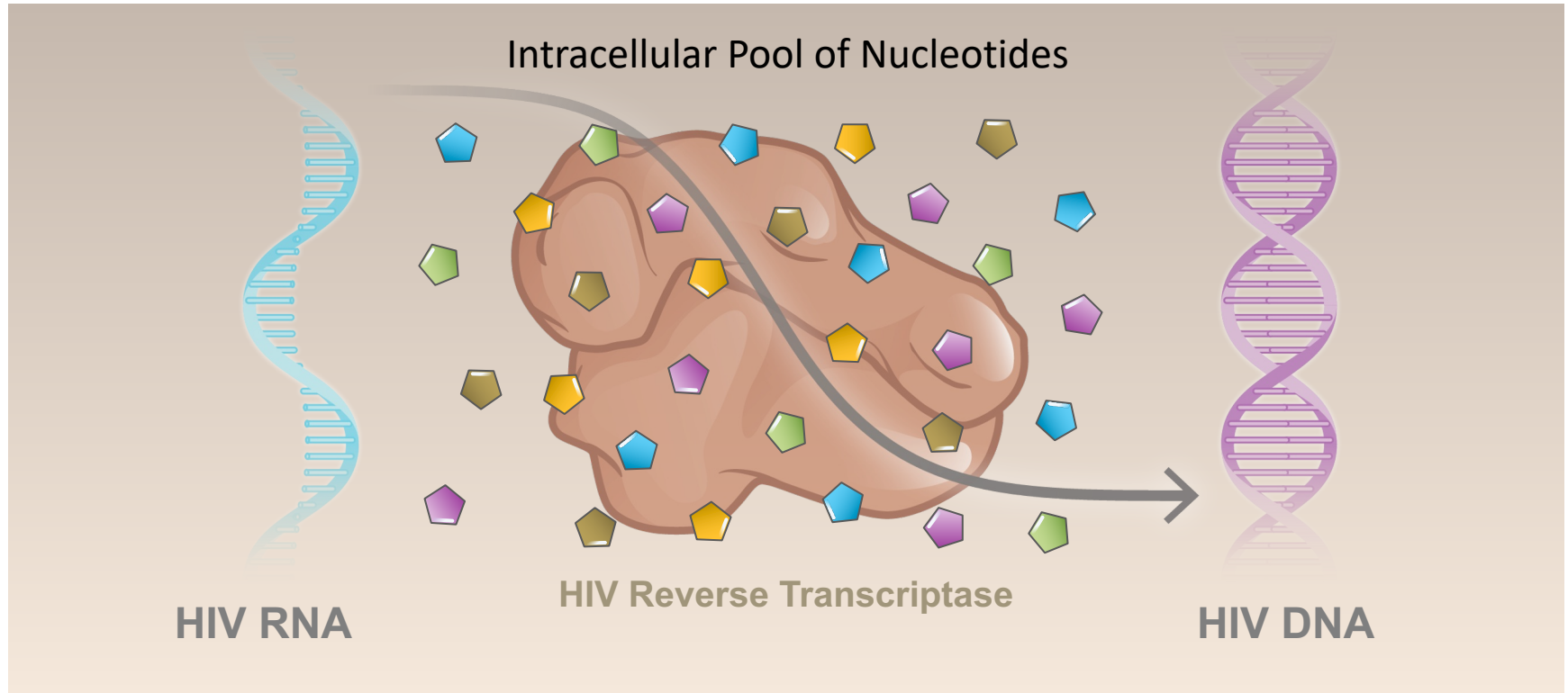
HIV Reverse Transcription



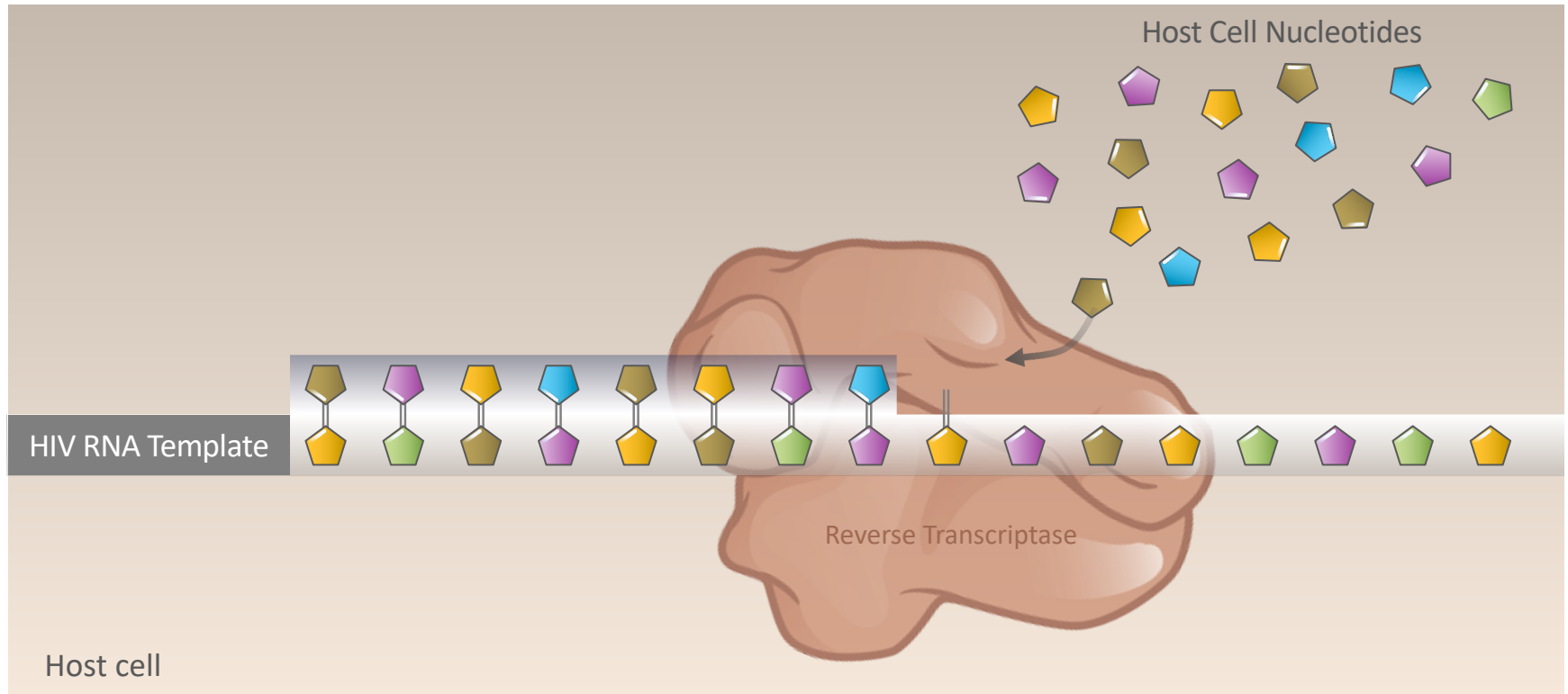
HIV Reverse Transcription



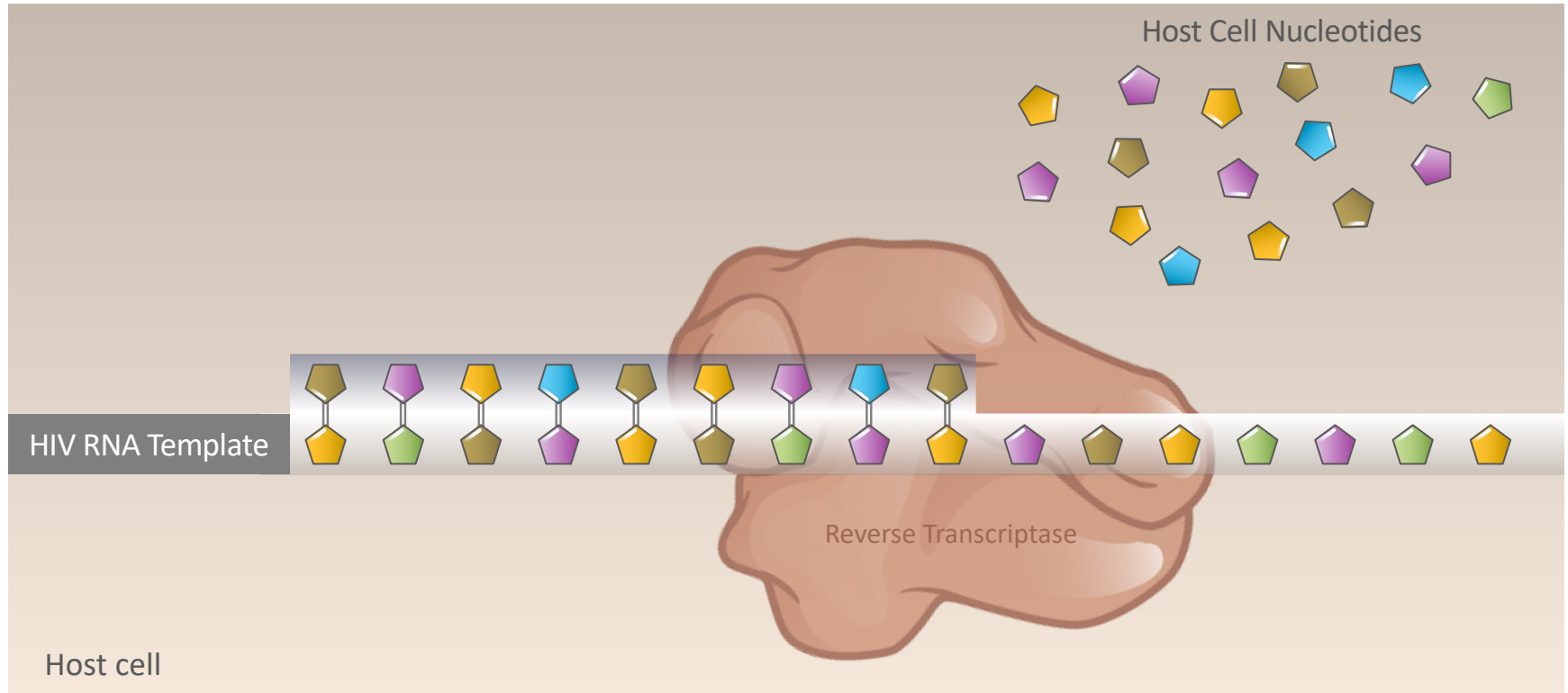
HIV Reverse Transcription



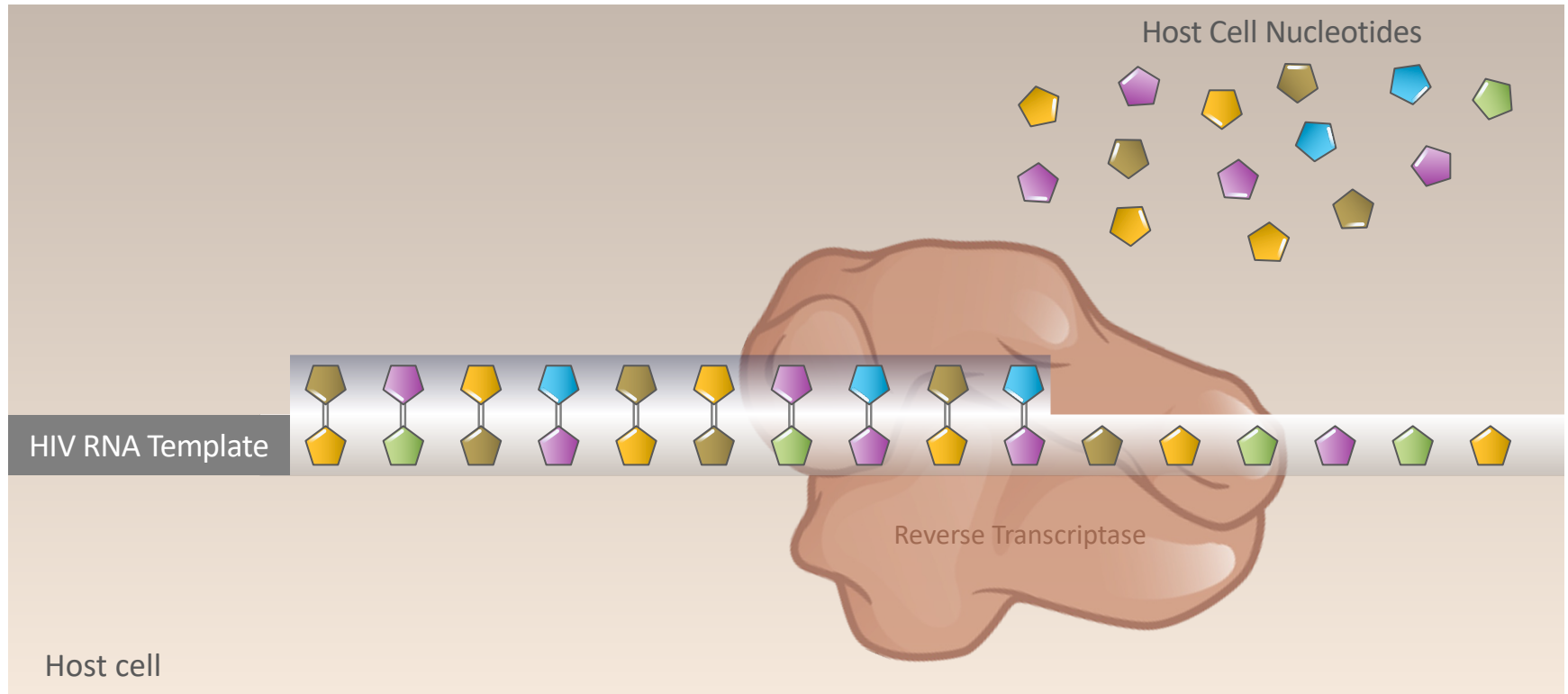
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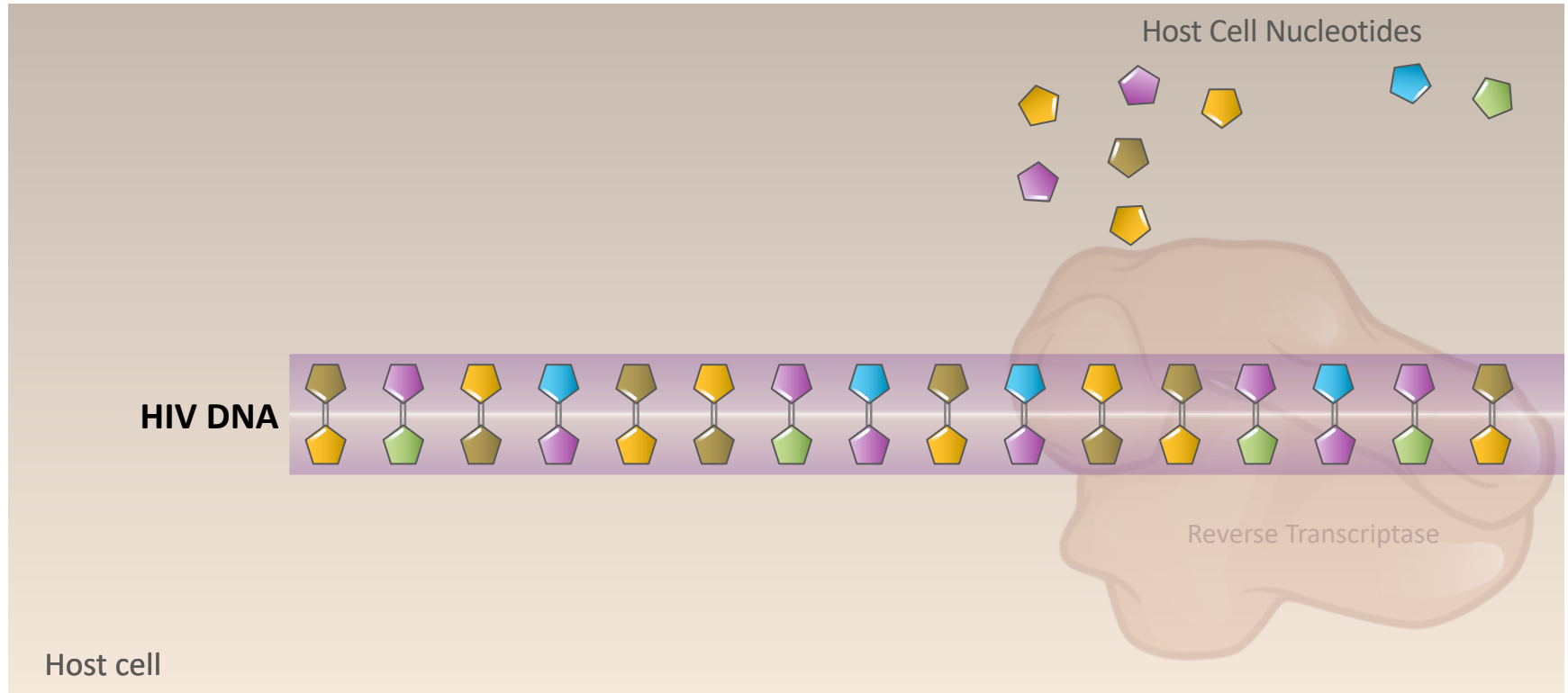
HIV Reverse Transcription



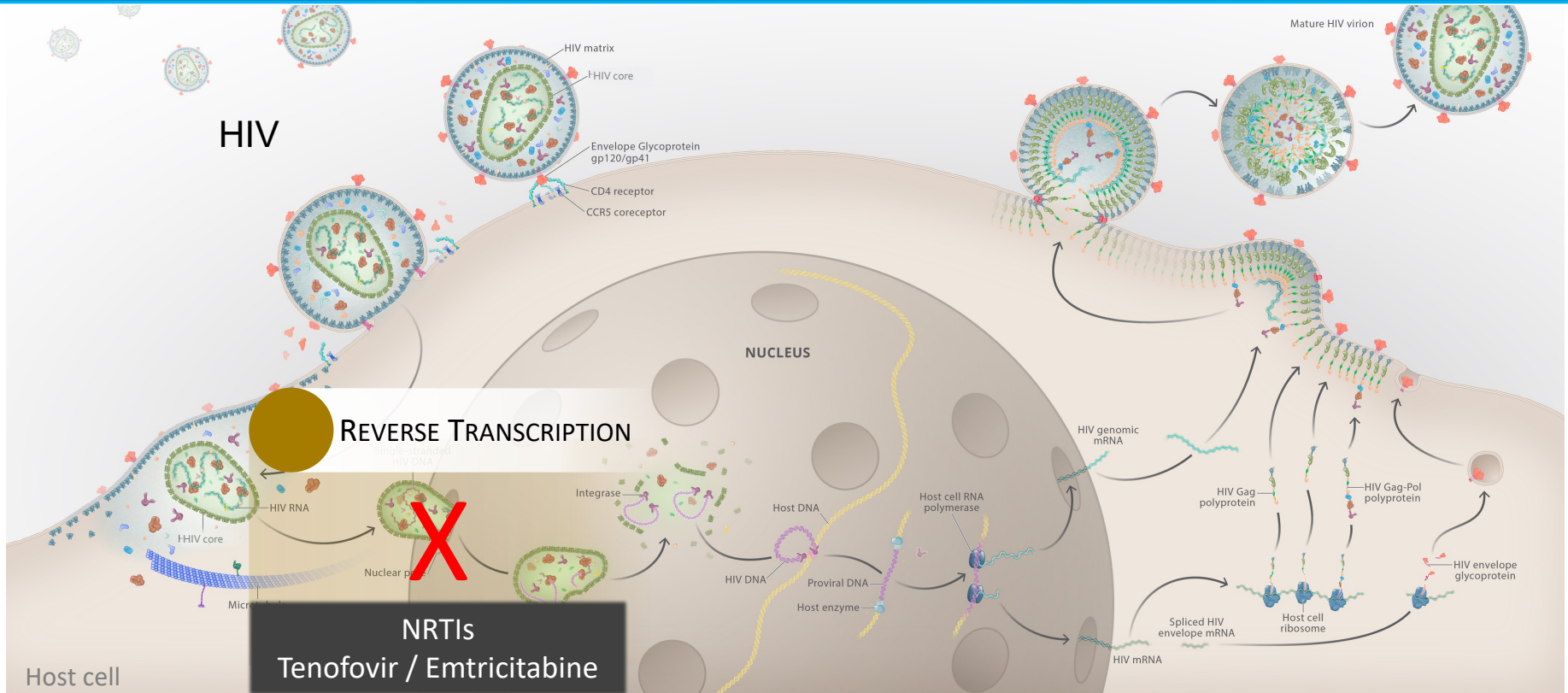
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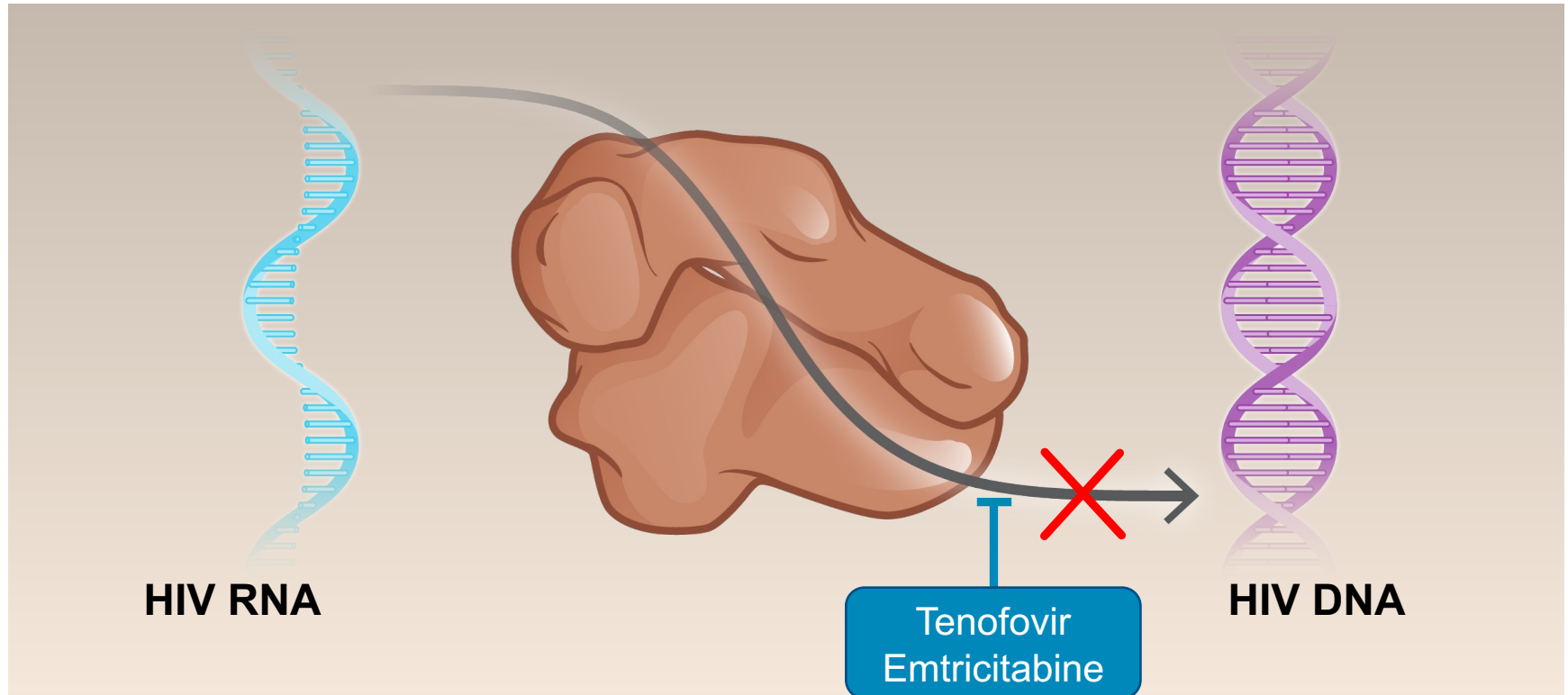
HIV Reverse Transcription



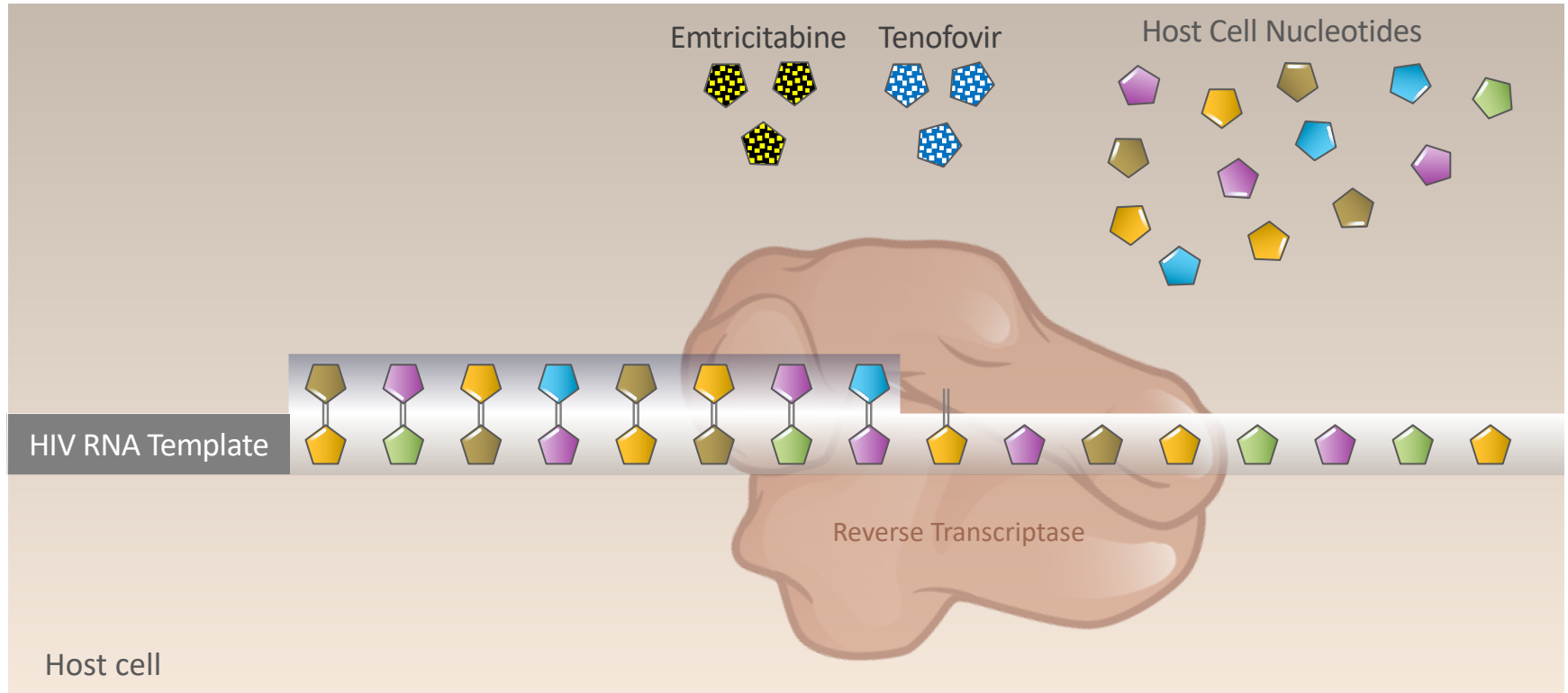
Nucleoside Reverse Transcriptase Inhibitors (NRTIs)



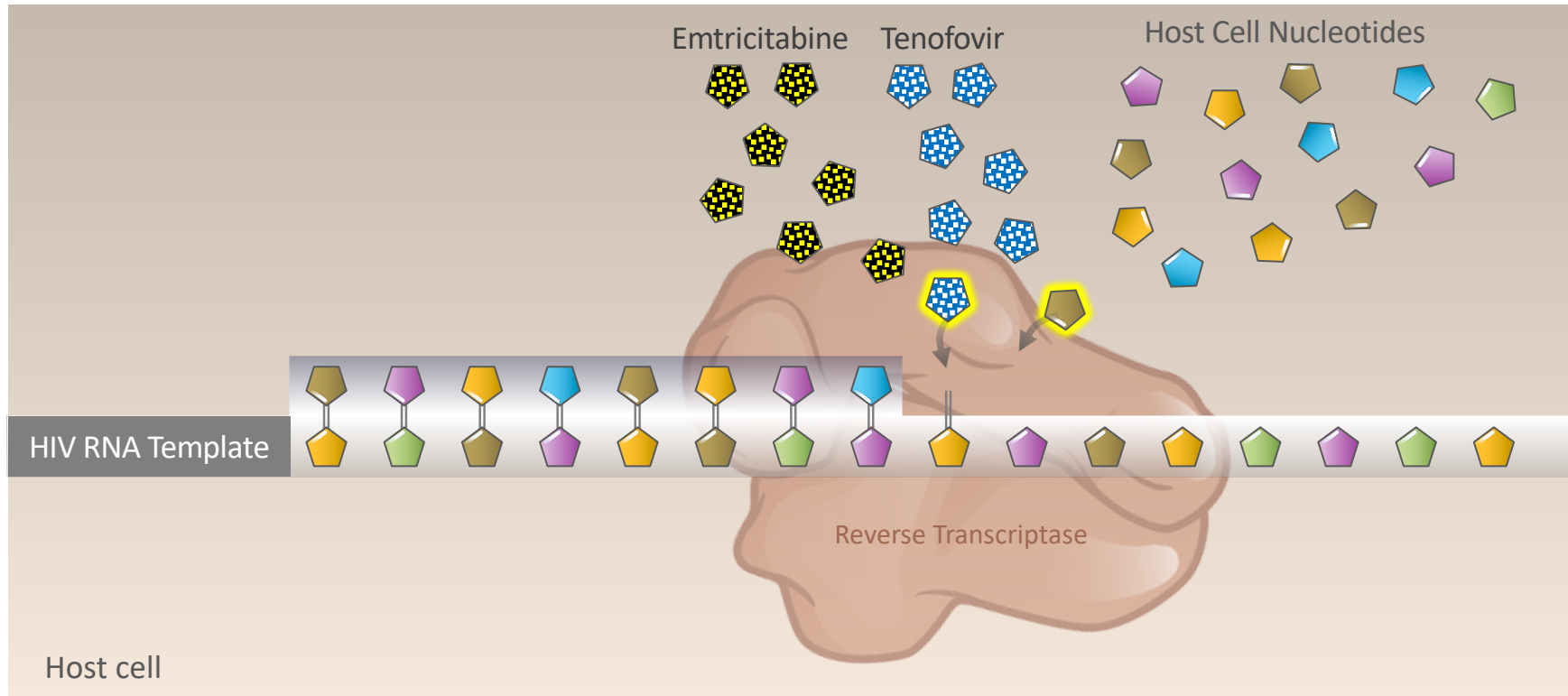
Tenofovir and Emtricitabine: Mechanism of Action



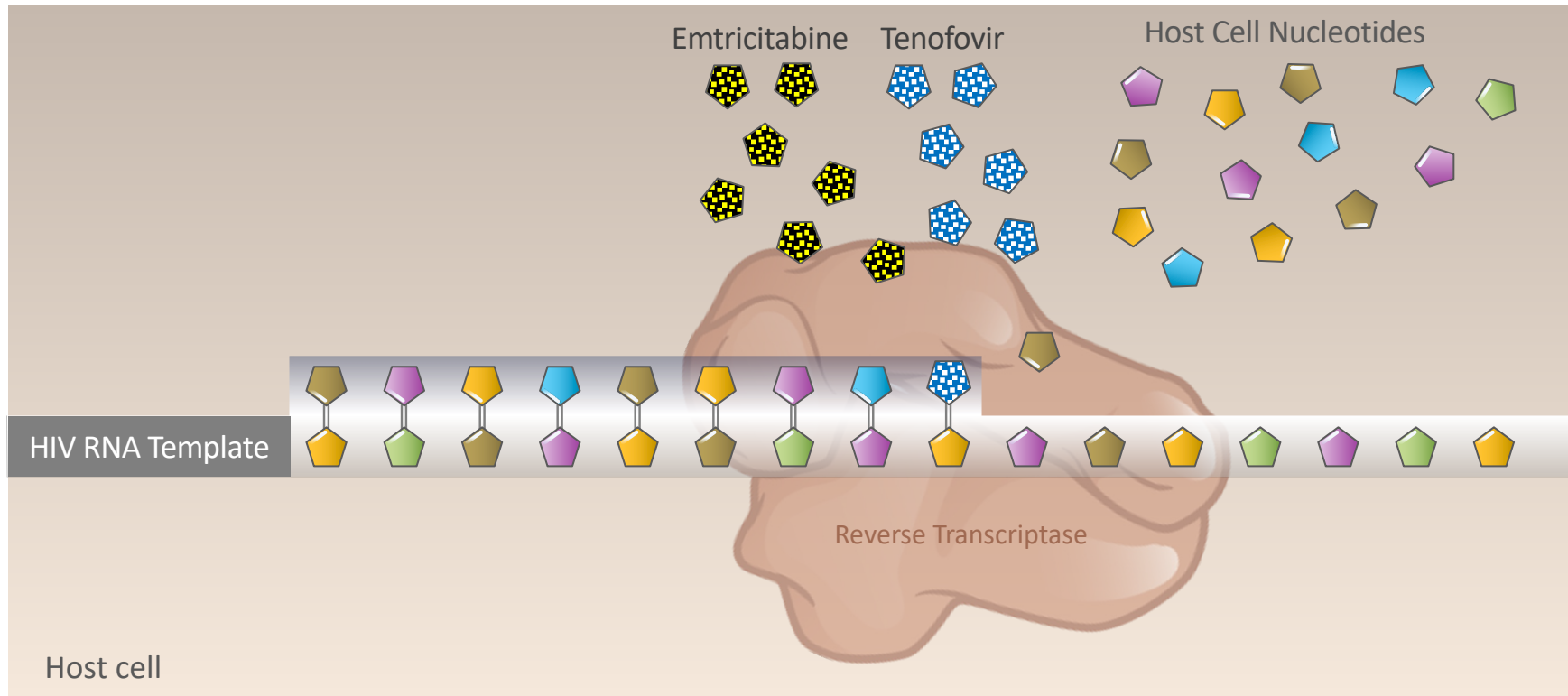
Tenofovir and Emtricitabine: Mechanism of Action



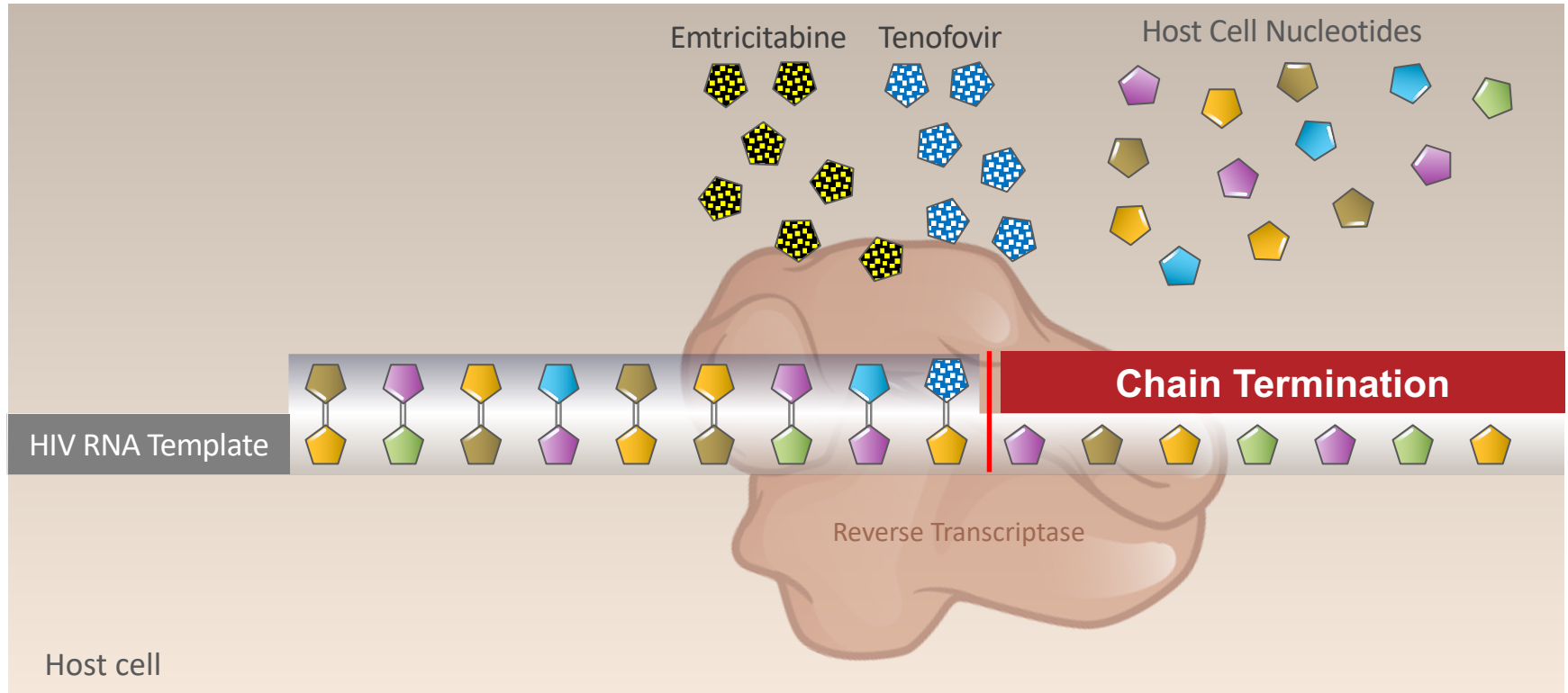
Tenofovir and Emtricitabine: Mechanism of Action



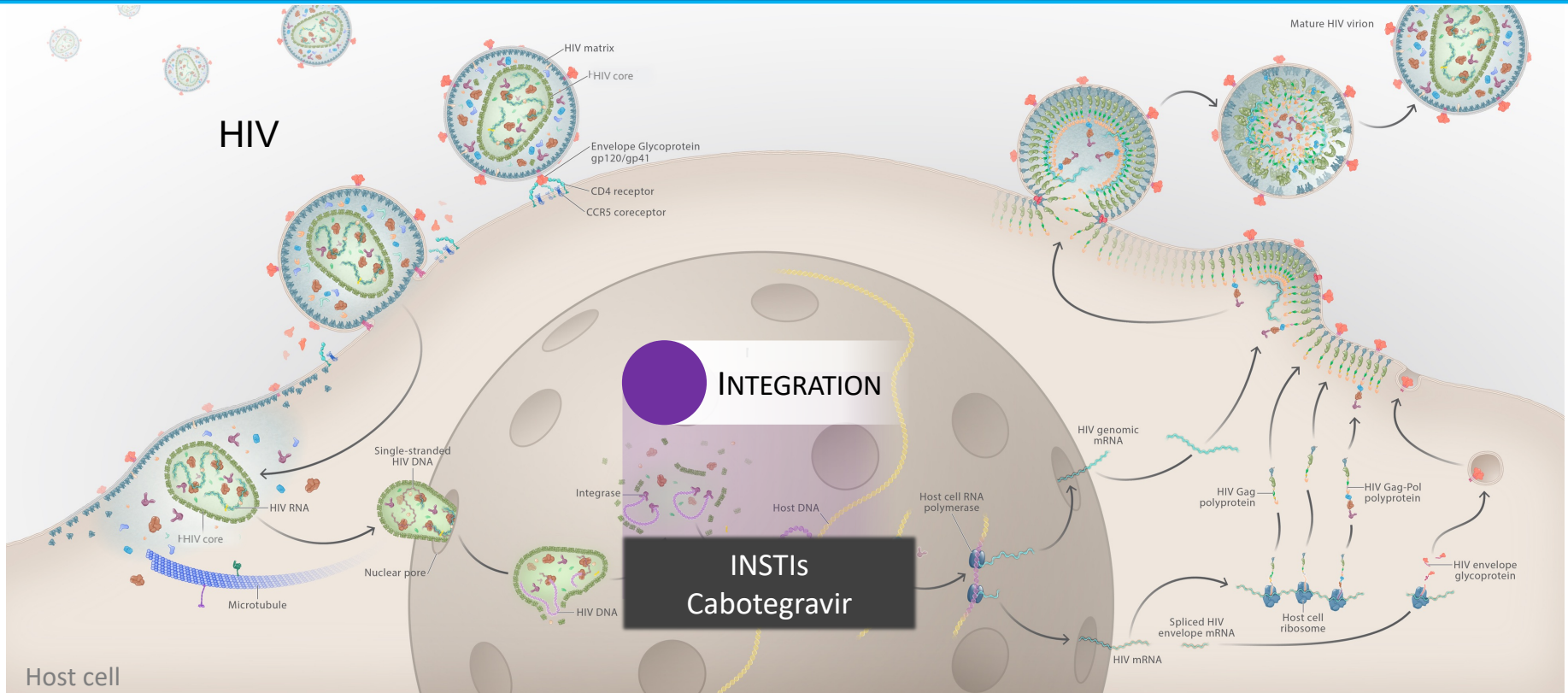
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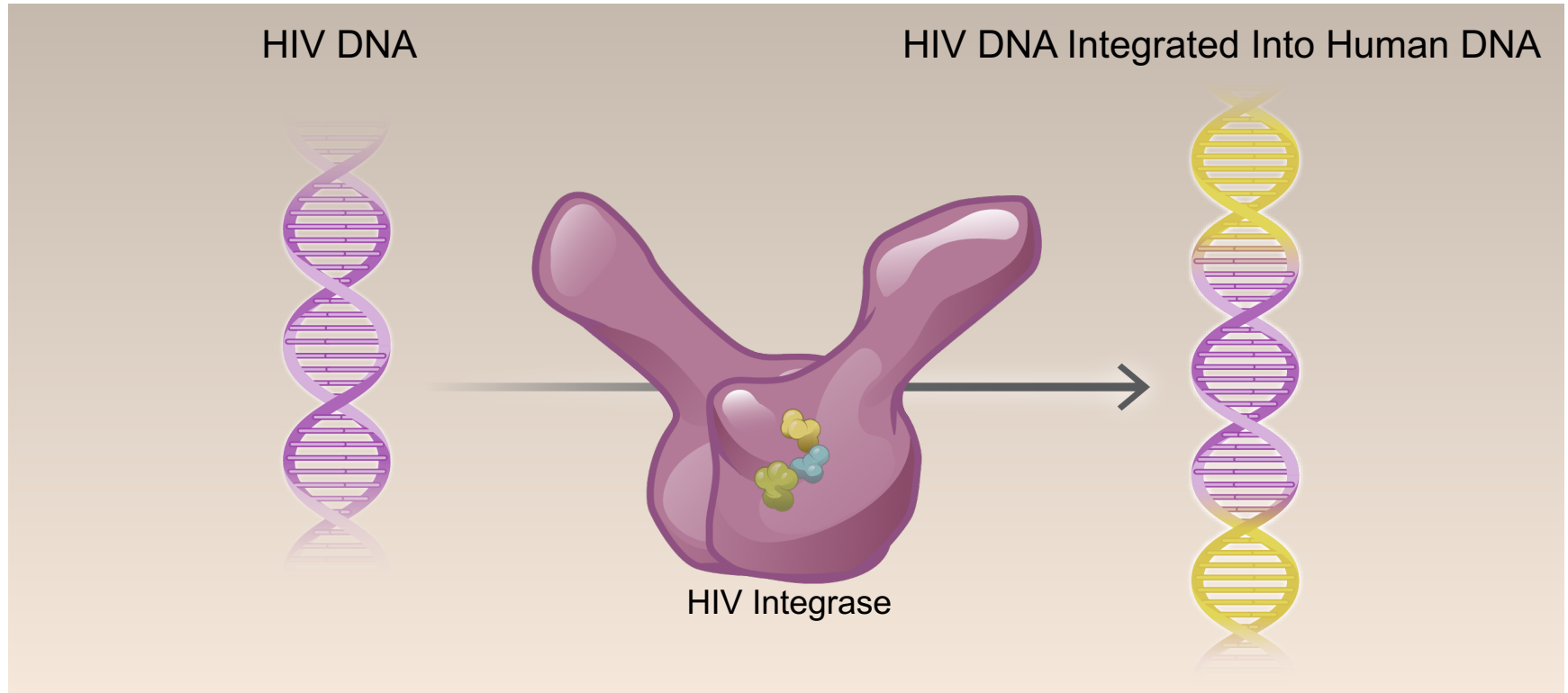
Tenofovir and Emtricitabine: Mechanism of Action



HIV Integration



HIV Integration



HIV Integration



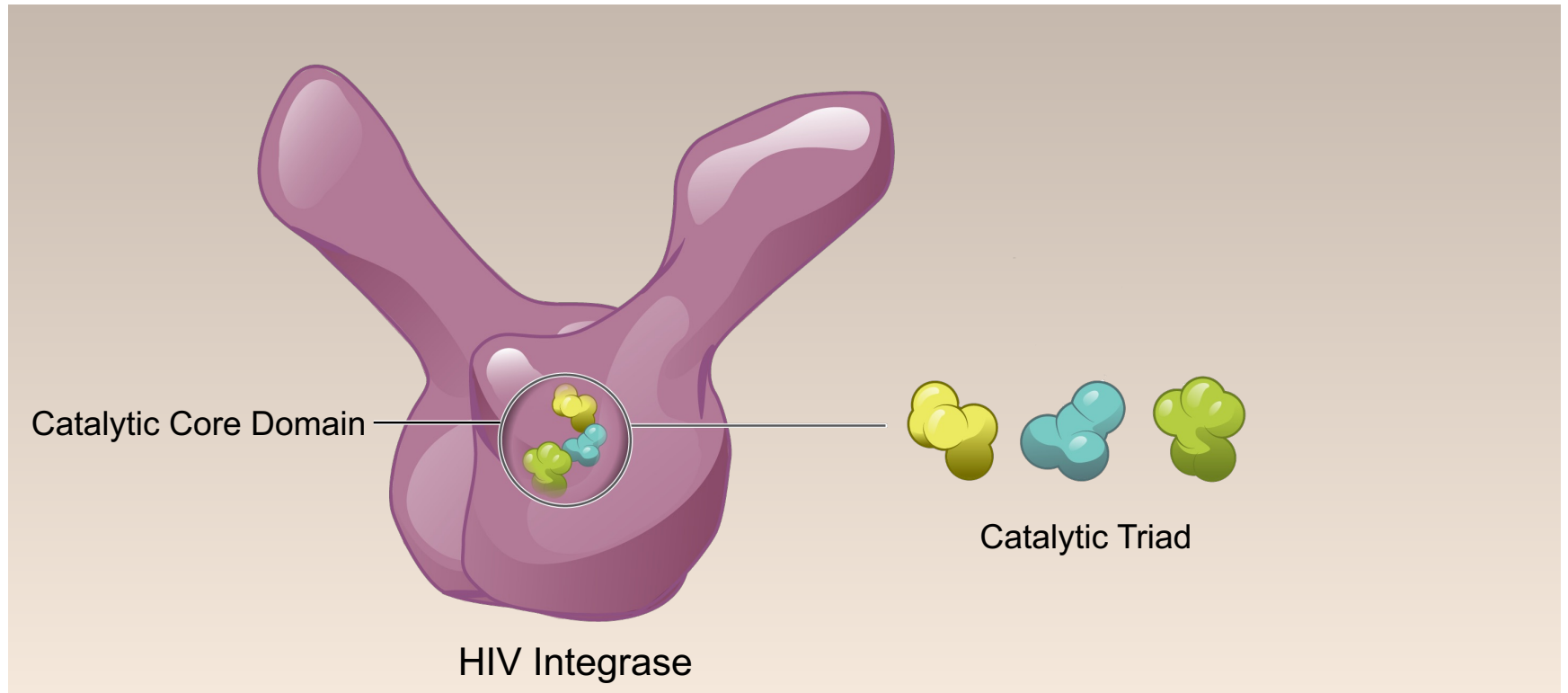
HIV Integrase Monomers

HIV Integration

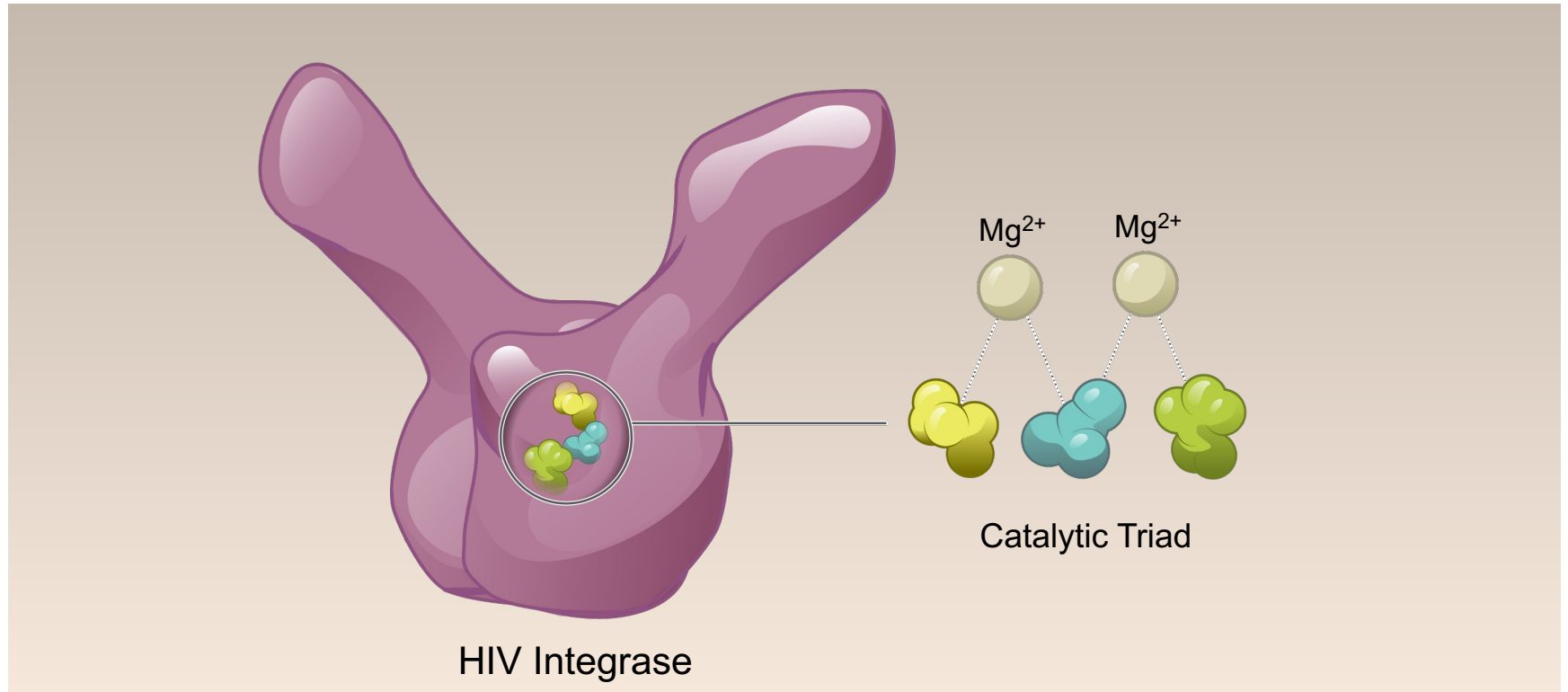


HIV Integrase Dimer

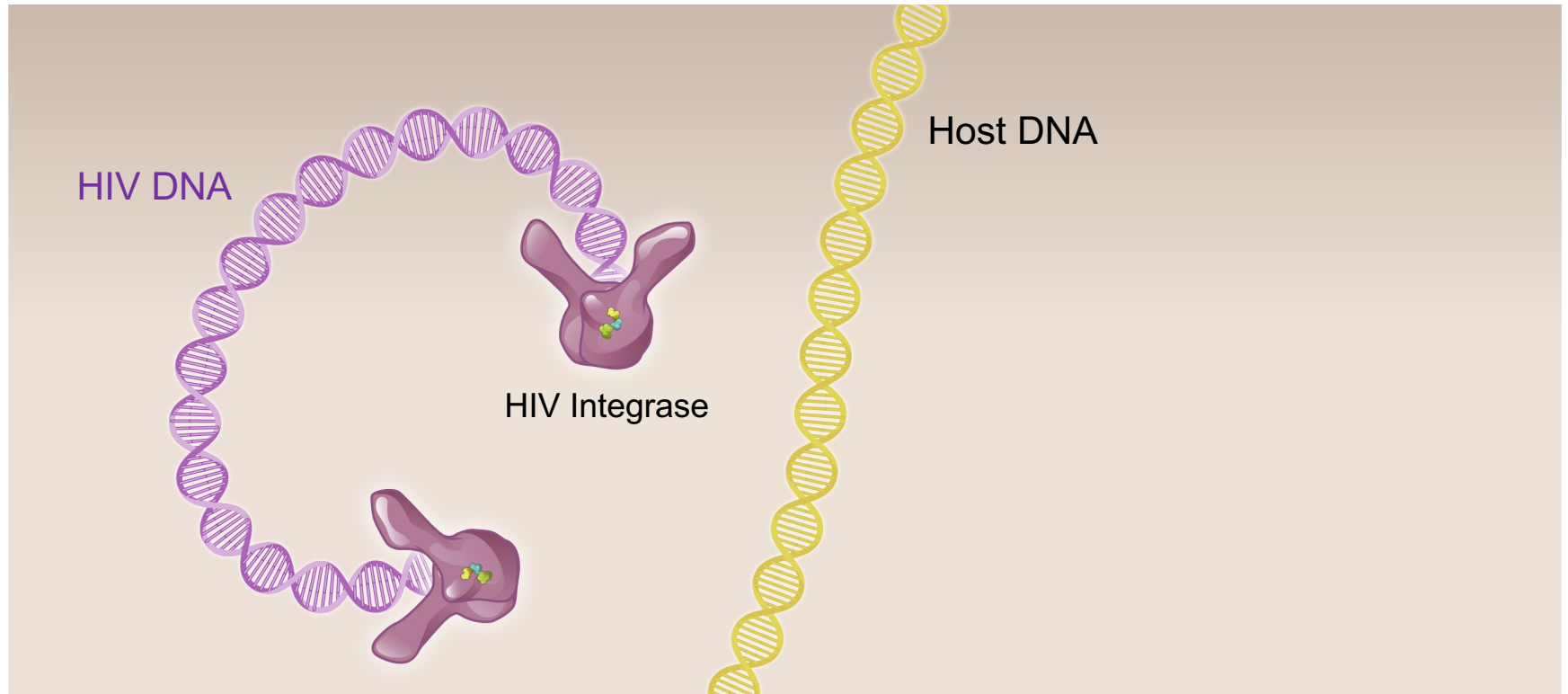
HIV Integration



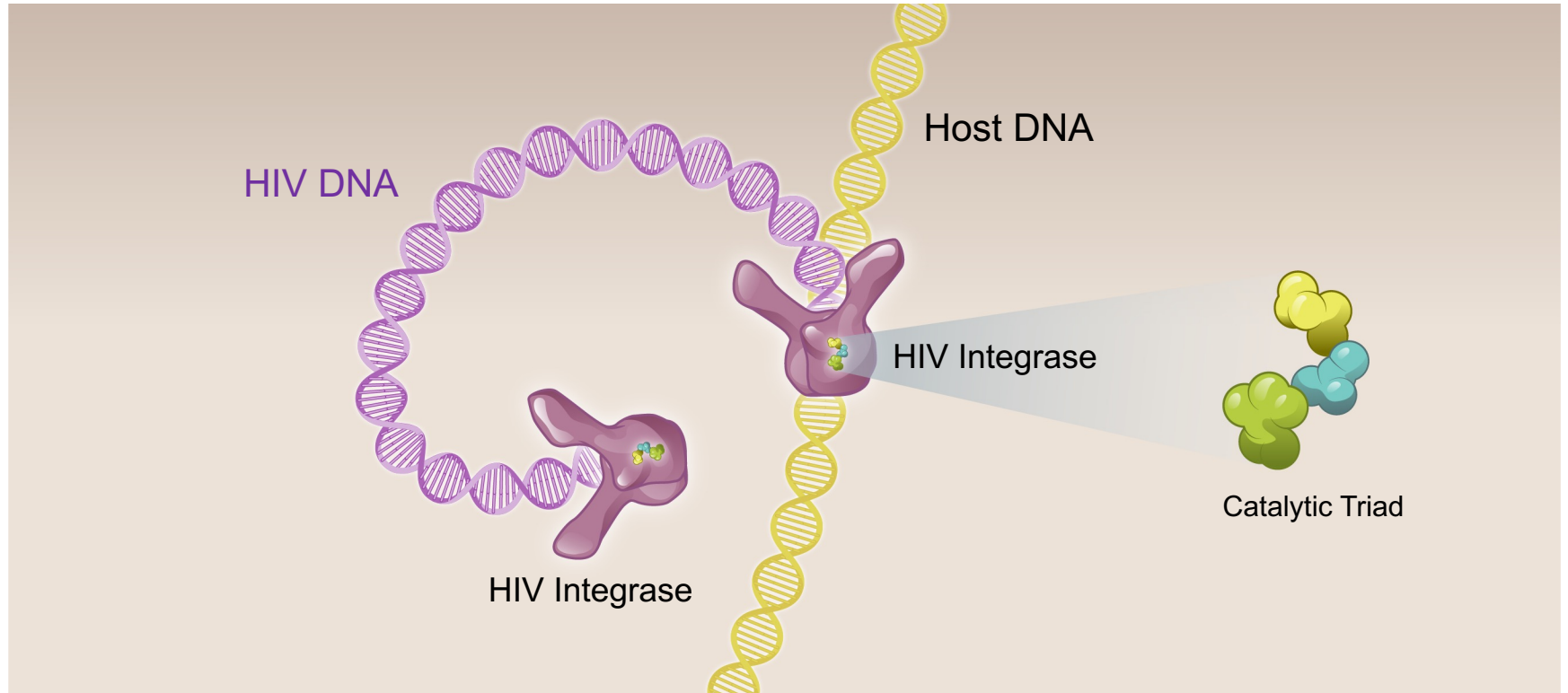
HIV Integration



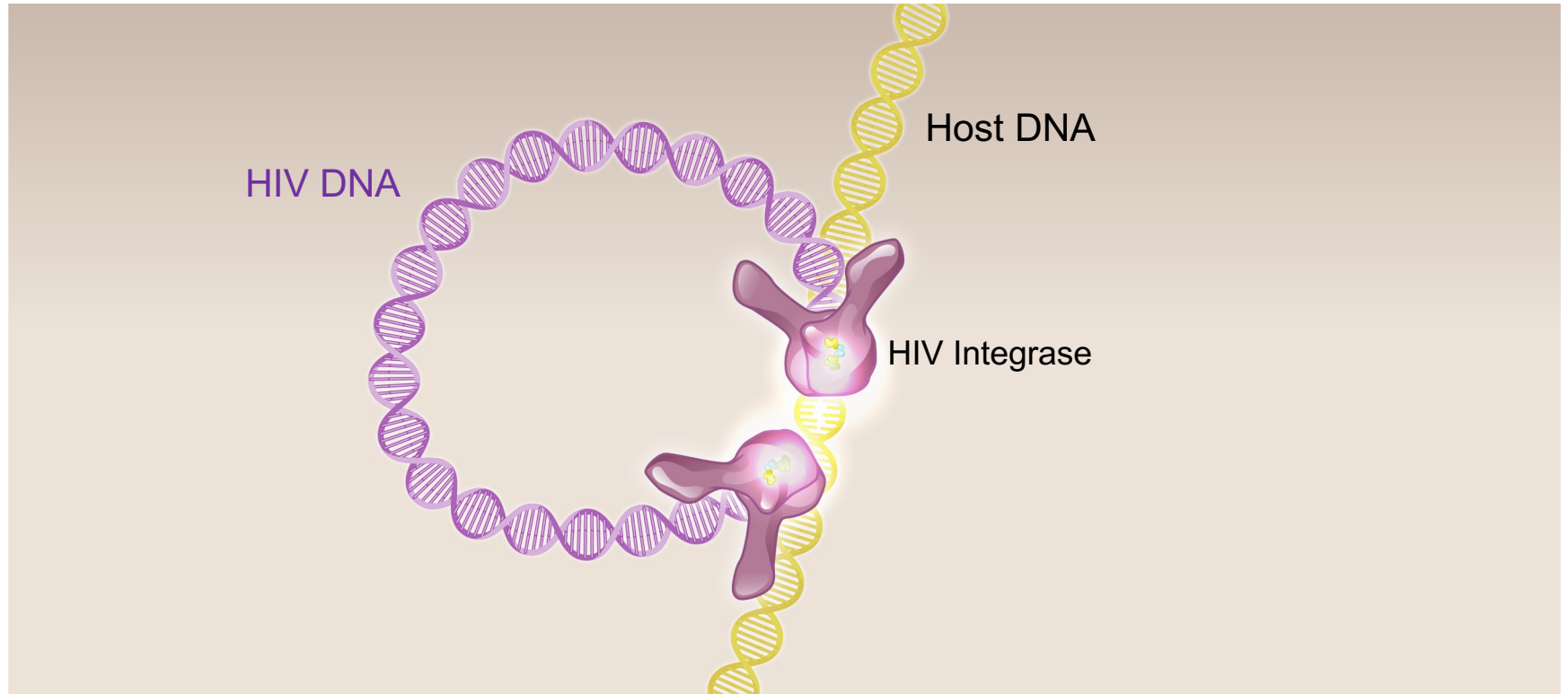
HIV Integration



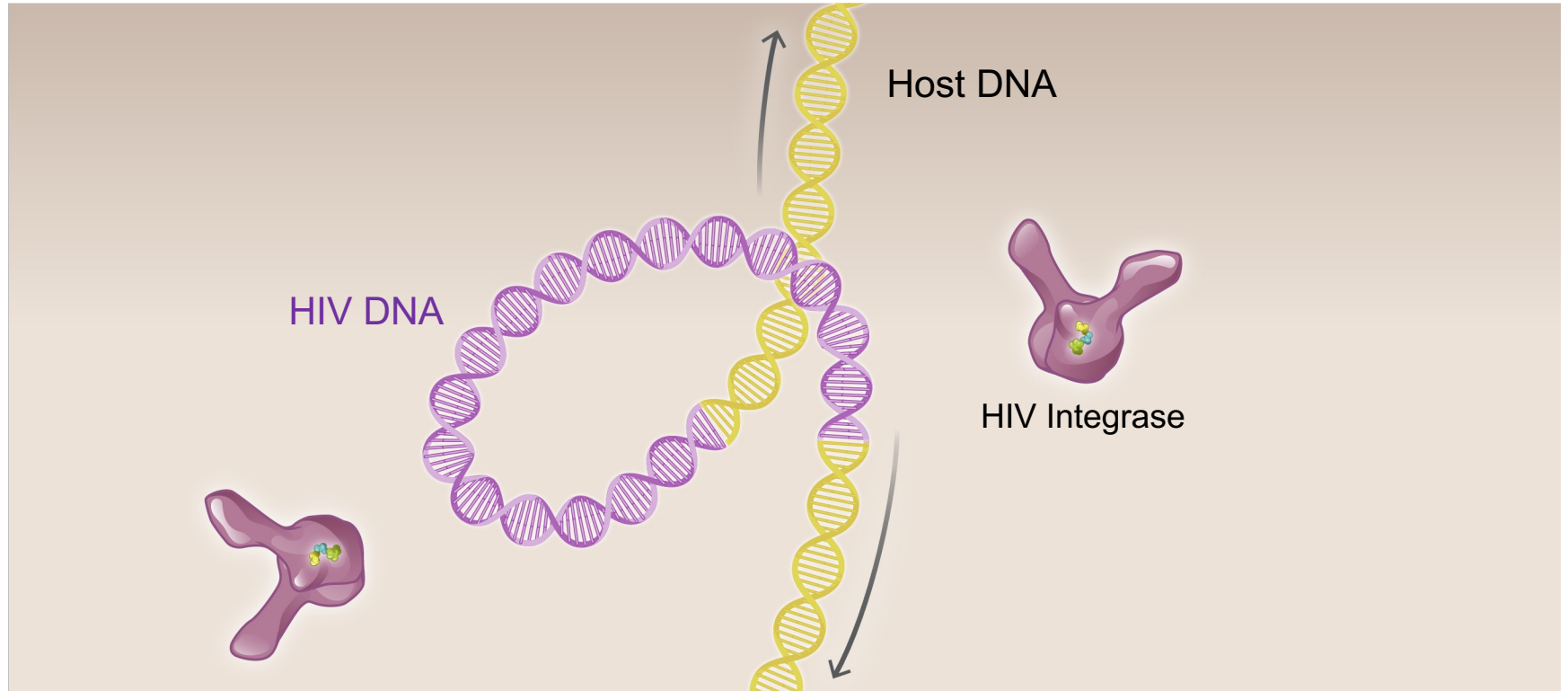
HIV Integration



HIV Integration



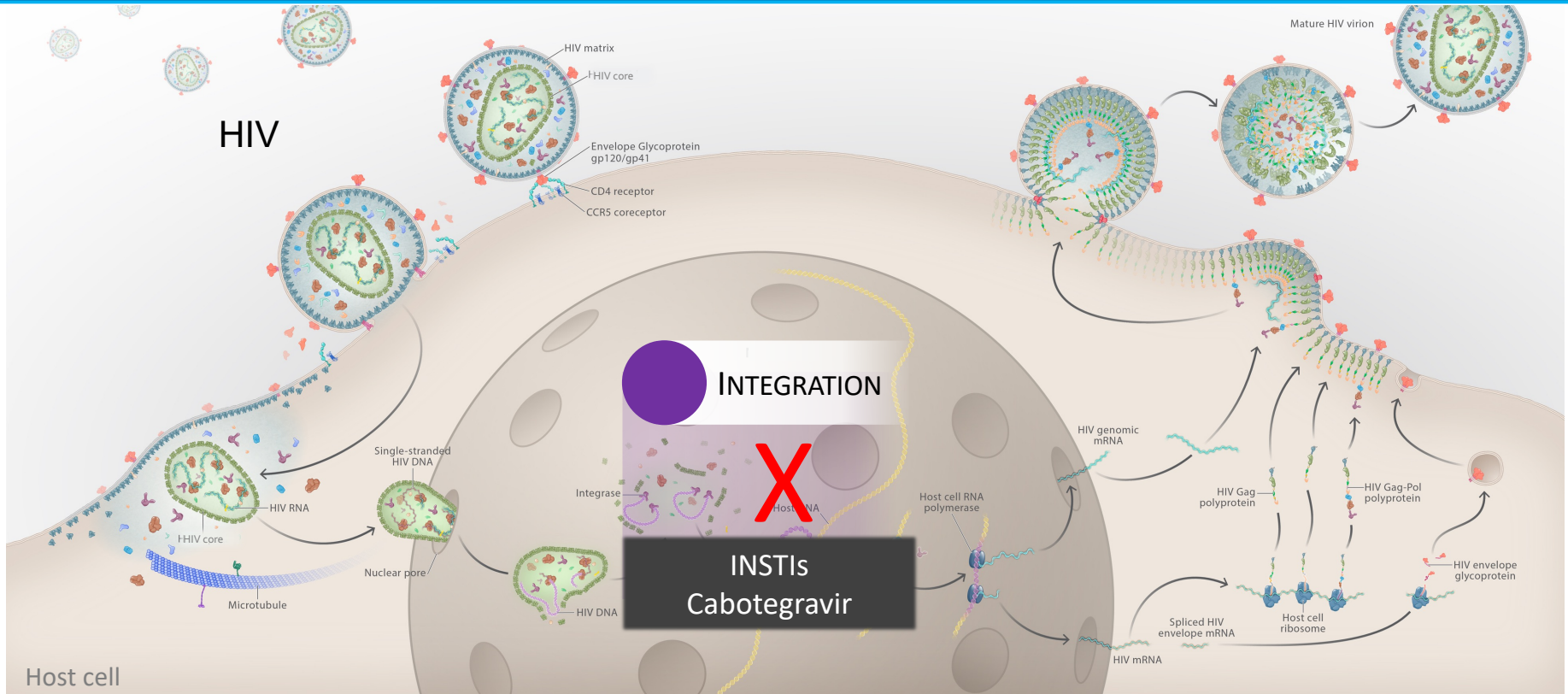
HIV Integration



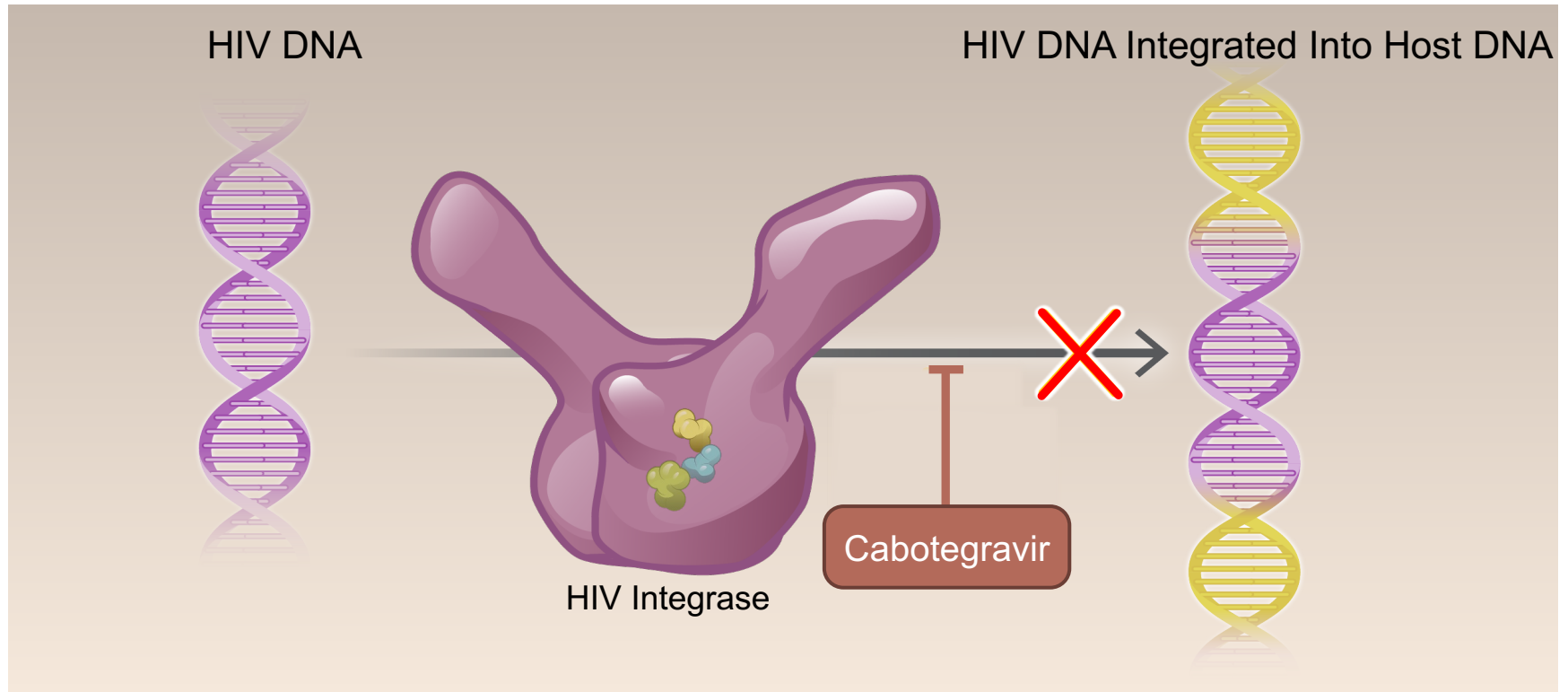
HIV Integration



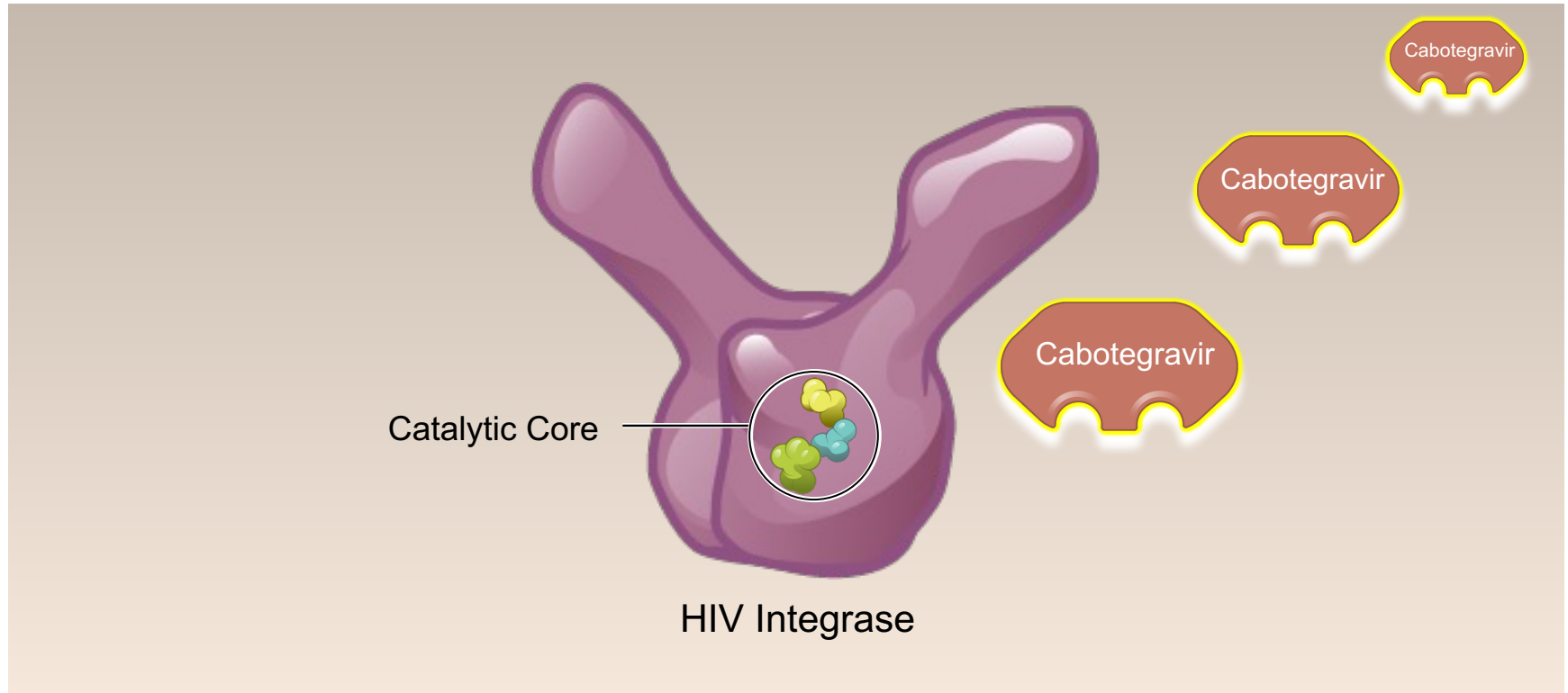
Integrase Strand Transfer Inhibitors (INSTIs)



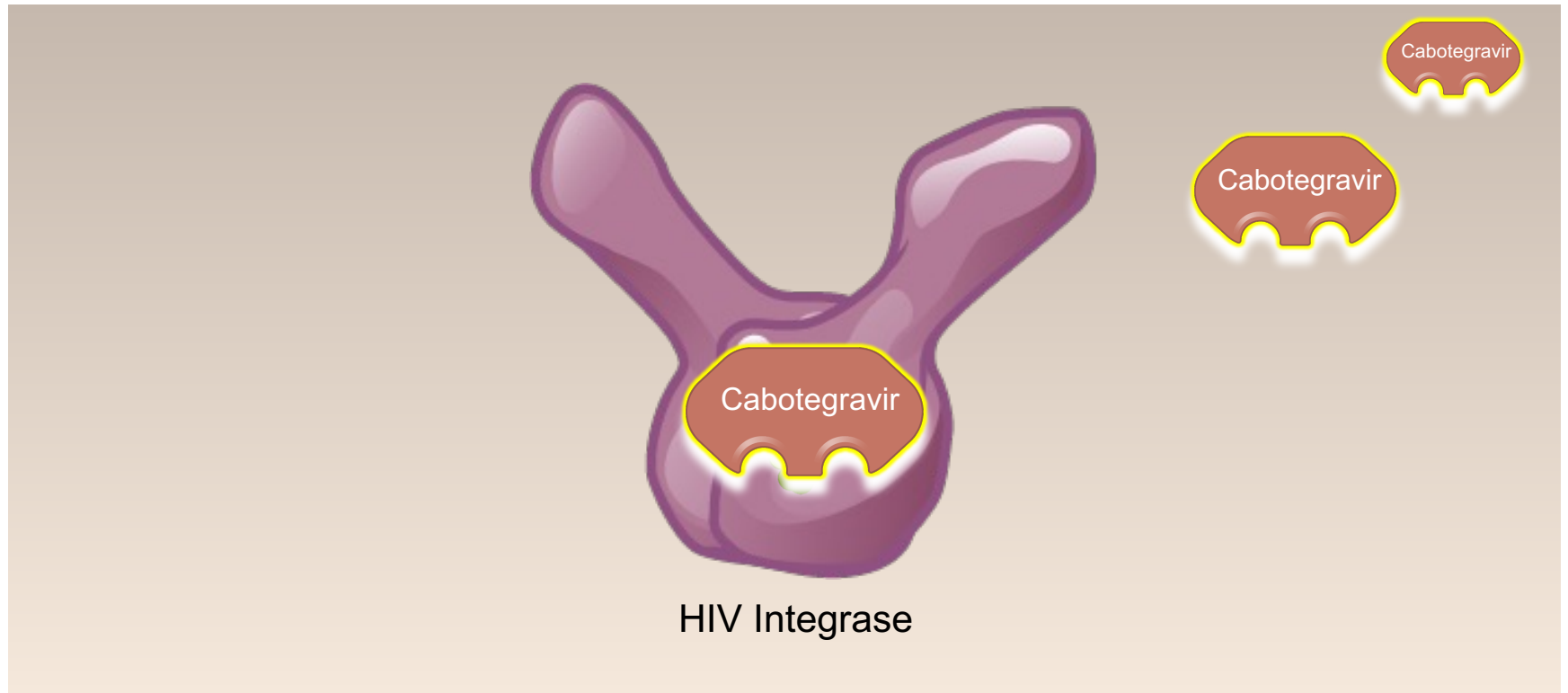
Cabotegravir: Mechanism of Action



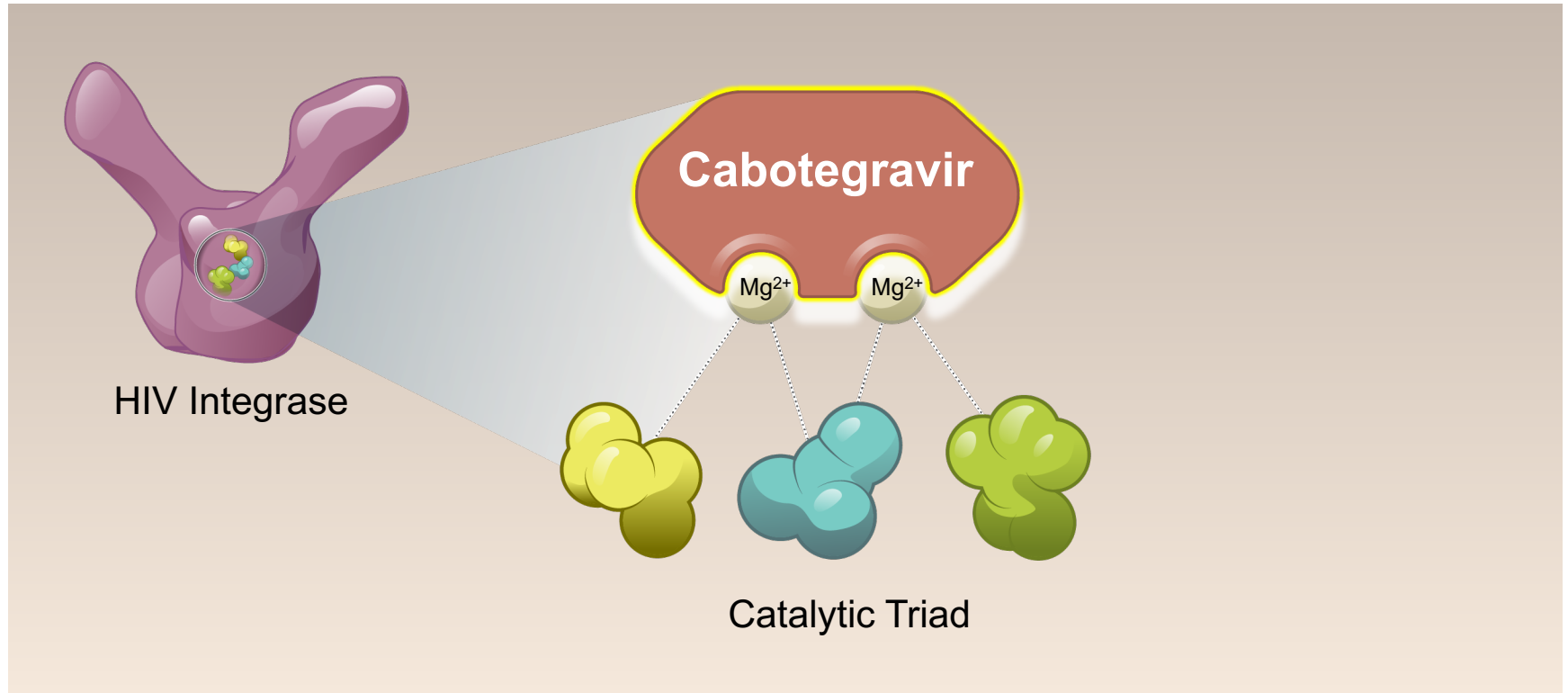
Cabotegravir: Mechanism of Action



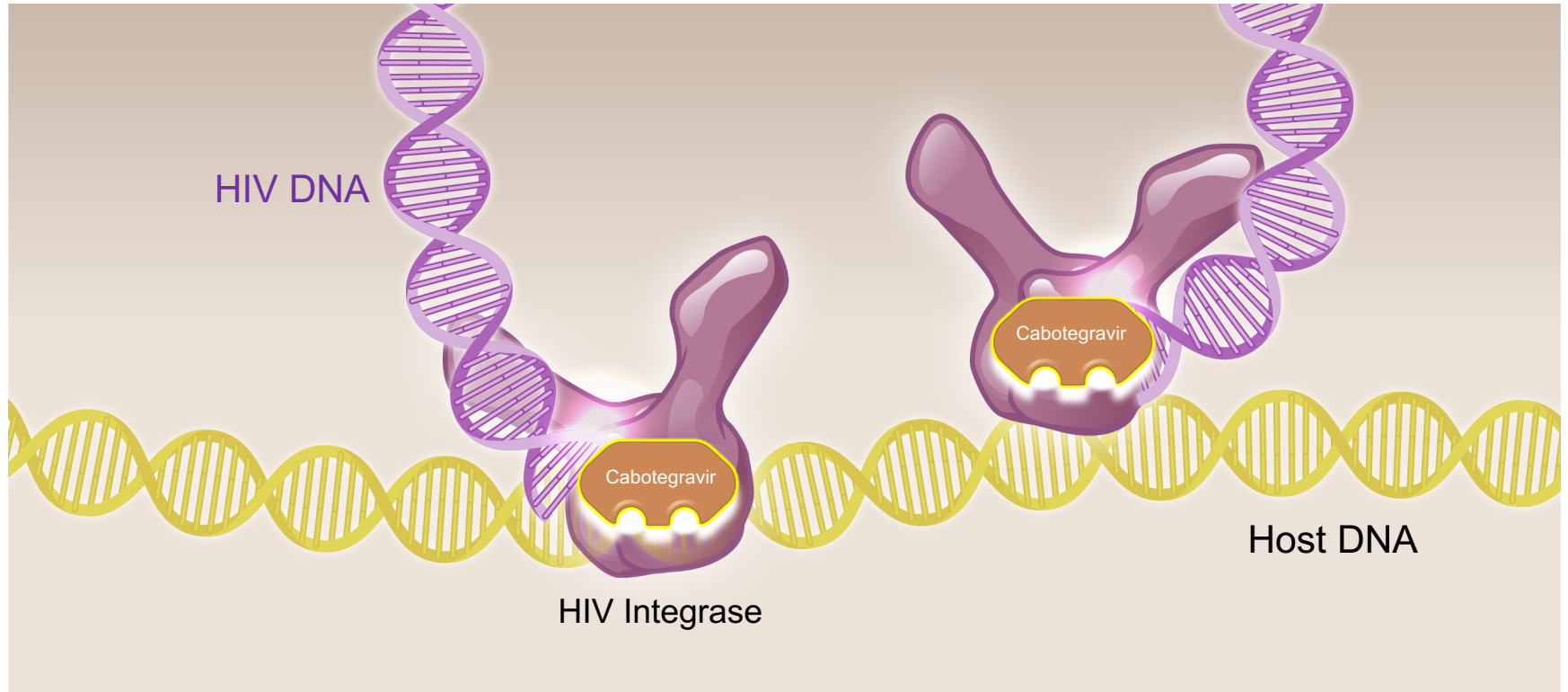
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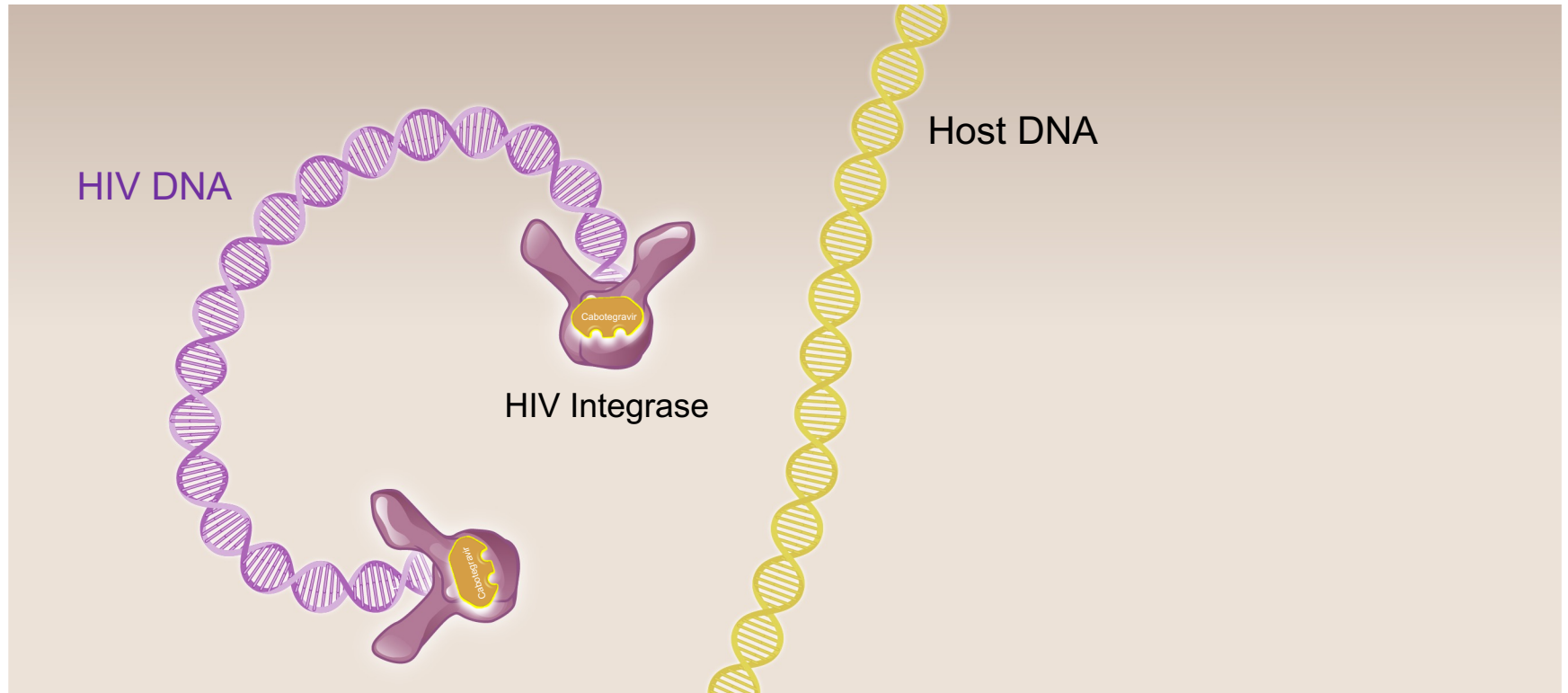
Cabotegravir: Mechanism of Action



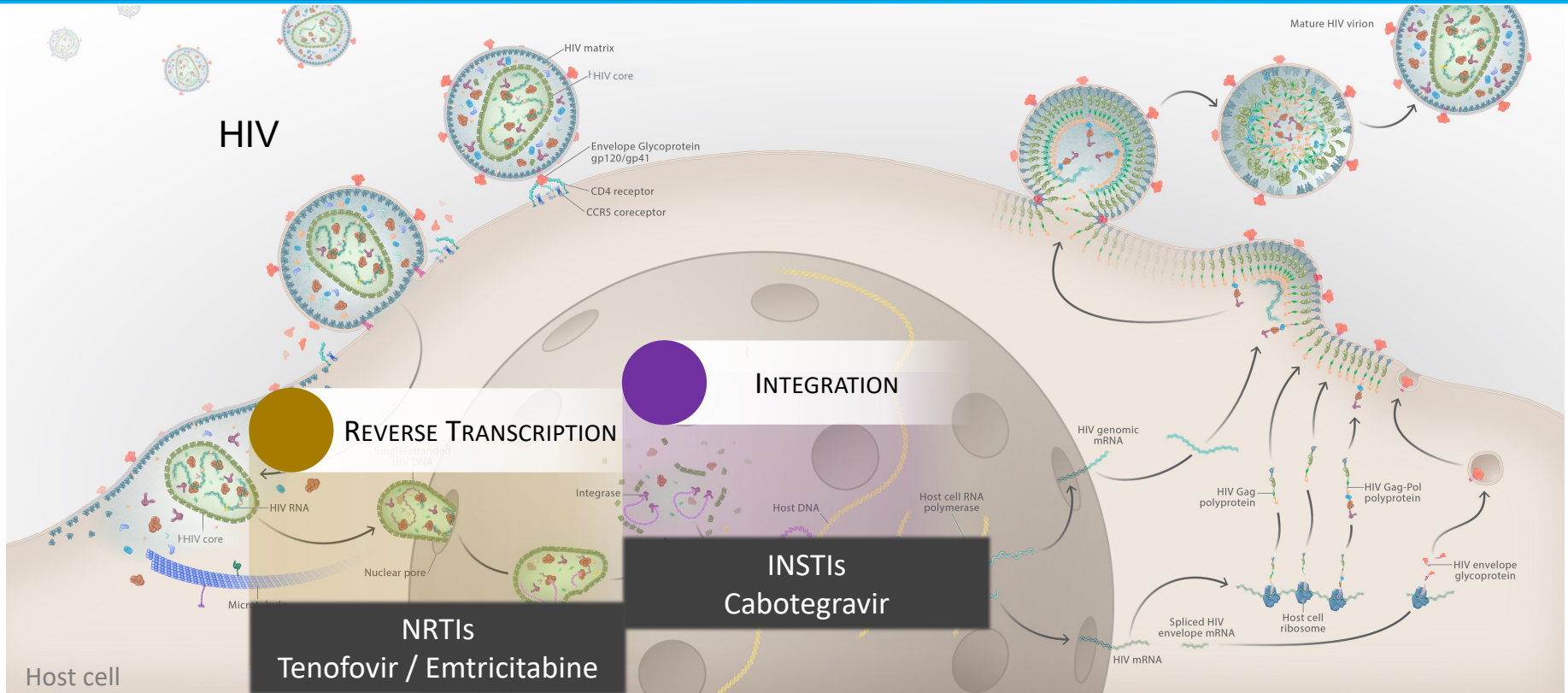
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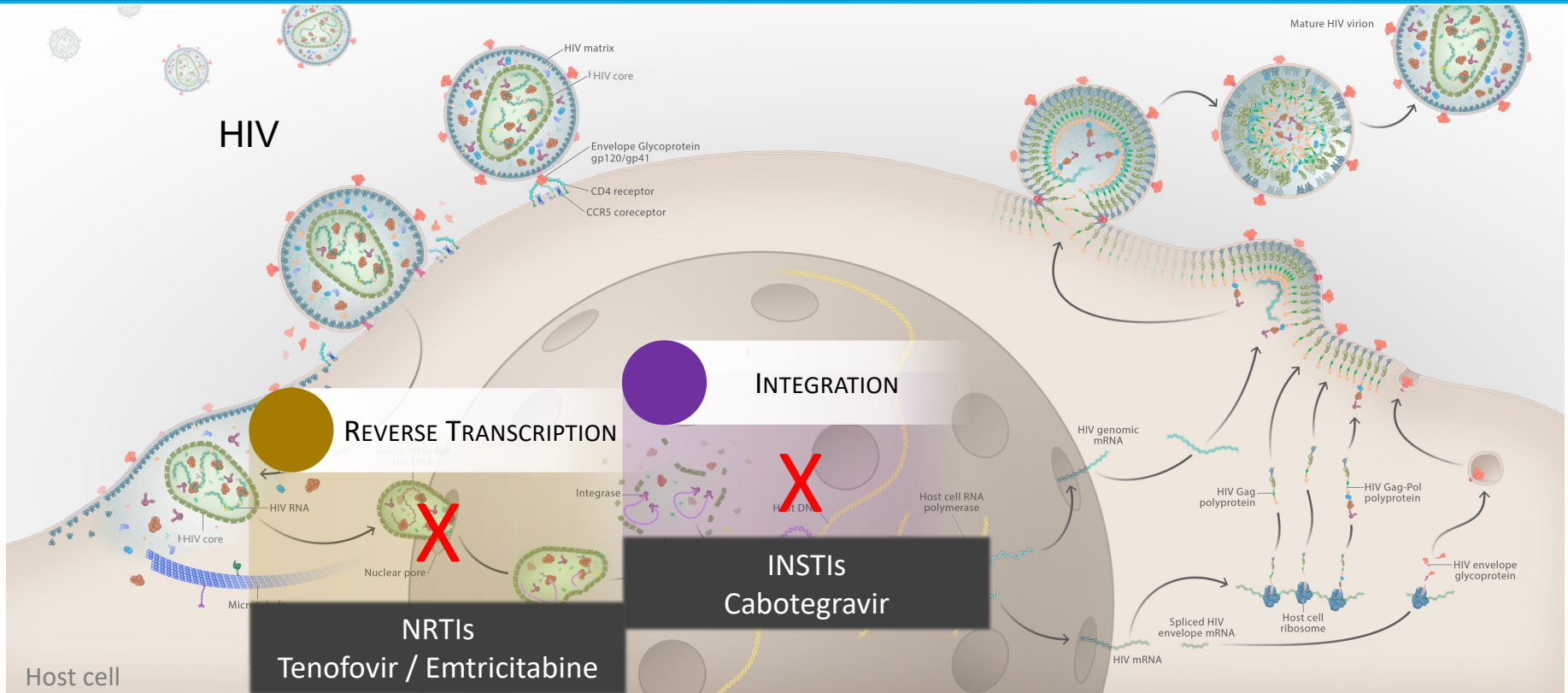
Cabotegravir: Mechanism of Action



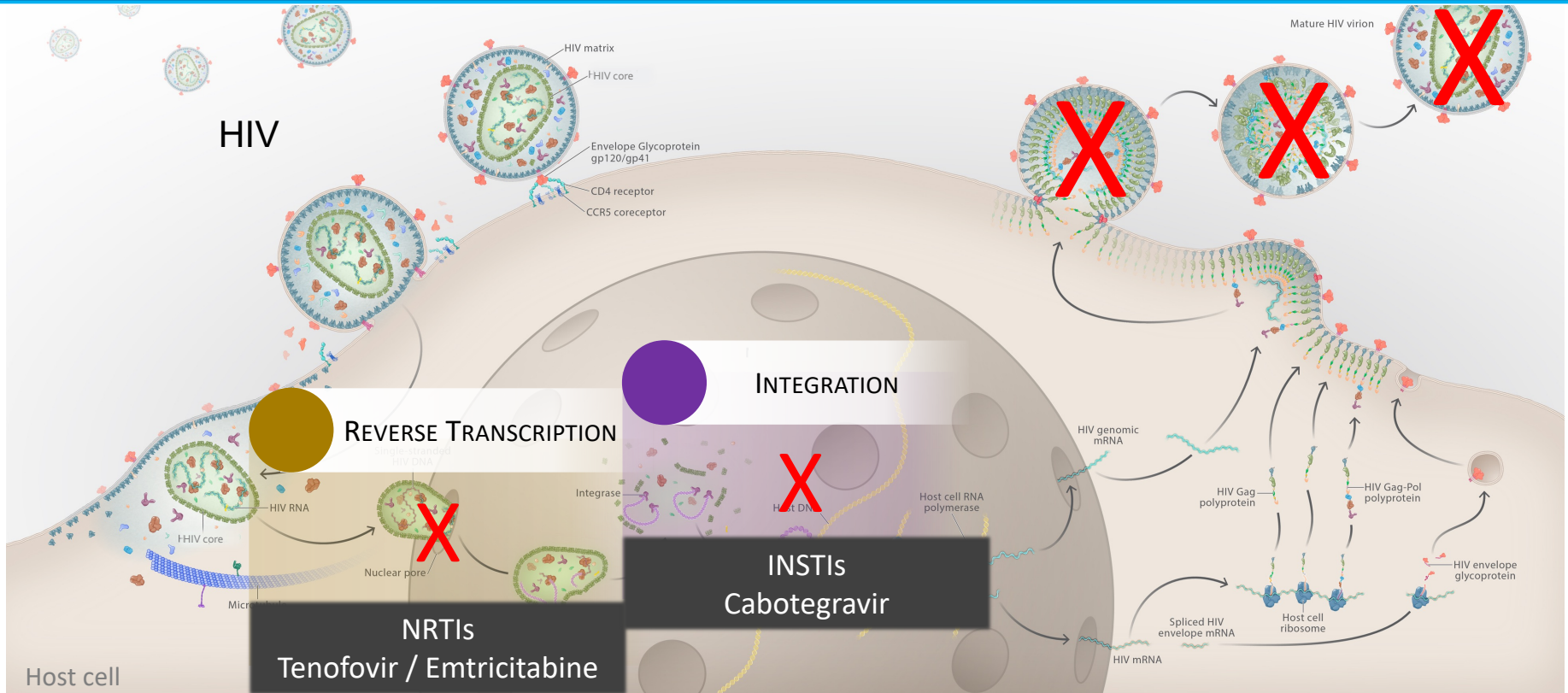
HIV Life Cycle: Sites of Action for HIV PrEP Medications



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Acknowledgement

The production of this **National HIV PrEP Curriculum *Mini-Lecture*** is supported by Grant U62PS924588 from the Centers for Disease Control and Prevention (CDC) and U10HA32104 from the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS). Its contents are solely the responsibility of the University of Washington IDEA Program and do not necessarily represent the official views CDC, HRSA, or HHS. This project is led by the University of Washington Infectious Diseases Education & Assessment (IDEA) Program.

