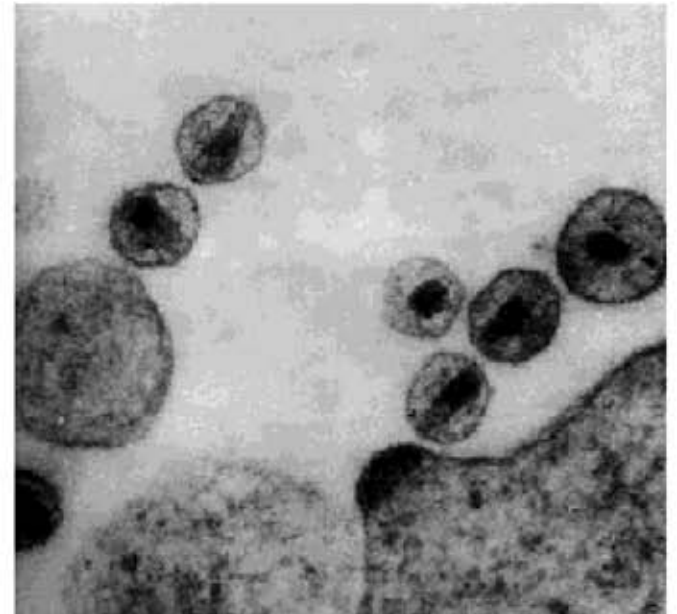


Advances in AIDS Research, 1981-2010

- Etiology
- Diagnosis
- Molecular Virology and Epidemiology
- Pathogenesis
- Natural History
- Treatment
- Prevention
- Vaccine Development



NIH HIV/AIDS Research: Importance to the Mission of PEPFAR

- **Treatment**
- **Prevention**
- **Capacity Building**
- **Implementation Science**

FDA-Approved Antiretroviral Drugs

NRTI

- Zidovudine
- Didanosine
- Zalcitabine
- Stavudine
- Lamivudine
- Abacavir
- Tenofovir
- Emtricitabine

NNRTI

- Nevirapine
- Delavirdine
- Efavirenz
- Etravirine

PI

- Saquinavir
- Ritonavir
- Indinavir
- Nelfinavir
- Amprenavir
- Lopinavir
- Atazanavir
- Fosamprenavir
- Tipranavir
- Darunavir

Fusion Inhibitor

- Enfuvirtide (T-20)

Entry Inhibitor

- Maraviroc

Integrase Inhibitor

- Raltegravir

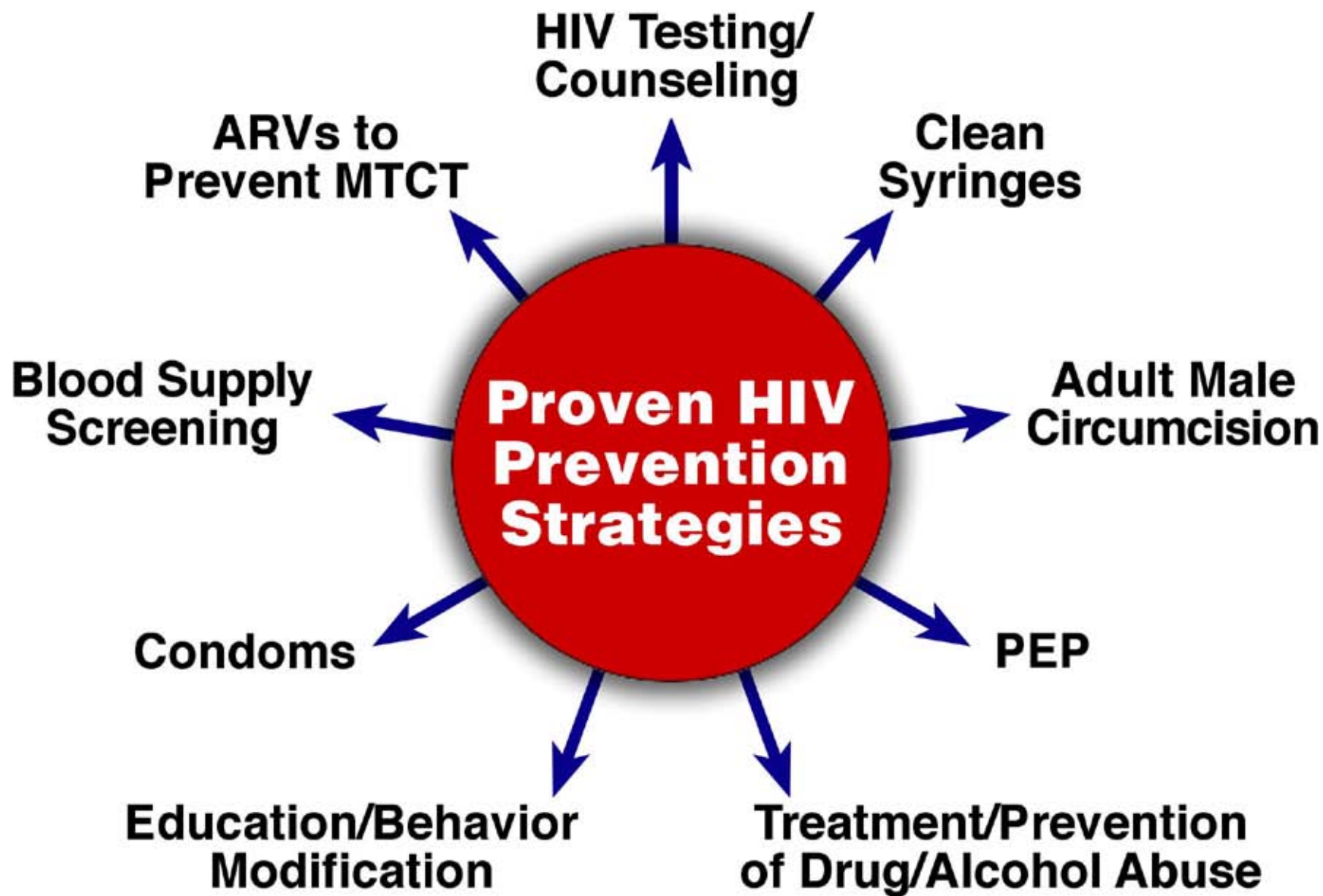
Combinations

- 6 available, combining 2 or 3 drugs



Approximate Life Expectancy of Patients with HIV Disease in the Developed World

- **1981 -- ~26 weeks**
- **Today -- ~50 years**



Selected HIV Prevention Strategies Under Development

■ Antiretroviral Drugs as Prevention

- Microbicides**
- Pre-Exposure Prophylaxis**
- “Test and Treat”**

■ Vaccines



Capacity Building

- **Develop in-country leadership and strengthen clinical and research capacity**
- **Example: Medical Education Partnership Initiative (with HRSA) to build clinical care and research capacity in Sub-Saharan Africa**

Implementation Science

- **Translate evidence-based findings from efficacy trials into population-level practices “on the ground”**
- **Ongoing partnership with PEPFAR**

**Our Common Goal:
Controlling and Ultimately
Ending the HIV/AIDS
Pandemic**

