



A dimly lit hospital room where a patient lies in a bed, wearing a white oxygen mask. The patient's eyes are closed. Medical staff in blue scrubs and masks are positioned around the bed, with one person's hands visible near the patient's face. In the background, a shelf holds several circular medical charts or monitors. The overall atmosphere is clinical and somber.

HIV



Resistance to the drugs used in ART.

Affects other parts of the body.

The virus remains in your body.

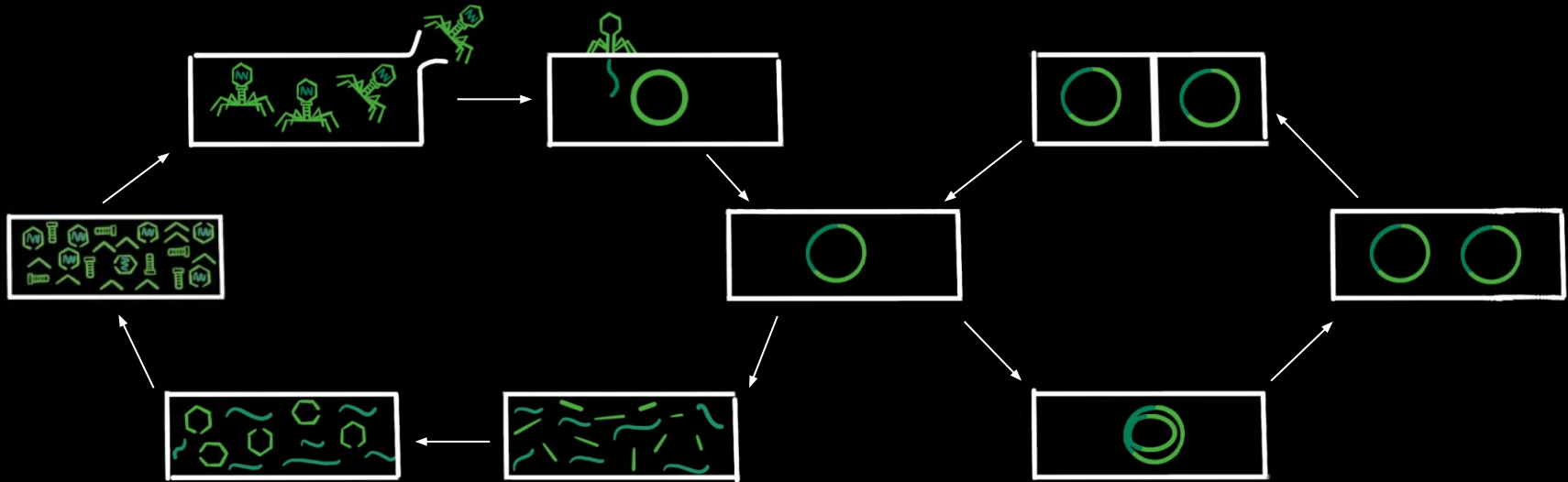
HIVa

TKS

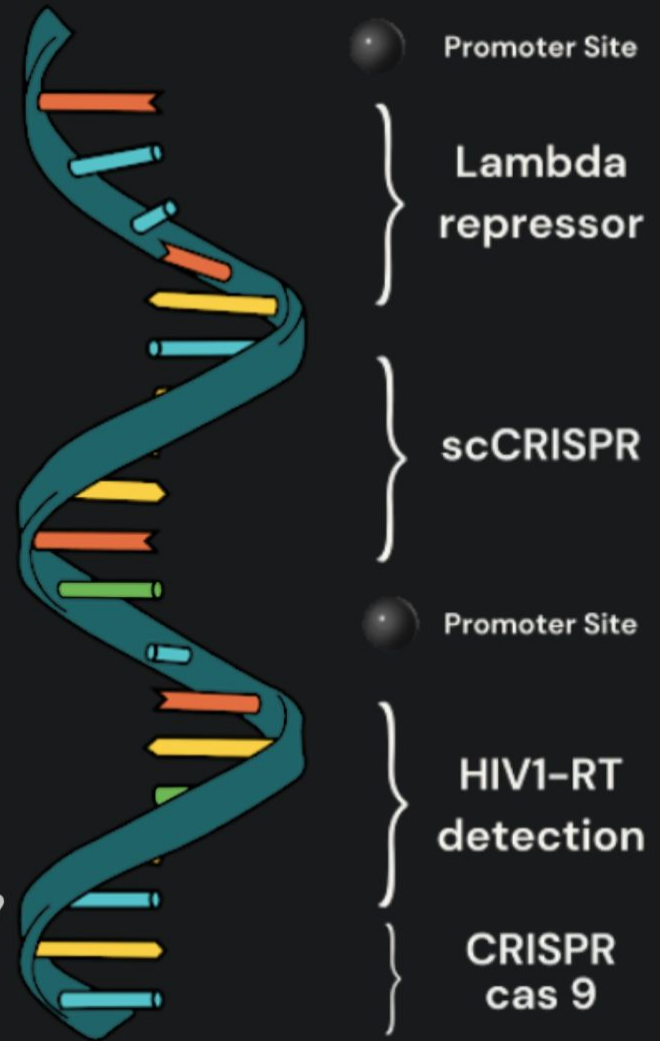


Lytic Cycle

Lysogenic Cycle



Schematic of Spacer DNA



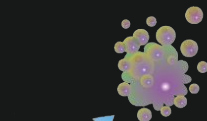
1

Delivery.



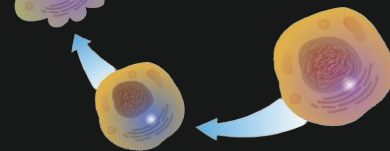
2

Elimination.

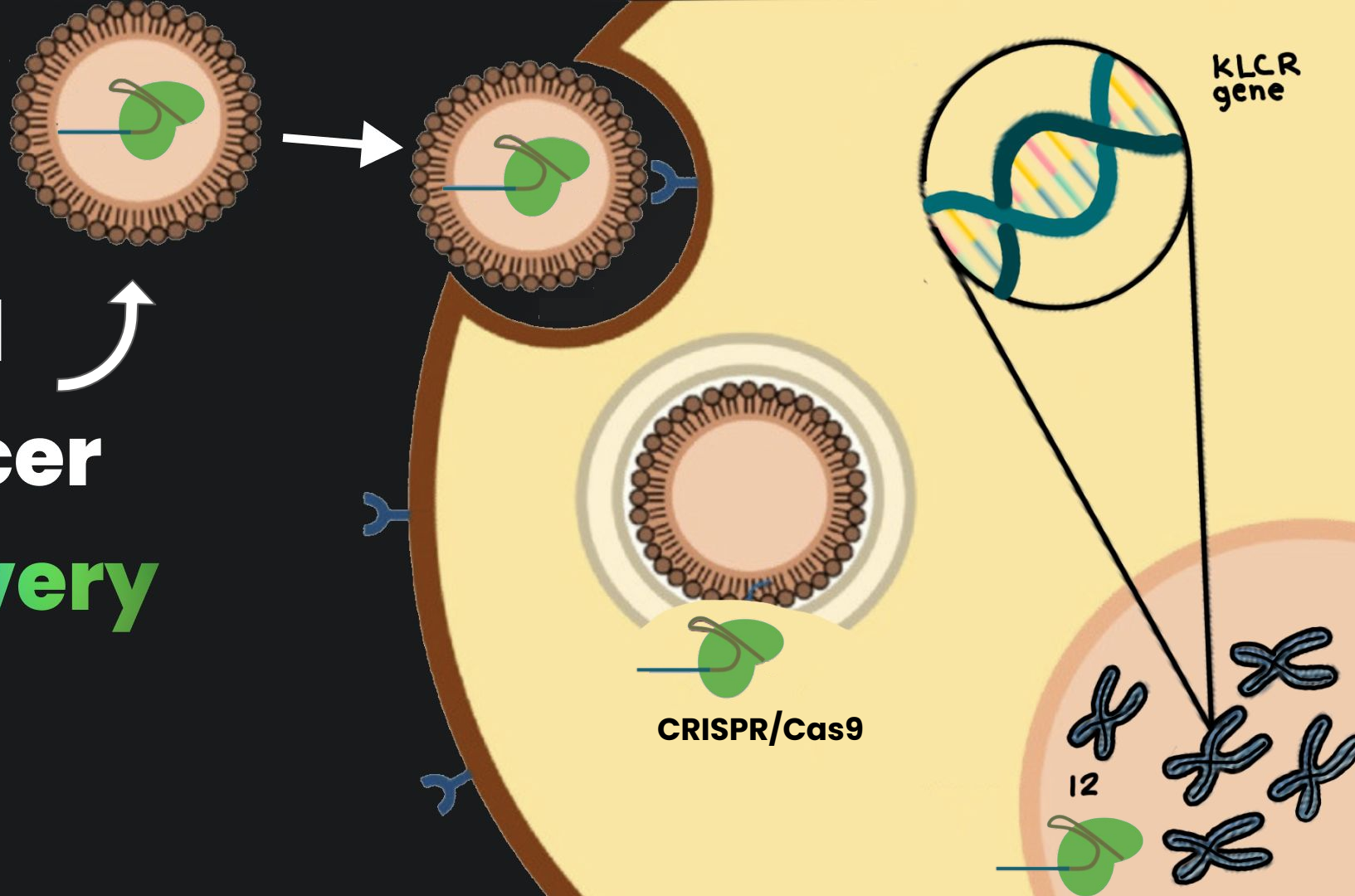


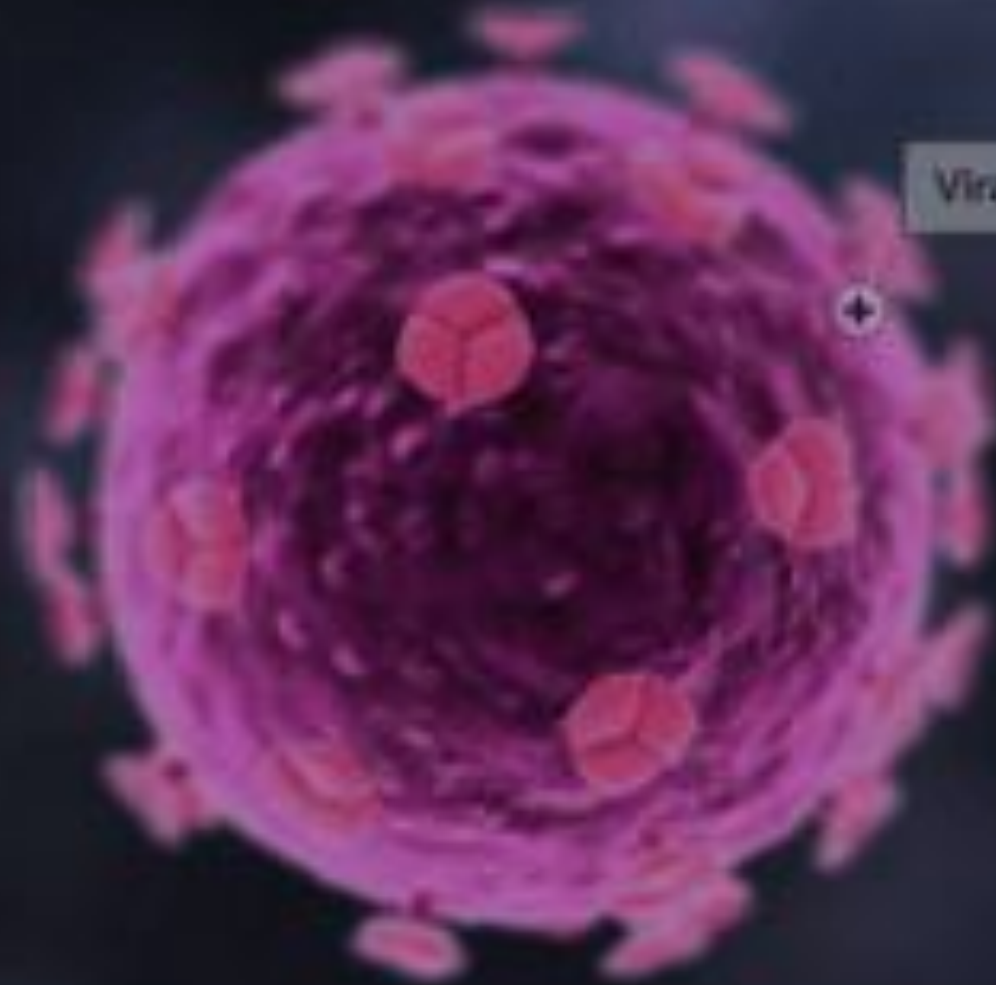
3

Propagation.



Viral Spacer Delivery



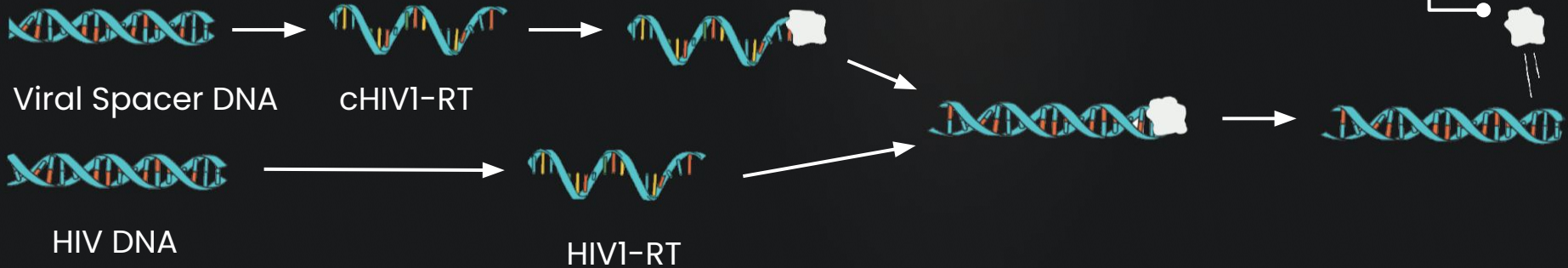


Viral membrane

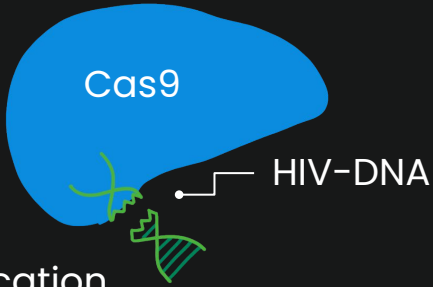
Elimination

Lock and Key Method

Bax protein initiates protein cascade resulting to apoptosis

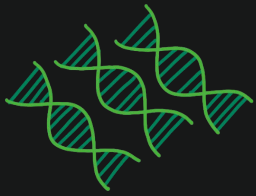


Viral Spacer DNA



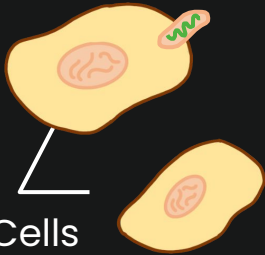
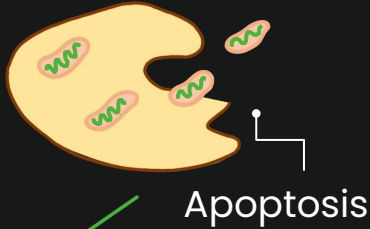
Duplication

Duplication



Propagation

Cell proliferation



Propagation

```
//Lamba receptor in a nutshell
if {lambda_repressor == true} {
  lysogenic_cycle = true;
}
else if (lambda_repressor == false){
  lysogenic_cycle = false;
  lytic_cycle = true;
}
if (lytic_cycle == true) {
  scCRISPR destroys HIV DNA;
  sleeper_agents += 10;
  Coats sleep_agents in lipid nanoparticles to penetrate other cells;
}
```

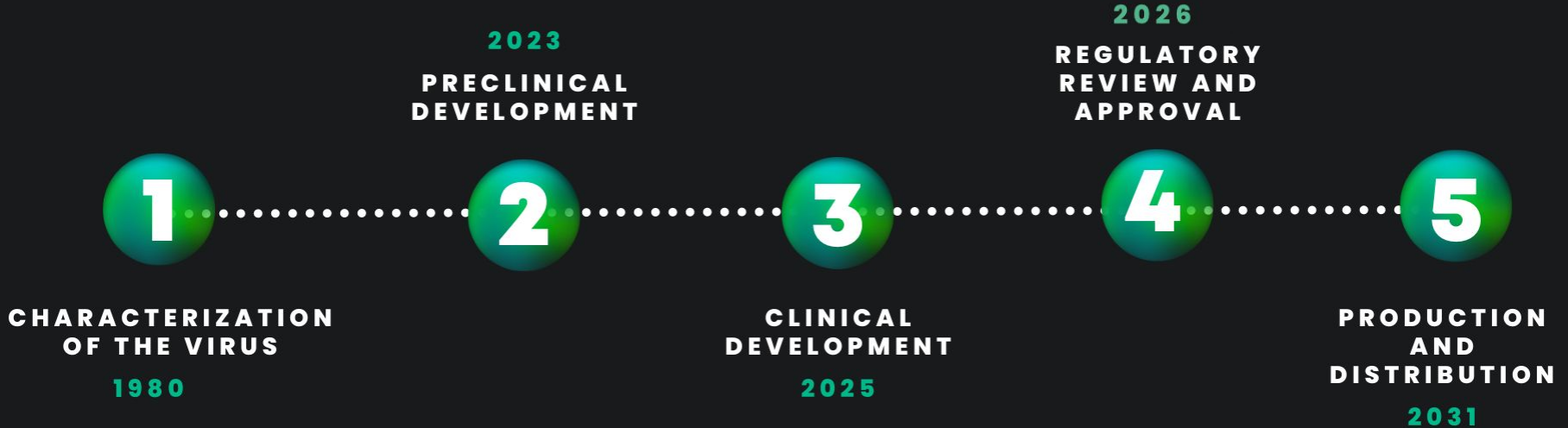


Vision & Implementation



Empowering the future, one **HIVax** at a time.

Future Roadmap



Expenses

Current solution

Our solution

Monthly price of current HIV
solution

Months per year

Avg time left after getting HIV

$\$4,250 \times 12 \text{ months} \times 40 \text{ years} = \2 million

Total

$\$50,000 + \$10,000 = \$60,000$

Cost of Dormant Virus

Price of sc-CRISPR Cas9