

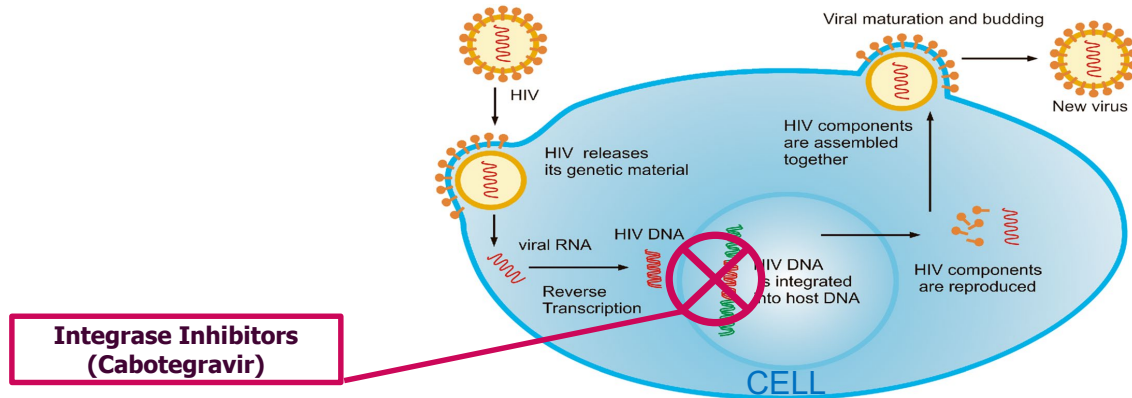
Cabotegravir Dissolvable Pellet Implants and Cabotegravir Injectable Depot

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What is cabotegravir (CAB)?

- CAB is a long acting, potent, anti-retroviral drug from the class of integrase inhibitors
- It stops the HIV virus from integrating into the DNA of the healthy human cells, preventing HIV from replicating and spreading elsewhere in the body
- CAB as a long-acting injectable (called APRETUDE) is approved by the FDA and recommended by WHO as an additional HIV prevention option



CAB Pellets and CAB Depot in brief

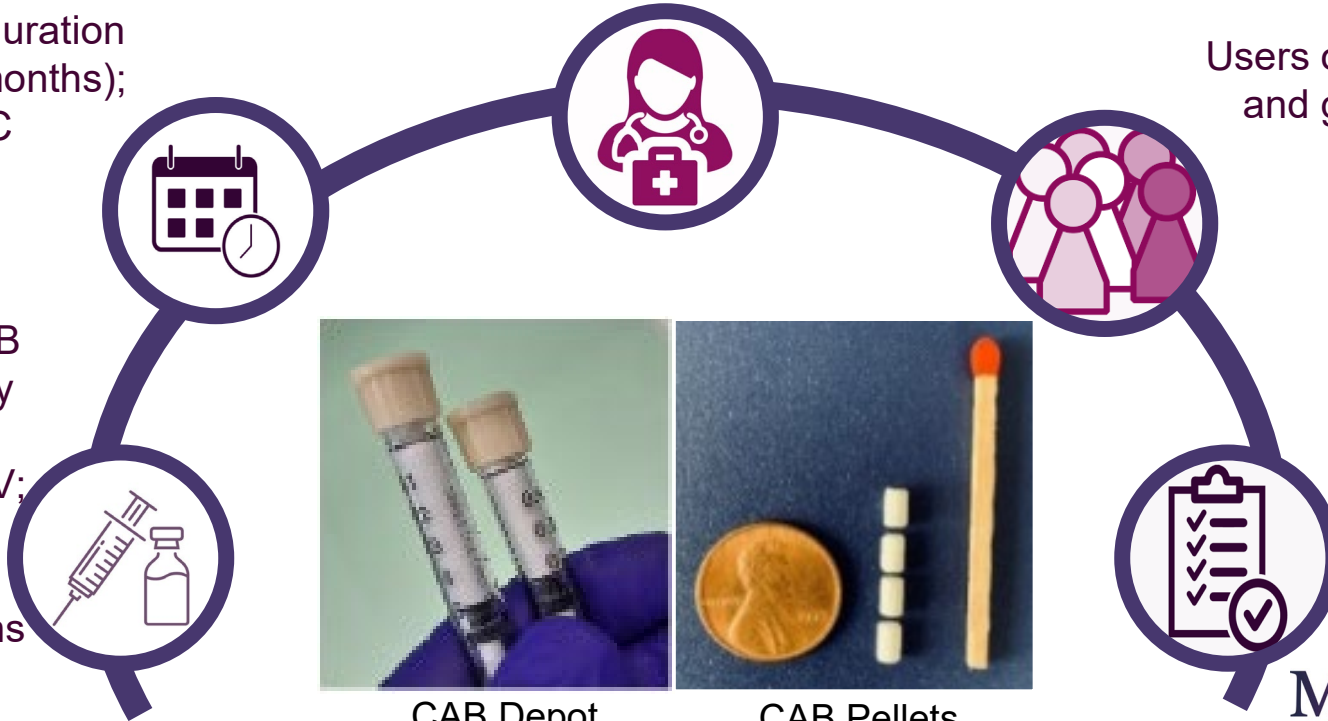
Administered under the skin by healthcare provider similarly to contraceptives

Longer duration (~6-12 months); SC

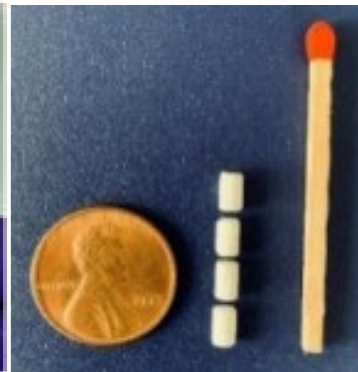
Users of all ages and genders

Approved CAB product highly effective at preventing HIV; must be injected IM every 2 months

Reduce clinic visits, costs, time, monitoring efforts



CAB Depot



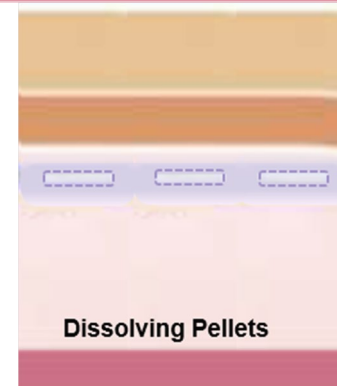
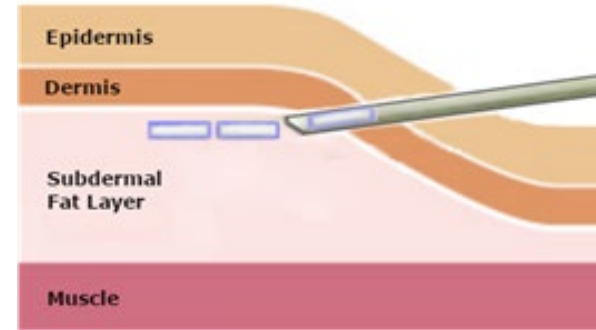
CAB Pellets

MATRIX

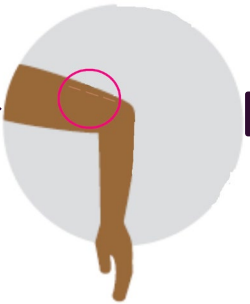
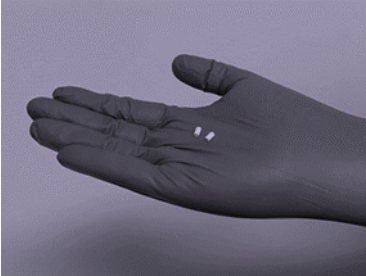
CAB Pellets



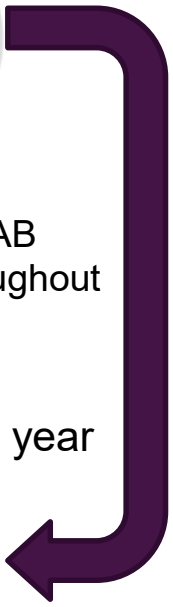
- Small, cylindrical shape, containing mostly CAB
- One dose equals multiple pellets
 - Target dosing up to 8-10 pellets implanted with a single insertion
- **Slowly dissolve**, so there's nothing to remove
 - In the case of severe adverse reaction, pellets could be removed 1-3 months after implanted
- Ingredients (other than CAB) are generally regarded as **safe**
- Low cost and simple to manufacture
- Potential to be developed in combination with other antivirals or contraceptives



How are CAB Pellets inserted?

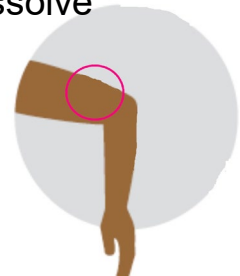


Pellets release CAB immediately and throughout the year



~ 1 year

Pellets fully dissolve



Return to clinic for next implanted dose

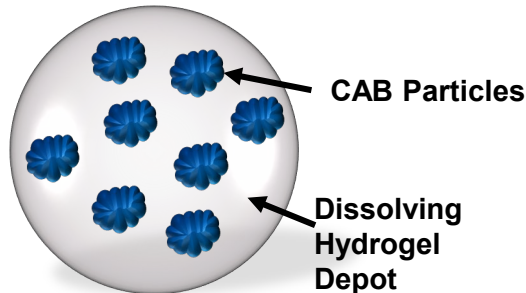


While the user is seated, the pellets are implanted by clinic provider with an inserter



CAB Depot

- What do we mean by “depot”?
 - Depot is a small bubble-like gel injected under the skin with CAB contained or stored inside
 - As the bubble dissolves, CAB is slowly released
- The rate of release is controlled by the natural ingredients that make up the bubble (depot)



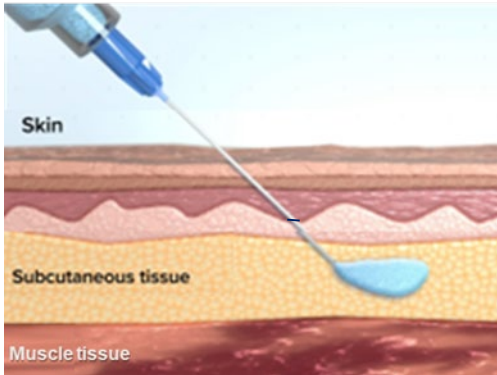
Bubble-like depot



How is CAB Depot injected?

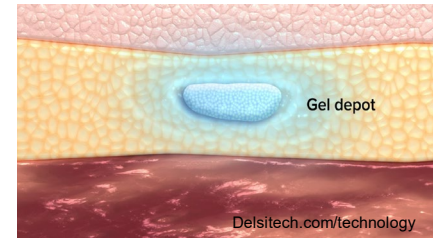
➤ Provider uses a small, thin needle to deliver the depot under the skin

- ✓ Minimal pain
- ✓ Quick injection
- ✓ Long-lasting



➤ Depot slowly dissolves and releases CAB at steady rate

- ✓ Confers protection for ~ 6 months
- ✓ Two injections per year
- ✓ Nothing to remove



Advantages of CAB Pellet and CAB Depot versus CAB-LA



Studies Conducted to Date and Key Take-Aways



Formulation Development

- Several formulation improvements developed
- Increased drug amount & release rate



Preclinical Animal Testing

- Rat Drug Release Rate Studies
- Monkey Drug Release Rate Studies
- Long term monkey study (Depot)

Promising data showing safety and target release rate in rats and monkeys



Qualitative

- Discrete Choice Experiments
- End-user preferences (SA, Kenya, eSwatini)

Strong preference among African women for long acting and implantable products



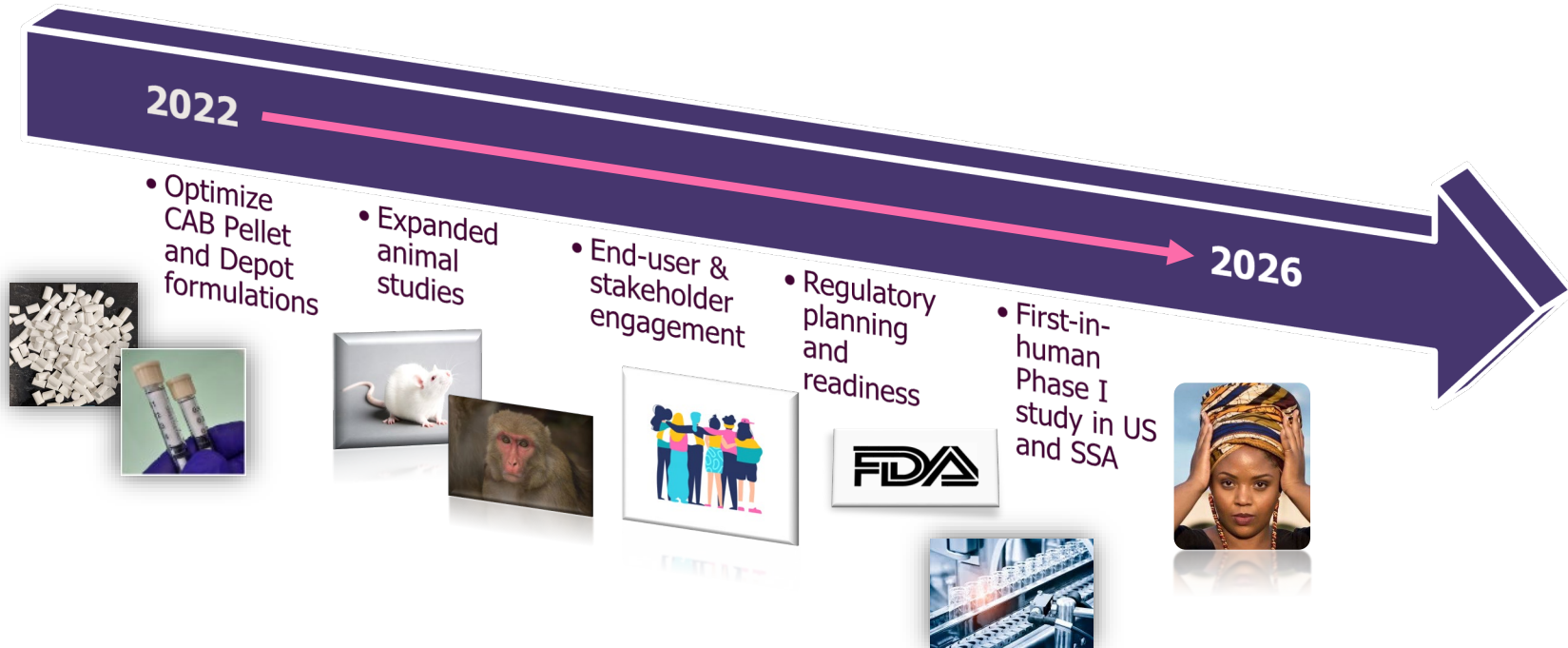
Regulatory

- Initial FDA engagements ongoing
- Formal Pre-Investigational New Drug (IND) Meetings pending for clinical testing

Key questions to address - next steps

- Can we achieve the **desired duration** of 12 month for the pellets and 6 months for the injectable depot?
- Until when can the products be **safely removed** if needed?
- How long does CAB **persist in the body** after the period of protection ends? In other words, what is the **"tail"**?
- Are the depot and pellet **safe and well tolerated** in women?
- Do they achieve **levels associated with protection**?

Next steps and development timeline



Acknowledgements

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Acknowledgements

