

CleverLab™

Neutralize™

An IND-Ready Antiviral Oral Platform
Powered by Chloroplast Biologics & Click Chemistry

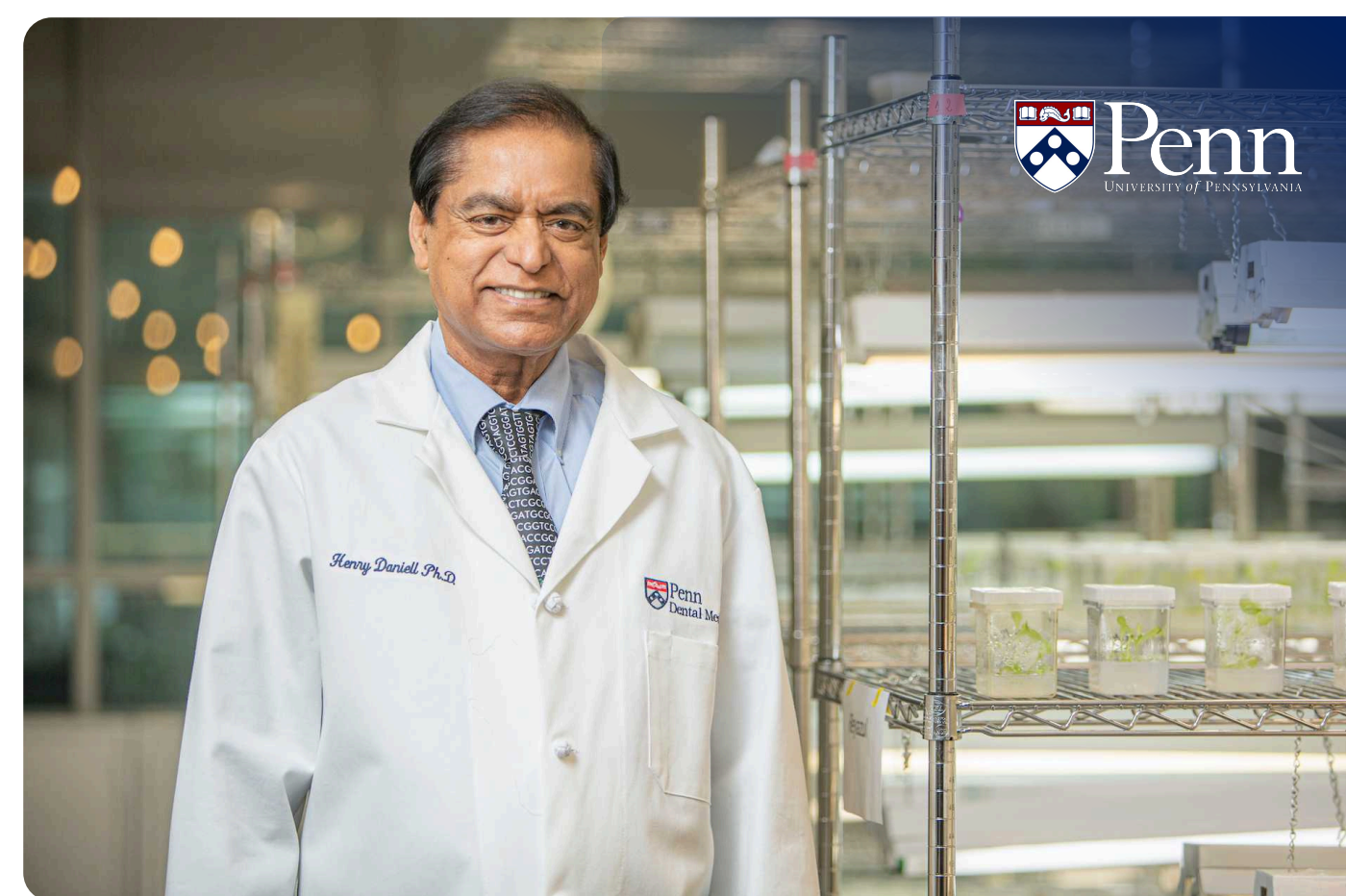
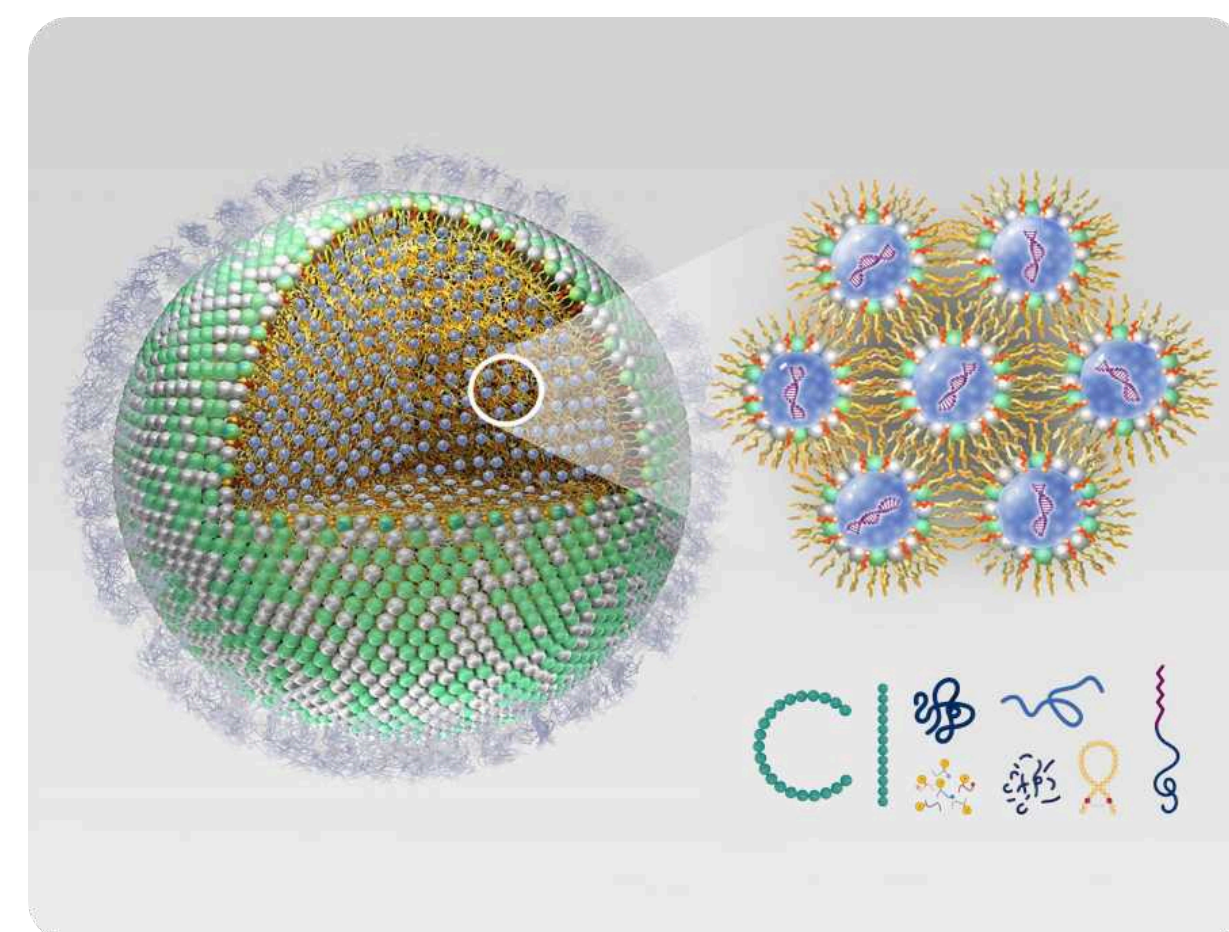
Presented by: **Cleverlab AB** – in partnership with **Dr. Henry Daniell**



Strategic Opportunity

Why Roche, Why Now

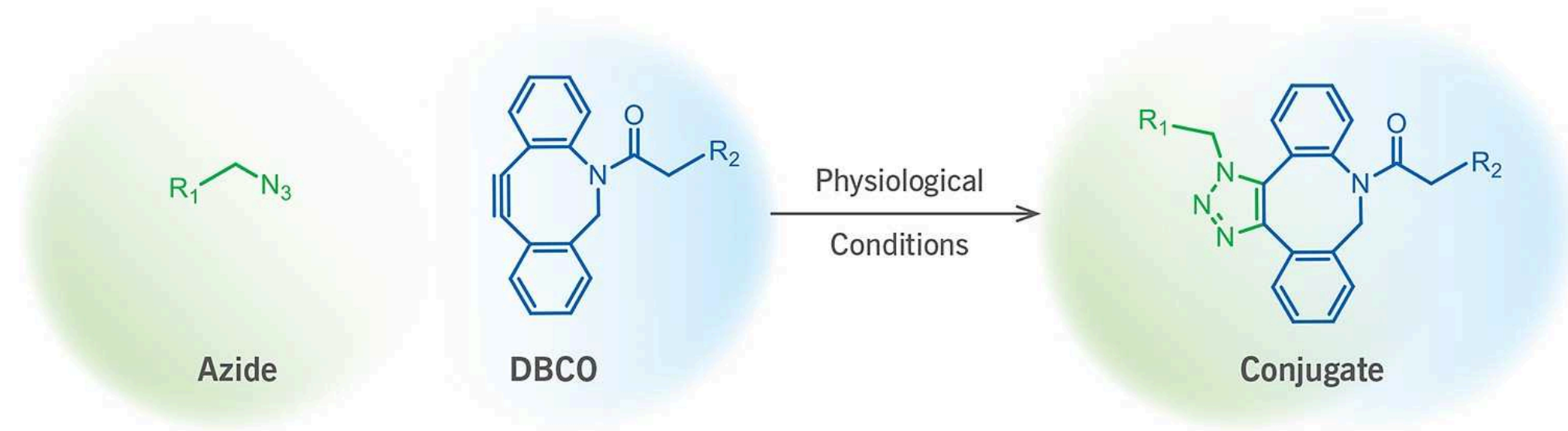
- Leverages Roche's leadership in immune & infectious diseases
- Aligns with Roche's interest in mucosal immunity and non-invasive delivery
- Strategic fit for pandemic preparedness and public health stockpiling
- IND-ready: Phase I/II can start within 90 days
- Co-development of NeutralizeRX™ possible without opening IP on other Clevergum flavors or platforms



The Product

Neutralize™ – FRIL+Click™ Oral Antiviral Gum

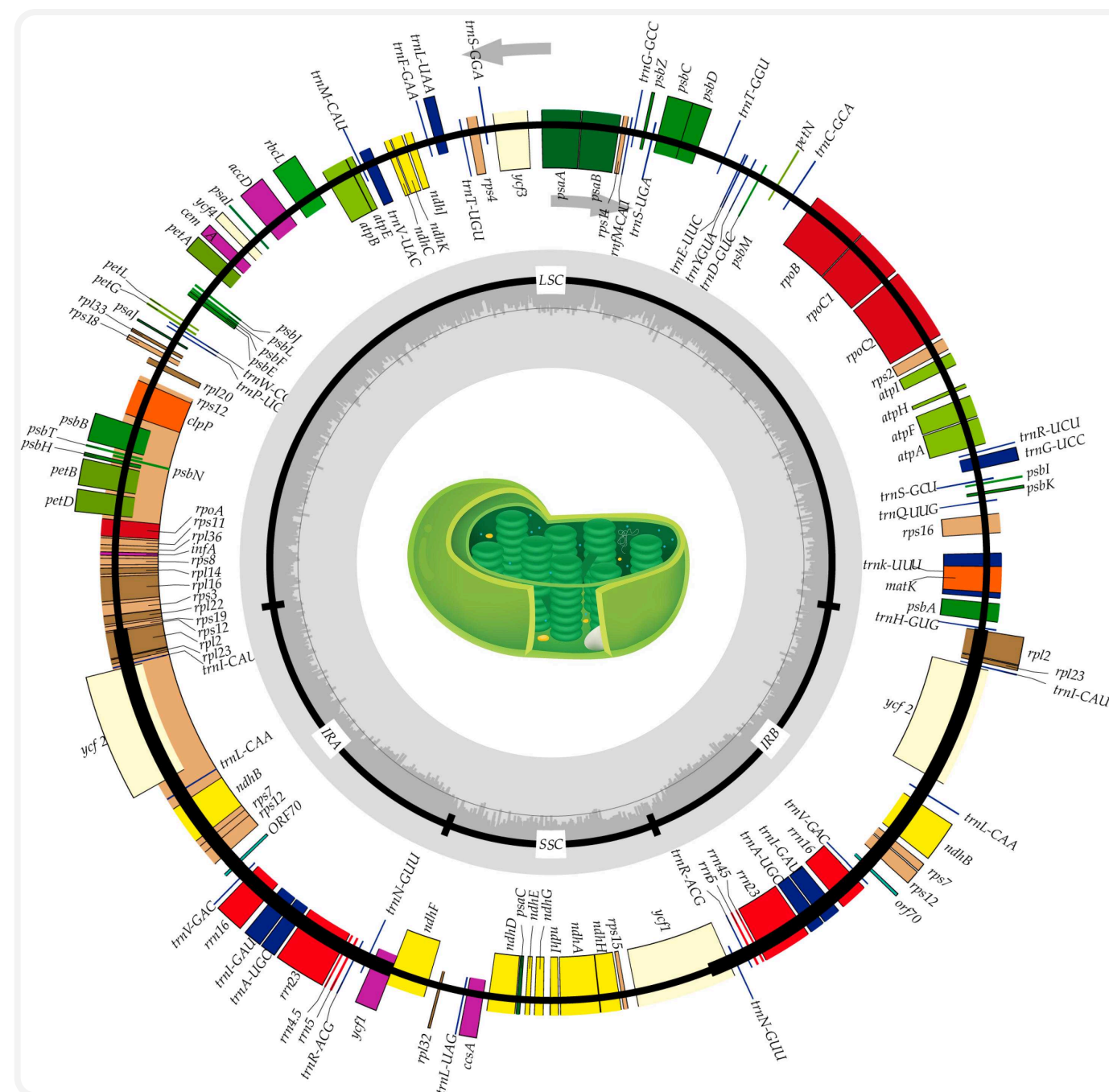
- Clinically validated protein: FRIL (Flt3 Receptor Interacting Lectin), developed by Dr. Daniell
- Plant-derived protein, >95% neutralization of HSV-1/2, H1N1, H3N2
- Delivered via SPAAC-conjugated mucoadhesive matrix (Clicktromics™)
- Chew-based dosing. Room-temp stable. Shelf life >2 years



Clicktromics™ – Mechanism Integration

Two Best-in-Class Systems Combined

- FRIL anchors to complex-type N-glycans on viral envelopes
- Clicktromics™ applies SPAAC chemistry to stabilize FRIL in gum for targeted mucosal release.
- Enables precise orientation, slow release, and durability inside oral cavity
- Bioorthogonal, copper-free, Nobel-winning chemistry (2022)



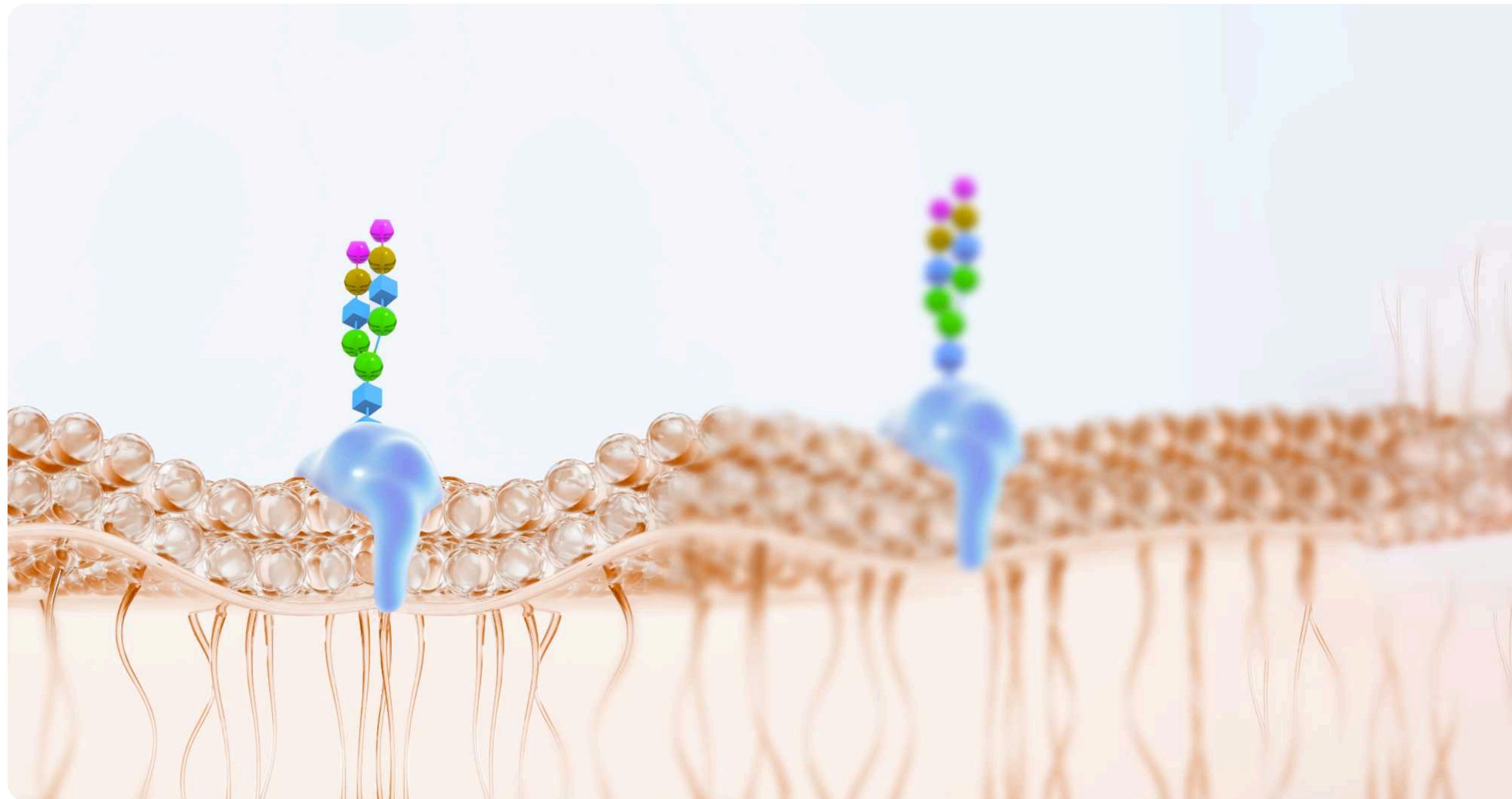
The screenshot shows the Clicktromics website interface. At the top, there is a navigation bar with links for "Clicktromics Components", "What's Clicktromics", "Bertozzi", "How it works", "Key Concepts", and "Team behind". A "Start Clicktromics" button is also present. Below the navigation bar, there is a section titled "Explanation Video" and "Clicktromics Components". The main content area features a diagram illustrating the mechanism of an Antibody Drug Conjugate (ADC). The diagram shows an antibody binding to a target cell, forming an ADC. The ADC then undergoes internalization, degradation in the endosome and lysosome, drug release, and cellular machinery disruption, leading to cell death. The diagram is labeled with "Antibody", "Linker - Payload", "Target Cell", "Antibody Drug Conjugate (ADC)", "Pinatuzumab Vedotin", "Tumor cell", "CD22", "MC-vcPAB linker", "Internalization", "Degradation", "Drug Release", "Cellular Machinery Disruption", and "Cell Death". Below the diagram, there is a section titled "App Description" and "What's Clicktromics™?". The text describes the app as a specialized application developed by Prepaire Labs aimed at assisting scientists and researchers in the efficient design and development of antibody-drug conjugates (ADCs). It mentions that the app reduces the time and cost associated with ADC screening by guiding users through a systematic design process. Below this, there is a section titled "Bertozzi" and "A Pioneering Scientist in Chemical Biology and Glycobiology". The text describes Carolyn Bertozzi as a groundbreaking scientist whose work has changed the way we understand and interact with living organisms at the chemical level. It mentions her most famous achievement, the development of bioorthogonal chemistry, and how it has opened up new possibilities in medicine. The text also mentions that her tools have allowed scientists to map and study these glycans in ways that were never possible before, leading to major advancements in cancer research, infectious disease treatment, and the development of new therapies. Finally, it mentions that the impact of her work is enormous and that her discoveries are not only transforming the field of biochemistry but also hold the potential to save millions of lives by leading to more precise and effective treatments.

IND & Clinical Readiness

CleverLab™

Built on Proven Science

- IND-approved gum platform (FDA IND #154897) for ACE2 + FRIL delivery
- Manufacturing pipeline already validated (UPenn GMP plant system)
- Daniell Lab brings preclinical + clinical data, regulatory groundwork, and formulation
- Cleverlab adds formulation enhancements + delivery innovation + commercial positioning



Made In SWEDEN

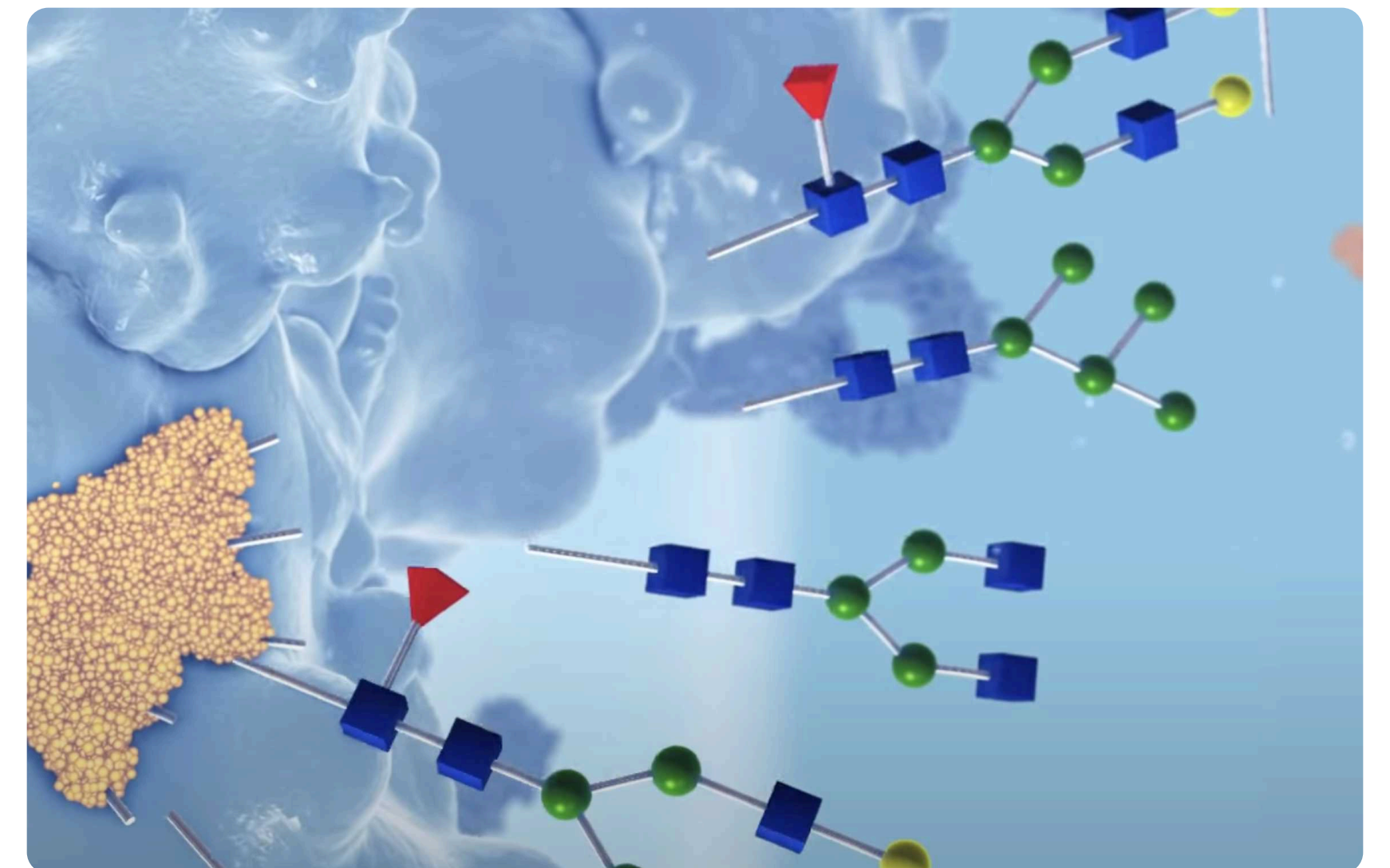


Precision-Crafted Wellness

Differentiation

Why This Is Unique

- First antiviral gum to use click-anchored biologics
- Bioorthogonal delivery + plant cell bioencapsulation = unmatched safety + efficacy
- Crosses pharma, wellness, and pandemic readiness markets
- No cold chain. No needles. Just chew.





Neutralize™

Use Cases

CleverLab™



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Precision-Crafted Wellness

Clinical Pathway

2025 Timeline

Q2

Partner onboarding + IND transfer protocol alignment



Q3

Phase I/II clinical launch (N=60)



Q4

Data readout + scale-up planning



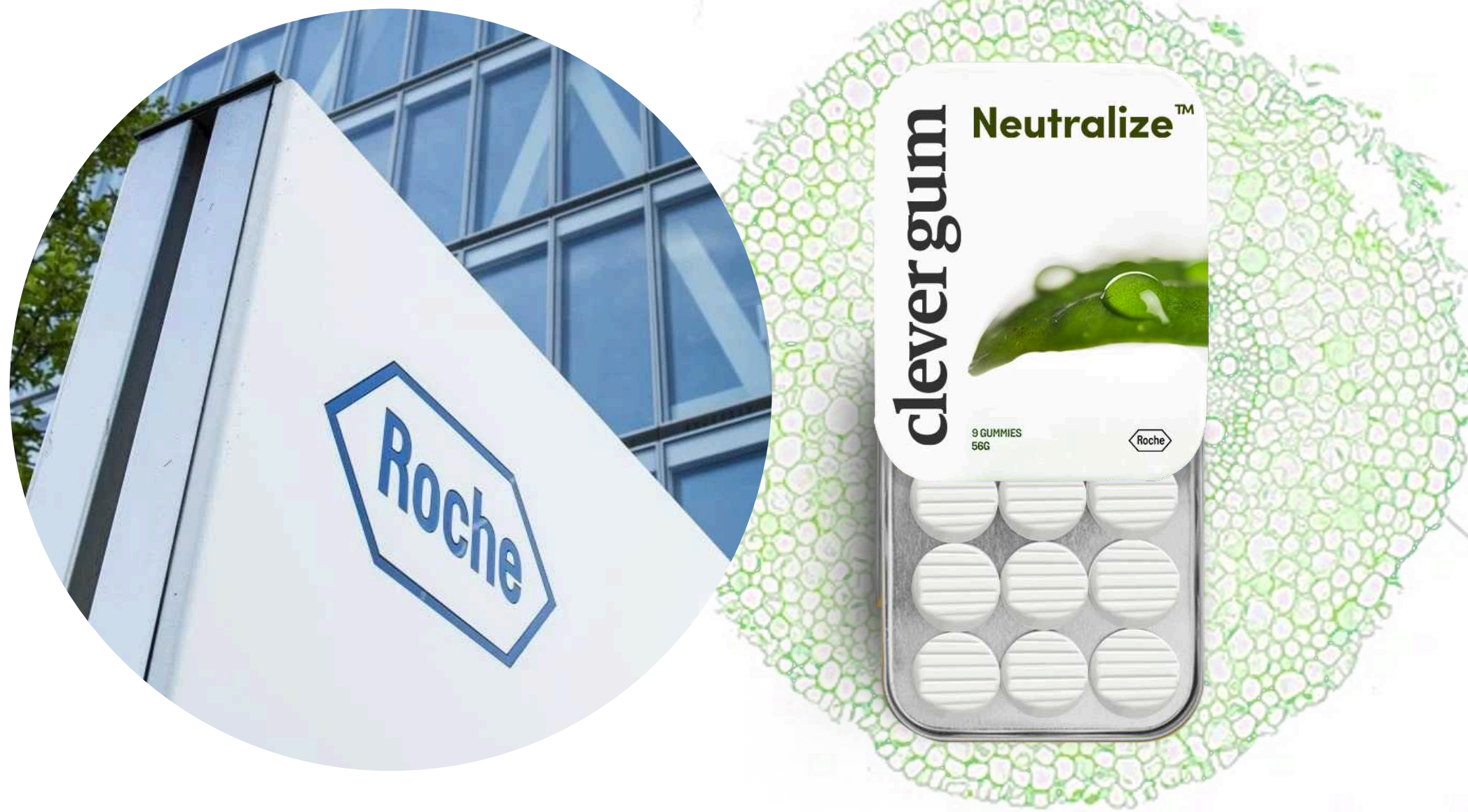
2016

Market-specific registration (OTC + NeutralizeRX™)



Partnership Proposal

- Clinical and regulatory collaboration to fast-track **Neutralize™**
- Co-development rights for pharma-grade formulation (**NeutralizeRX™**)
- Optional global strategic stockpile discussions



Made In SWEDEN





Let's Create the World's First Antiviral Chewing Gum. One that's ready now. Not next cycle.

Backed by chloroplast biologics.
Anchored with click chemistry.



Neutralize™

By Cleverlab AB x Daniell Lab

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Precision-Crafted Wellness