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Dyve Biosciences

Aesthetics Innovation Summit

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Dyve is an R&D biopharmaceutical leader creating disruptive innovations through our unique transdermal delivery technology



- **Human proof of concept in multiple patients in multiple indications, and a vast library of potential drug candidates in therapeutic and aesthetic indications. For example,**
  - **Adipolysis**
  - **Alopecia**
  - **Analgesia**
  - **Antifibrinolytic**
  - **Melasma/dyschromia**
  - **Erythema**
  - **Gout**
  - **Rhytids**
- **Advanced clinical programs in gout and melasma, both with anticipated phase 2 trials in 2020**

# Mechanism of Action: Dyve Technology opens two key transdermal doors, the stratum corneum lipid matrix and tight junctions

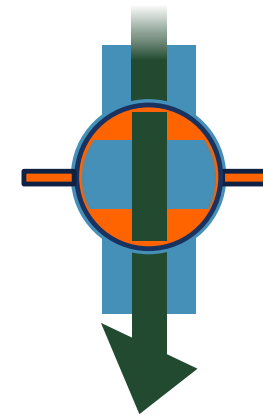
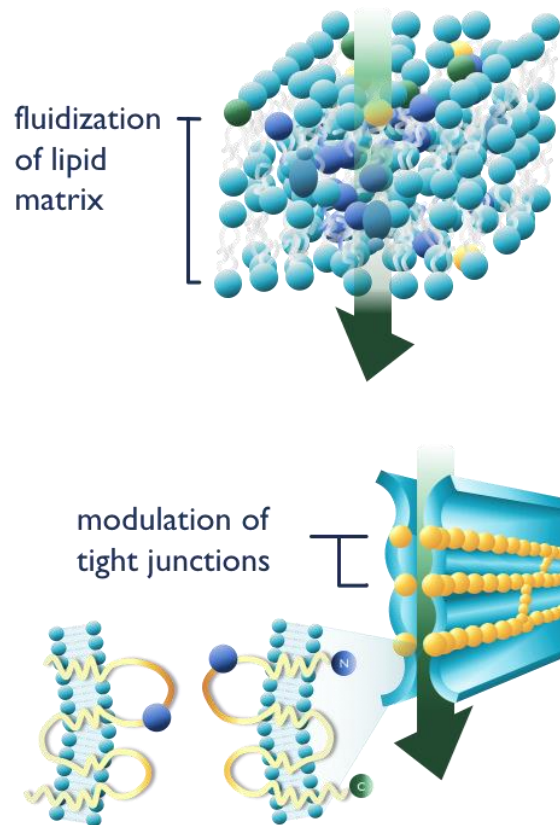
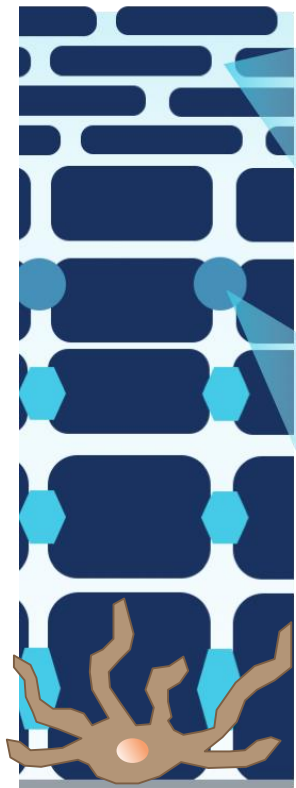
**Skin Barrier**



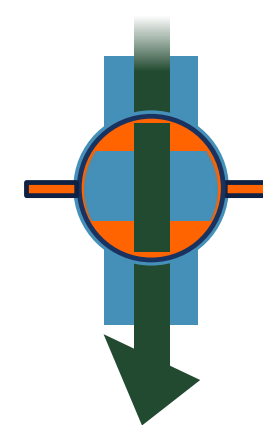
**Dyve Technology**



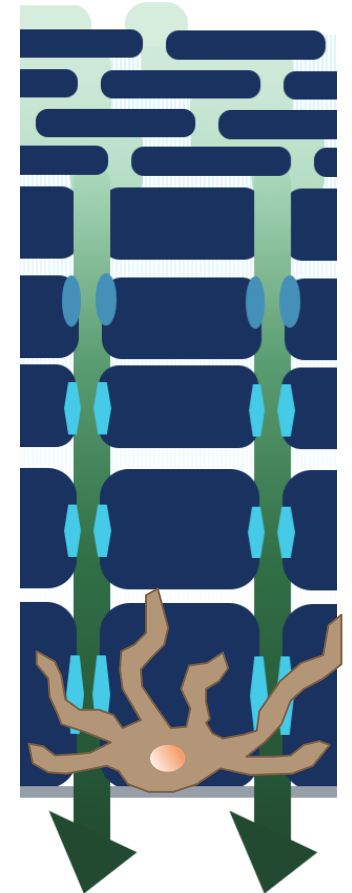
**Opening Physiologic "Valves"**



OPEN



OPEN

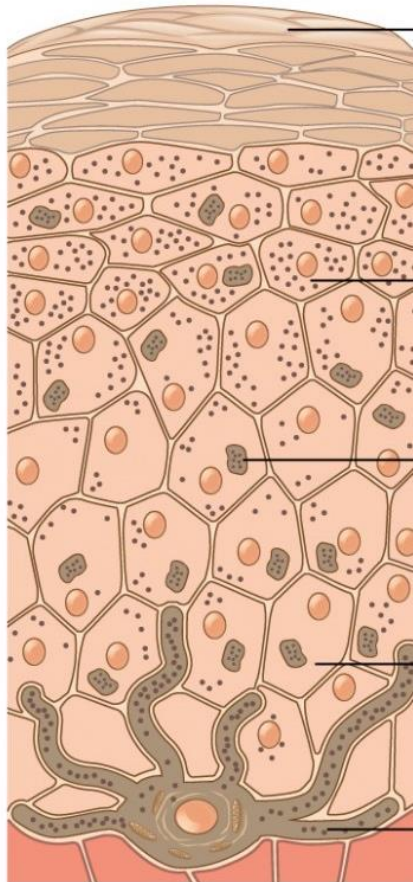


# DYV600 – Tranexamic acid in a novel transdermal delivery system to treat Melasma



- **High prevalence** – 50-70% of post-partum women with melasma, even larger when considering broader dyschromia
- **Unmet Need**
  - Modest efficacy of existing topical options
  - Lack of effective, safe, chronic use topical
- **Safe drug with observed efficacy when delivered acutely delivery orally or by injection for antifibrinolysis**
- **Dyve technology takes oral or injected drugs and optimizes their delivery transdermally**

# DYV-600: Targeting Melasma at the Source



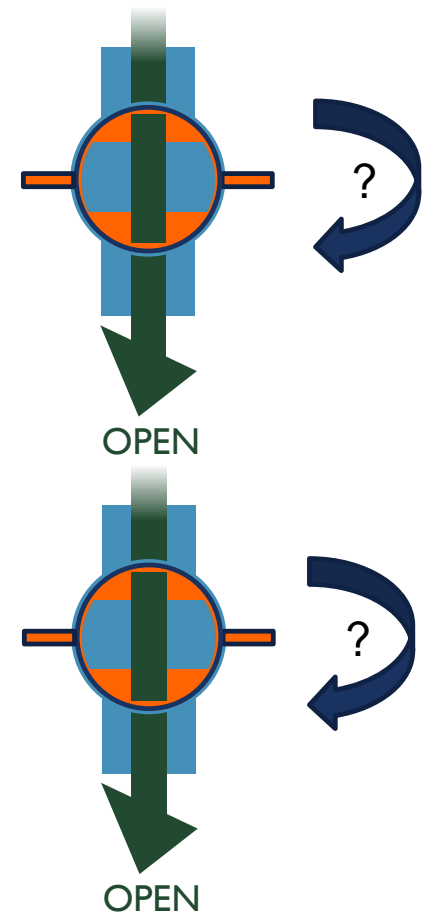
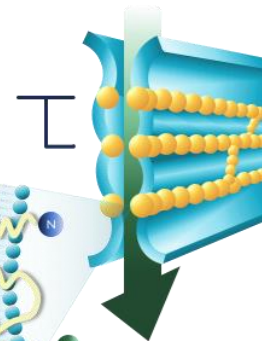
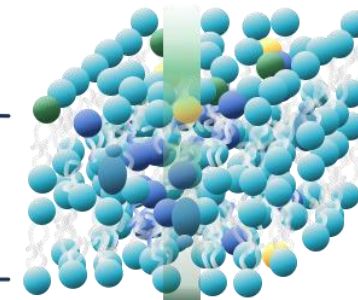
Uneven pigmentation is the result of melanosomes that rise to the surface.

Shutting off the process requires treating deep melanocytes – beyond current topicals' penetrating ability.



fluidization  
of lipid  
matrix

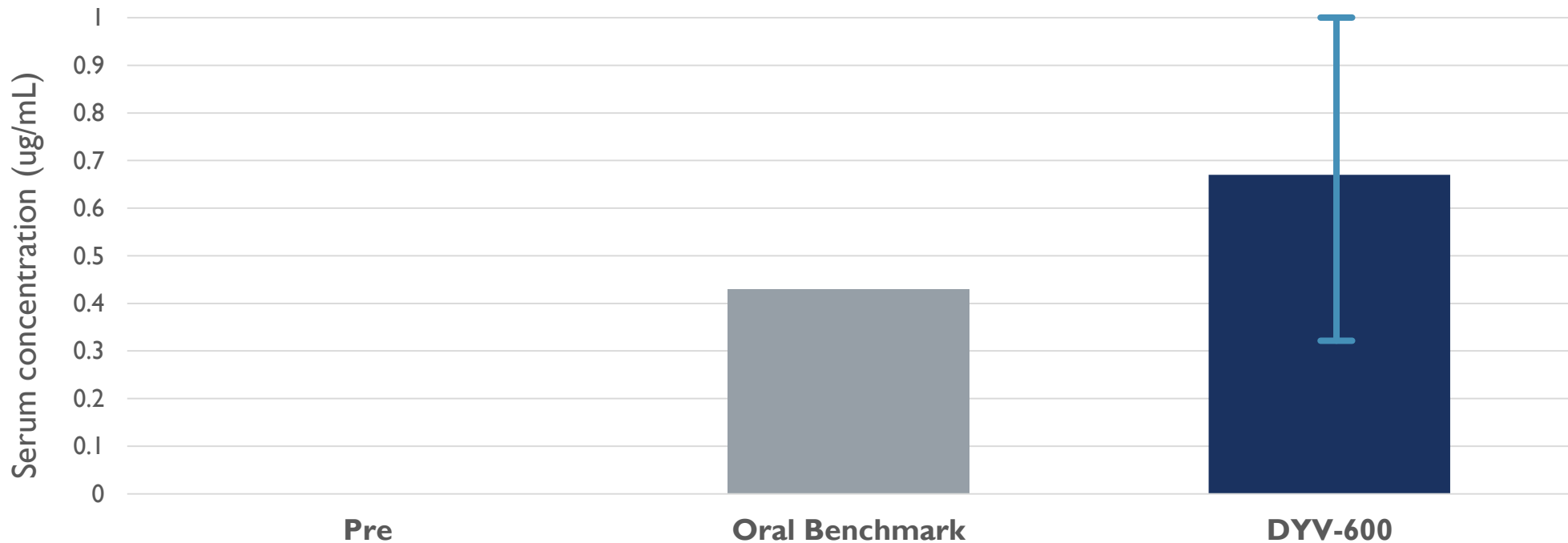
modulation of  
tight junctions





# DYV-603: Bioavailability – Summary of Results

## Bioavailability of Active in Blood Serum – DYV-604



Blinded testing (n=3). Subjects applied 0.5 mL of Dyve Tranexamic acid cream (6% active) every 2 hours for 8 hours (total of 5 doses) for a total of 125mg (average of ~1.5mg/kg). Blood drawn 1 hour after final dose. Serum tested for concentration of active molecule and compared to baseline concentration (pre-treatment). Oral dose equivalent benchmark calculated from Pilbrant, et al, doi:10.1007/bf00554669

# DYV-600: Overview of Melasma Clinical Programs

- **DYV-601: Feasibility**

Open label feasibility in treatment resistant patients.

- **DYV-602: Split-face Versus 4% Hydroquinone (HQ)**

Randomized, double-blind, head-to-head, split-face study comparing tranexamic acid in a novel transdermal delivery system to hydroquinone for improvement of melasma.

- **DYV-603: Split-face with/without Turnover Agents**

Randomized, single-blind, split-face study evaluating tranexamic acid in a novel transdermal delivery system, alone or with skin turnover agents, for improvement of melasma.

- **DYV-604: Full-face comparing various technology formulations (on-going)**

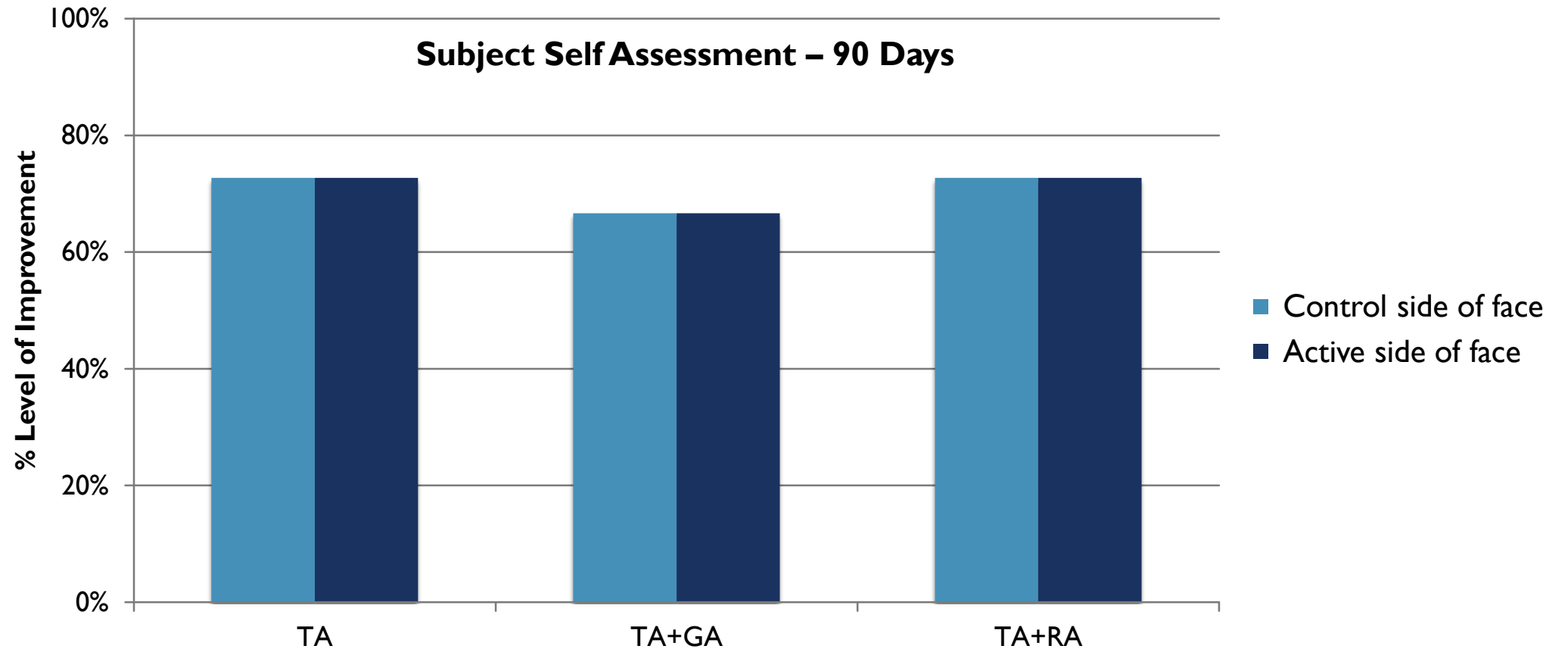
Randomized, double-blind, placebo controlled, parallel group design.

# DYV-601: Feasibility Study Showed Rapid Resolution of Treatment Resistant Melasma





# DYV-603: Due to bioavailability, both sides respond in a split-faced study design



TA-Tranexamic Acid 6%  
TA+GA-Tranexamic Acid 6% + Glycolic Acid 5%  
TA+RA-Tranexamic Acid 6% and Retinoic Acid 0.25%

SSA Levels of Improvement are:  
Worst, No Change, Improved, Much Improved,  
and Very Much Improved.

## DYV-603: Representative Subjects – Non Active *Control* Side

Before



After



Before



After



# DYV-604: Interim Patient Data – 60 Days



## Investigators:

- Mitch Goldman, MD
- Sabrina Fabi, MD
- Rosalyn George, MD
- Joel Cohen, MD
- John Joseph, MD

Randomized, Double-Blinded, Placebo Controlled Efficacy and Safety Study of a Transdermal Treatment for Melasma (n=36). Subject applied 1.2mL DYV-600 to face b.i.d.

Data read-out 2H 2019

# Dyve's Strong R&D Pipeline

## AESTHETIC PROGRAMS

FEASIBILITY

PRE-CLINICAL

HUMAN  
POC

APPROVAL  
PROCESS

MARKET

DYV-600 – Dyschromia

DYV-200 – Rhytids

DYV-350 – Adipolysis (flanks)

DYV-400 – Alopecia

DYV-250 – Cellulite

## ALKALINITY PROGRAMS

FEASIBILITY

PRE-CLINICAL

HUMAN  
POC

APPROVAL  
PROCESS

MARKET

DYV-800 – Gout

DYV-000 – Oncology

## THERAPEUTIC PROGRAMS

DYV-100 – Analgesia (OTC)

DYV-300 – Adipolysis (lipoma)

DYV-450 – Erythema



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