# **Dermata Therapeutics**

A Study of the Tolerability, Safety, and Efficacy of DMT410 for the Treatment of Upper Facial Lines

**November 2021** 

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This presentation and the accompanying oral presentation contain "forward-looking" statements that are based on our management's beliefs and assumptions and on information currently available to management. Forward-looking statements include all statements other than statements of historical fact contained in this presentation, including information concerning our current and future financial performance, business plans and objectives, current and future clinical and preclinical development activities, timing and success of our ongoing and planned clinical trials and related data, the timing of announcements, updates and results of our clinical trials and related data, our ability to obtain and maintain regulatory approval, the potential therapeutic benefits and economic value of our product candidates, competitive position, industry environment and potential market opportunities. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," and similar expressions are intended to identify forward looking statements.

Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors including, but not limited to, those related to the success, cost and timing of our product candidate development activities and ongoing and planned clinical trials; our plans to develop and commercialize targeted therapeutics, including our lead product candidates DMT310 and DMT410; the progress of patient enrollment and dosing in our clinical trials; the ability of our product candidates to achieve applicable endpoints in the clinical trials; the safety profile of our product candidates; the potential for data from our clinical trials to support a marketing application, as well as the timing of these events; our ability to obtain funding for our operations, development and commercialization of our product candidates; the timing of and our ability to obtain and maintain regulatory approvals; the rate and degree of market acceptance and clinical utility of our product candidates; the size and growth potential of the markets for our product candidates, and our ability to serve those markets; our commercialization, marketing and manufacturing capabilities and strategy; future agreements with third parties in connection with the commercialization of our product candidates; our expectations regarding our ability to obtain and maintain intellectual property protection; our dependence on third party manufacturers; the success of competing therapies that are or may become available; our ability to attract and retain key scientific or management personnel; our ability to identify additional product candidates with significant commercial potential consistent with our commercial objectives; and our estimates regarding expenses, future revenue, capital requirements and needs for additional financing.

We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. Moreover, we operate in a very competitive and rapidly changing environment, and new risks may emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed herein may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Although our management believes that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. We undertake no obligation to publicly update any forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

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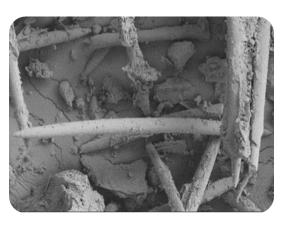


### **DMT410 - Unique Natural Platform Technology**

#### **Spongilla**-derived Platform

- DMT410 utilizes our unique spongilla technology to facilitate the delivery of OnabotulinumtoxinA
- Spongilla technology used in our DMT310 and DMT410 product is a powdered mixture that contains a unique variant of Spongilla lacustris, a freshwater sponge
- The sponge is comprised of inorganic siliceous spicules, which are about 200μm in length and 10-15μm in diameter. It is believed
  that the spicules penetrate the stratum corneum during application
- The sponge powder is mixed with 0.9% Sodium Chloride allowing for ease of topical application



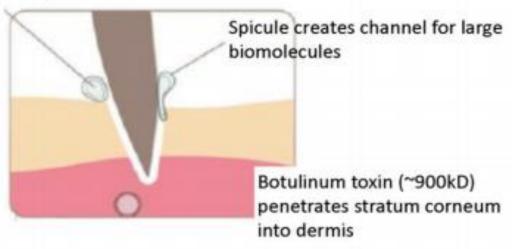




### **Hypothesis**

- It is hypothesized that the spicules contained in the sponge powder will create microchannels through the stratum corneum, thus allowing for penetration of OnabotulinumtoxinA into the dermis
- It is thus postulated that DMT410 may be able to deliver OnabotulinumtoxinA to the facial dermis and improve aesthetic endpoints

Large biomolecule (>100 kD)





### **Study Design**

- Open-label, 1-arm study
- 10 Subjects, 18 and older with moderate to severe upper facial lines
- One application of *Spongilla* mixture, followed by 1 topical application of 64 units of OnabotulinumtoxinA to the upper face by study staff
- Patients were assessed at 4 weeks, 8 weeks, 12 weeks, and 16 weeks

### **Endpoints**

- Luminosity, brightness, pore size, sebum production
- Global Aesthetic Improvement
- Laxity under the eye and fine lines under the eye
- Severity of glabellar, lateral canthal, and forehead lines

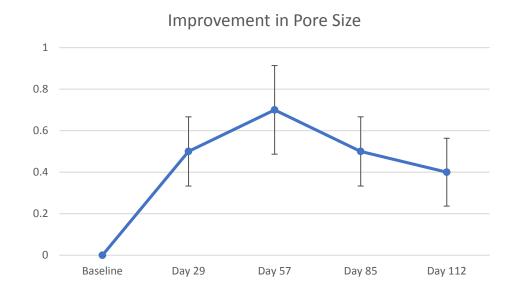


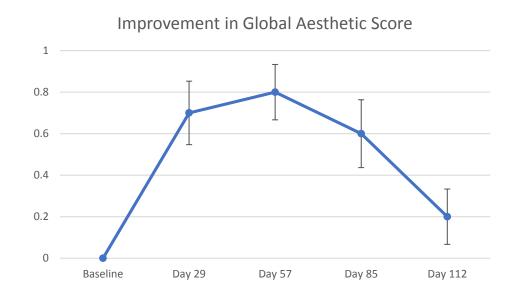
# **Demographics**

	DMT310 (N=10) N (%)
Sex - Female	10 (100.0)
Race - White	10 (100.0)
Ethnicity – Not Hispanic / Latino	10 (100.0)
Age Mean (range)	57.2 (48-78)
Fitzpatrick Skin Type Type I Type II Type III Type IV Type V Type VI	1 (10.0) 2 (20.0) 4 (40.0) 3 (30.0) 0 (0.0) 0 (0.0)



### Mean Improvement in Pore Size and Global Aesthetic Score







## **Canfield VISIA Pore Analysis from Baseline to Month 1**

**Baseline** 



Data Point	Value
Pore Count	302
Pore FA	0.77







Data Point	Value
Pore Count	100
Pore FA	0.32

Subject 013



# Canfield VISIA Image Analysis Change from Baseline to Month 1

Measure	Forehead		Left Temple		Right Temple	
	Mean Change	Pct Change	Mean Change	Pct Change	Mean Change	Pct Change
Pore Count	-107.5	-12.2%	-14.8	-11.1%	-21.3	-19.0%
Pore Area	-5.2	-16.4%	-1.7	-10.0%	-2.0	-16.5%
Wrinkle Count	-12.2	-11.6%	-3.2	-18.9%	-3.4	-19.0%
Wrinkle Area	-11.7	-7.0%	-4.1	-13.5%	-5.1	-14.1%



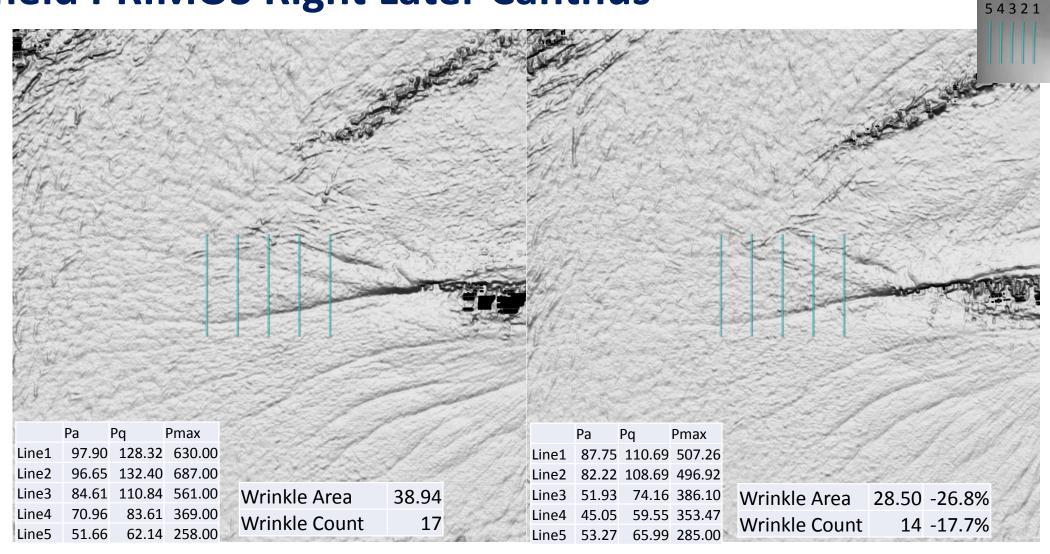
# Canfield PRIMOS Image Analysis Change from Baseline to Month 1

Measure (mm²)	Forehead		Glabella		Left Oblique		Right Oblique <sup>1</sup>	
	Mean Change	Pct Change	Mean Change	Pct Change	Mean Change	Pct Change	Mean Change	Pct Change
Mean Line	-1.8	-3.4%	-2.8	-3.9%	-23.0	-14.7%	-20.5	-14.3%
Mean Roughness	-1.4	-5.1%	-2.7	-7.2%	-4.0	-5.8%	-4.2	-7.9%

Roughness: refers to the superficial fine lines



## **Canfield PRIMOS Right Later Canthus**



**Subject 05** 

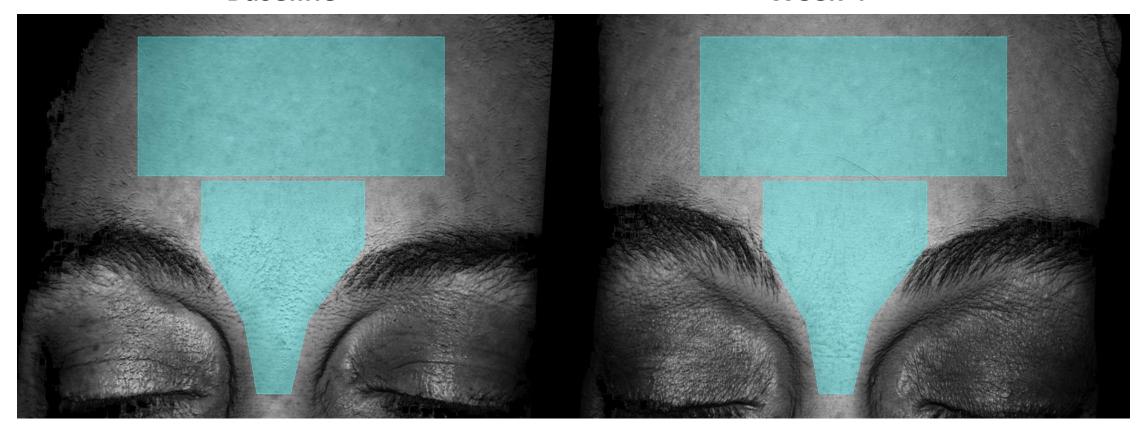


**Baseline** 

Week 4

### **Canfield PRIMOS Forehead and Glabella**

Baseline Week 4 Subject 013



Endpoint	Baseline	Day 29	% Change
Pore Count	302	100	-66.9%
Pore Area	37.87	12.62	-66.7%

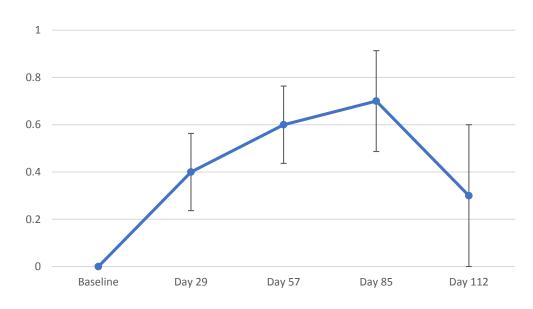
Endpoint	Baseline	Day 29	% Change
Roughness	25.04	20.93	-16.4%
Wrinkle Area	82.14	20.20	-72.95%

Endpoint	Baseline	Day 29
Brightness	8	9
Luminosity	8	9

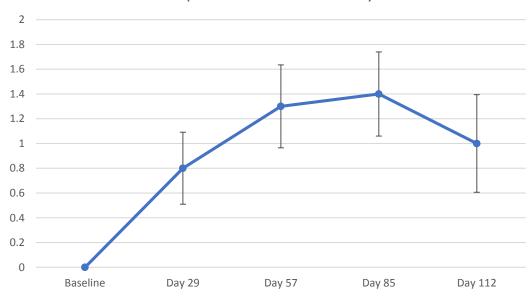


### Mean Improvement in Brightness and Luminosity





#### Improvement in Luminosity



**Brightness**: the combined uniformity of skin coloring and texture.

**Luminosity**: the intensity of light area reflected on the face.

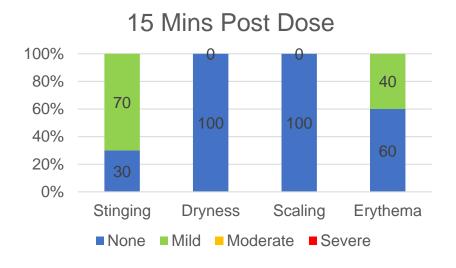


### **Treatment Emergent Adverse Events**

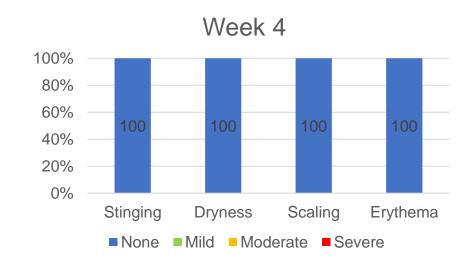
System Organ Class Preferred Term	DMT310 (N=10) N (%)
Any Adverse Event	0 (0.0)
Any Potential Distant Spread of Toxin Event	0 (0.0)
General disorders and administration site conditions	0 (0.0)



### **Local Tolerability**











### **Conclusions**

- Most patients demonstrated improvements in skin quality endpoints
  - pore size and count,
  - brightness,
  - Luminosity, and
  - overall aesthetic improvement
- These improvements peaked 2-3 months after treatment before trending towards baseline
- DMT410 treatment appeared to be well tolerated and produced no potential distant spread of toxin adverse events
- These promising results warrant further investigations with DMT410 for skin quality improvement, perhaps with enhanced treatment regimens, doses, or formulations



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