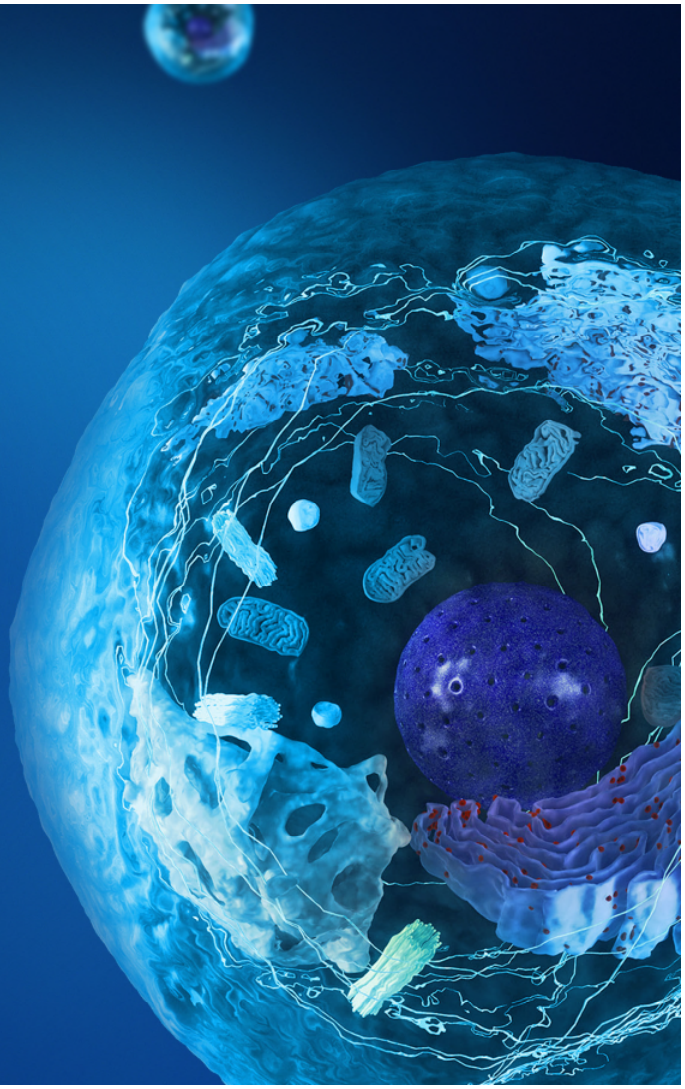
Introduction

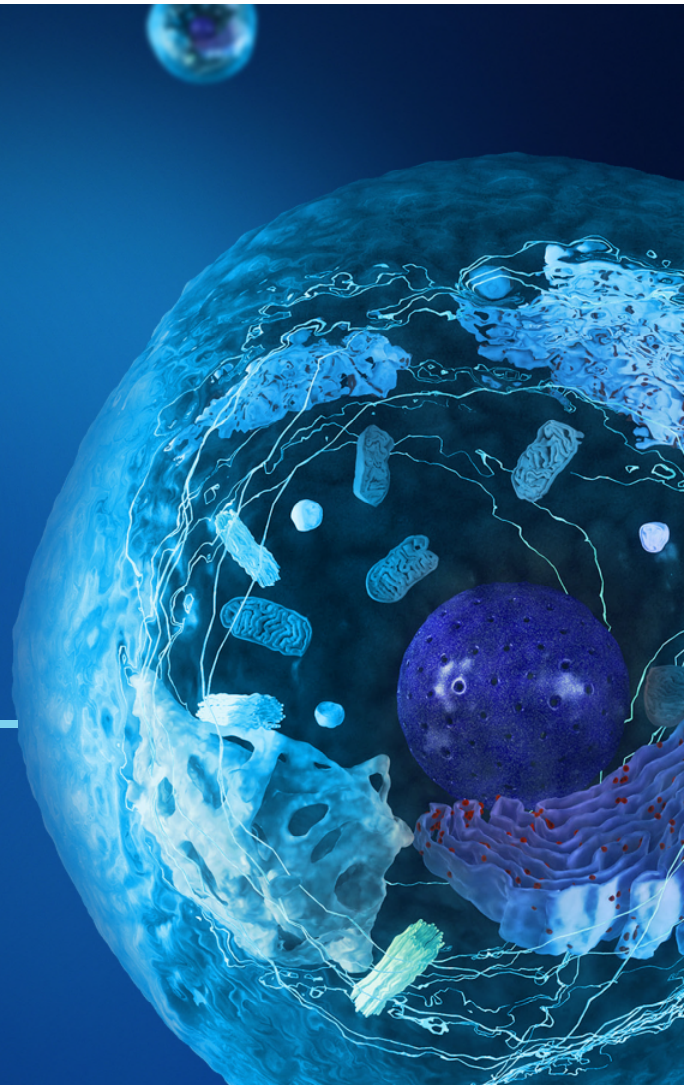
(Nasdaq : PLSE)

Pulse Biosciences



Pulse Biosciences

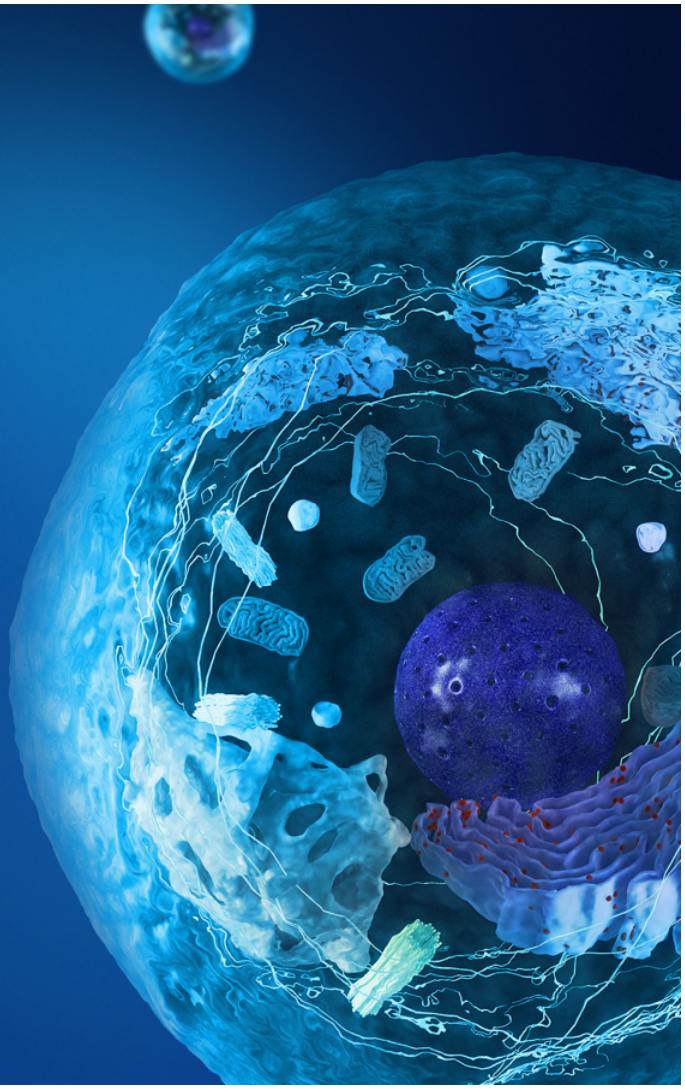
A **novel** medical therapy company bringing to market its **proprietary** Nano-Pulse Stimulation™ (NPS) platform



FORWARD-LOOKING STATEMENTS

This presentation and accompanying oral presentation by Pulse Biosciences, Inc., contain estimates and forward-looking statements including, among others, statements regarding Pulse Biosciences' future business plans, products, commercial applications, clinical trials, regulatory processes and pathways, markets for its technologies, and other future events. You should not place undue reliance on forward-looking statements, as they involve known and unknown risks and uncertainties that are, in some cases, beyond the Company's control and could cause actual results to differ materially from the information expressed or implied. Factors that could materially affect actual results are described in detail in the Company's recent Securities and Exchange Commission filings.

Pulse Biosciences undertakes no obligation to revise or update forward-looking statements to reflect future events or circumstances.



Pulse Biosciences

Pulse Biosciences - Investment Overview

Proprietary Platform	NPS has a **broadly applicable cell-targeting mechanism** that induces a unique cell death process
Excellent Clinical Data	Initial clinical studies have demonstrated **excellent safety and efficacy** in difficult-to-treat dermatologic skin lesions
Near-term Commercial	Preparing for a **commercial launch** in cosmetic dermatology in **H2-2019—a significant commercial opportunity**
Future Applications	Preclinical models have demonstrated a unique ability to induce **immunogenic cell death**, expanding potential for the platform in skin cancer and other cancers
Strong Team	Proven management team and board of directors, experienced in building **viable companies with significant shareholder returns**

Pulse Biosciences

Pulse Biosciences—History

Pulse Biosciences

Pulse Biosciences—Proven Leadership

Founded on technology and intellectual property, and advanced into the clinic toward commercialization by a proven and experienced multidisciplinary team.

Management Team

Darrin Uecker, President & Chief Executive Officer
Pioneer in surgical robotics and ablation technologies, with over 25 years of life science experience, including bringing numerous novel technologies to market, and inventor on 70 patents

Brian Dow, SVP & Chief Financial Officer
Senior finance executive with experience building life science companies from early stage through commercialization

Edward Ebbers, Vice President and General Manager, Dermatology
Experienced commercial development executive in cosmetic dermatology; introduced initial commercial products at Thermage and Zeltiq

Board of Directors

Bob Duggan, Chairman
Successful life science executive and entrepreneur in surgical robotics and oncology biotech; as CEO sold Pharmacyclics for $21B to AbbVie in 2015

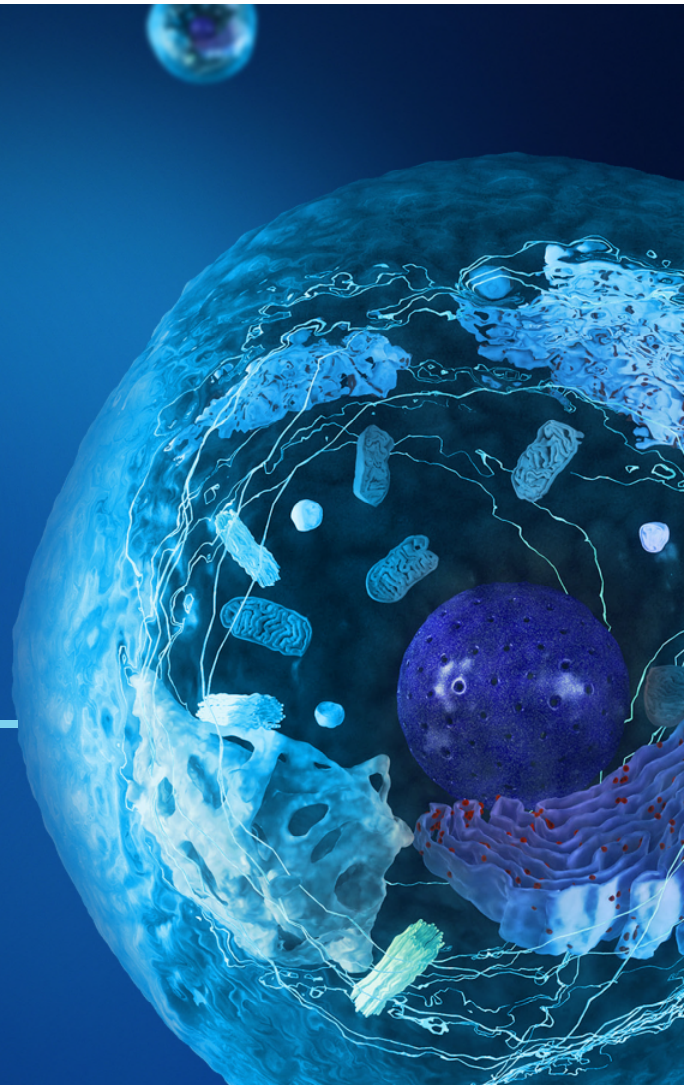
Maky Zanganeh, D.D.S.
Experienced operating executive in the life sciences and former chief operating officer at Pharmacyclics

Thomas Fogarty, M.D.
Founder of the Fogarty Institute for Innovation and recognized as a world leader in the development of innovative medical technologies

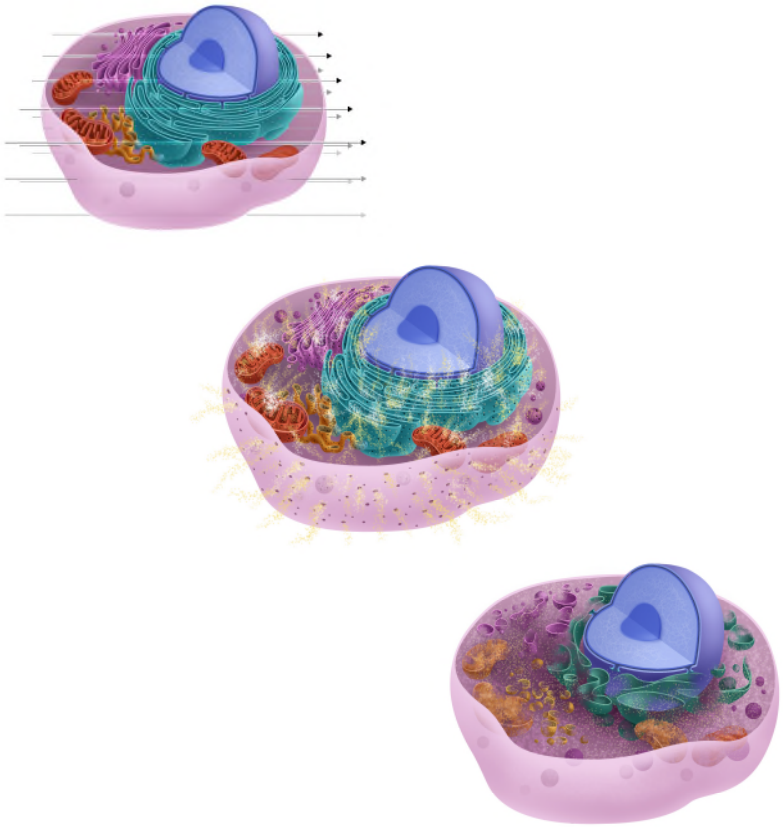
Kenneth Clark
Partner, Wilson Sonsini Goodrich & Rosati

Manmeet Soni
Experienced finance and accounting professional in the pharmaceuticals industry, including Pharmacyclics

NPS—unique mechanism of action creates opportunity in **multiple applications**



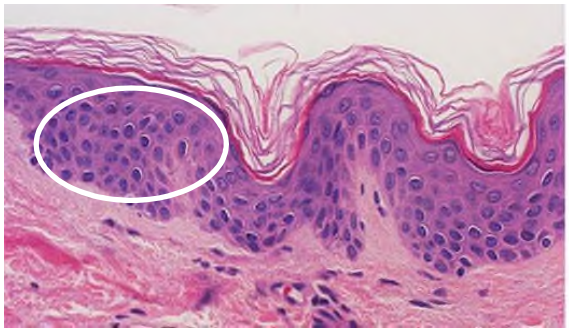
The Mechanism of NPS



- **Nonthermal** nanosecond energy pulses target internal cellular structures (organelles)
- **Organelles**, including the mitochondria and endoplasmic reticulum, lose membrane integrity and become dysfunctional
- **Regulated cell death** results and cells break down for efficient removal by the immune system
- NPS does not affect acellular structures, leaving extracellular tissue to support a **gentle healing** process

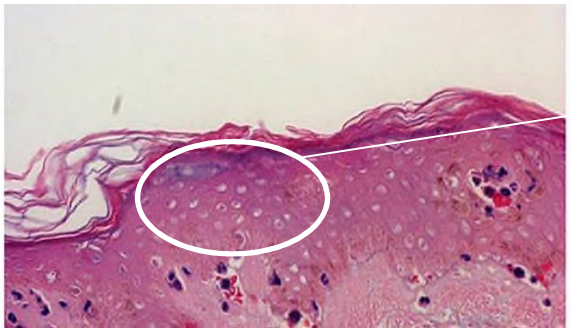
Demonstrated Mechanism of NPS

Safe, Precise Targeting & Elimination of Treated Cells



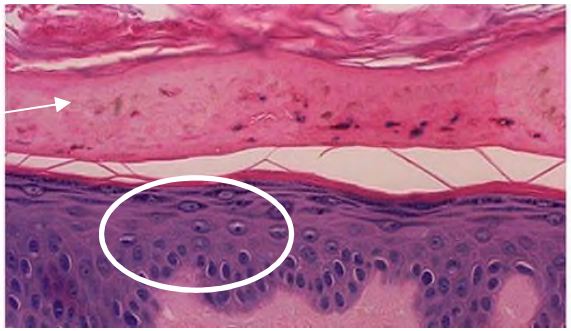
Healthy Skin

- Healthy epidermal cells with dark nuclei



One (1) day post-treatment

- Cells in treated epidermis are nonviable (ghost cells)
- Cell membranes and surrounding acellular tissue are intact



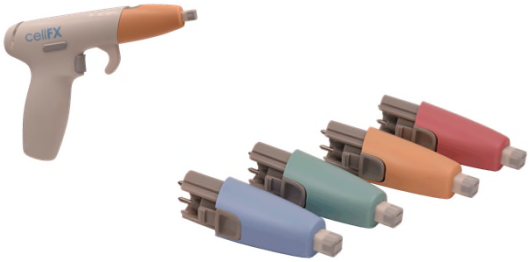
Seven (7) days post-treatment

- Healthy epidermis is emerging below
- Treated epidermal layer is peeling away

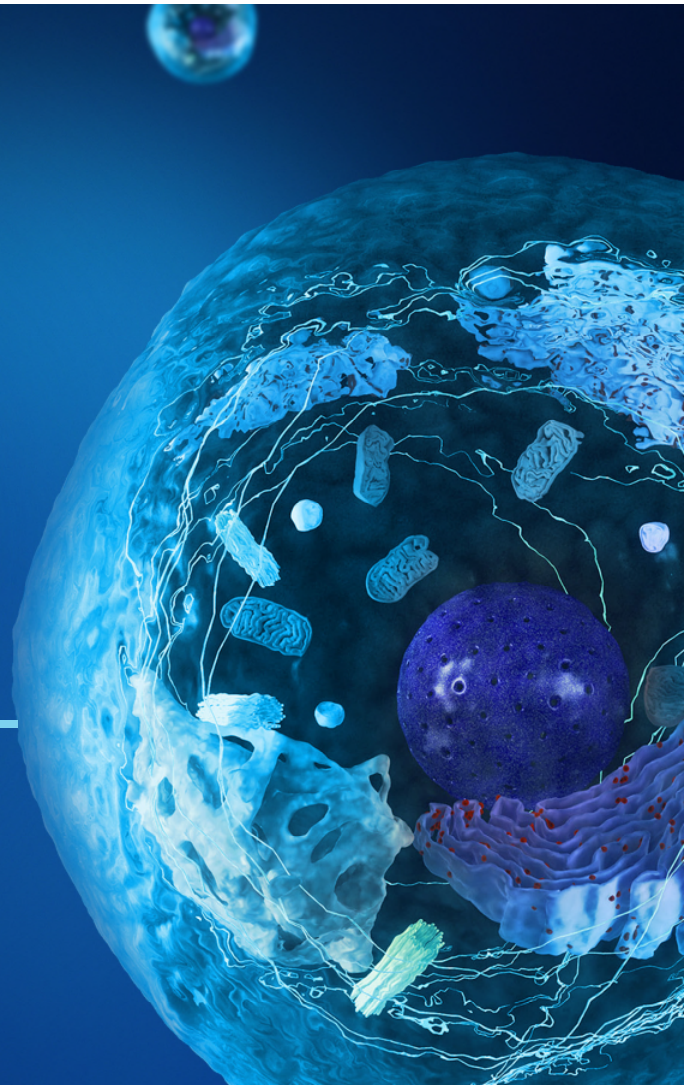
The CellFX™ NPS System

- Pulse Biosciences' **proprietary Nano-Pulse Stimulation System**
- Designed for **office, outpatient, or hospital** setting
- Simple and intuitive system design suitable across **multiple clinical applications**
- **Single-patient-use** applicator available with a variety of tip sizes for different applications
- **Fast** treatment times (<1 minute)
- Networked **per-click revenue** model

CellFX™



NPS—significant initial opportunity in cosmetic dermatology



Cosmetic Dermatology Is the Immediate Focus

Large, rapidly growing **cash-paying market**

Ideal Application for NPS

2X # of **consumers considering a cosmetic procedure has DOUBLED** in the last five years[1]

70% Percent of **consumers considering a cosmetic treatment** up from 30% in 2013[1]

#1 **Dermatologists** ranked **No. 1 influencer** of cosmetic procedure decision[1]

NPS mechanism targets and eliminates benign cellular lesions, with excellent cosmetic results

Simple to use in an office setting, extremely safe and well tolerated by patients

Minimal technical, clinical, and regulatory development risk relative to other areas

[1]ASDS Consumer Survey 2017

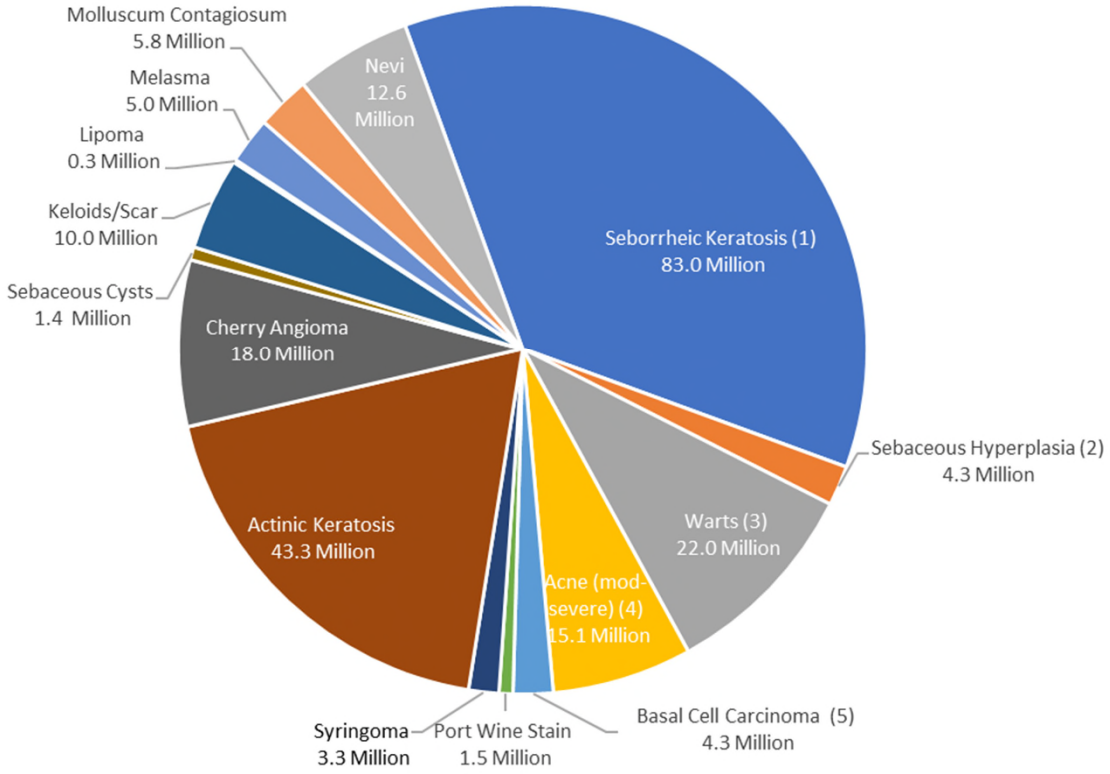
NPS in Cosmetic Dermatology—Immediate Opportunity with Significant Future Potential

Fifteen (15) initial dermatology conditions well suited for NPS

Approximately 230M Patients
(United States only)

First Five (5) NPS Clinical Studies
~130M potential patients

NPS in Dermatology—Immediate Opportunity with Significant Future Potential



(1) **Seborrheic Keratosis** – Study completed **– excellent results**

(2) **Sebaceous Hyperplasia** – Ongoing – **very good interim data**

(3) **Warts** – Feasibility study to be initiated in Oct 2018

(4) **Acne** – Study planned YE2018

(5) **Basal Cell Carcinoma** Immune biomarker window study – on-going

NPS in Dermatology—Seborrheic Keratosis (SK)

- SK is the most common benign skin lesion
- Great fit for NPS, as they typically present as a raised pigmented **skin lesion in the epidermis**
- Commonly occurs in older age

Opportunity

- Estimated US prevalence: **~83 million patients**[1]
- Immediately addressable US market:
  - **52 patients per week** on average are seen by cosmetic dermatologists, but only **35% receive treatment**[2]
  - **83% of consumers** are interested in treatment[1]
  - **Estimated addressable market of 6M patients**
- Current treatment modalities:
  - Thermal (heat or cold) have marginal efficacy, poor cosmesis
  - H_2O_2: multiple treatments, lower efficacy

(1) *J Clin Aesthet Dermatol*. 2017;10(3):16–25

(2) 2018 Clinician Survey conducted by SERMO on behalf of Pulse Biosciences, Inc.

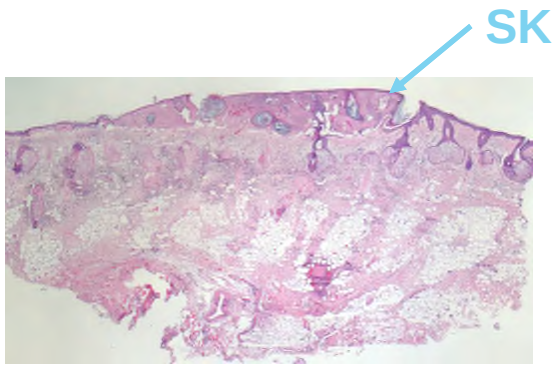
NPS in Dermatology—Seborrheic Keratosis (SK) cont'd

NPS SK Clinical Study - Completed

- Patients: 58 (3 treated lesions per patient)
- US centers: 4
- Treatment: Single NPS treatment
- Results:
  - **82% of 174 SKs rated as clear or mostly clear** by clinical investigators, compared to 61% for a recently approved topical drug
  - Patients rated themselves as being satisfied or mostly satisfied by 78% of lesion outcomes
  - Extremely safe and well tolerated - **Zero device or procedure-related adverse events reported**

Significance of Results

- NPS demonstrated a superior profile to existing modalities
- NPS can safely and effectively treat cellular lesions that reside in the epidermis while sparing the dermis



Cleared SK at 106-day follow-up

NPS in Dermatology—Sebaceous Hyperplasia (SH)

- SH occurs when the sebaceous glands become enlarged, creating small, shiny, yellowish lesions or bumps, usually 2-4 millimeters in diameter and typically on the face

Opportunity

- Estimated prevalence: **~4.3 million patients**
- Immediately addressable US market:
  - **32 patients per week** on average are seen by cosmetic dermatologists, but only **21% receive treatment**[1]
  - **83% of consumers** are interested in treatment[2]
  - **Estimated addressable market of 3.6M patients**
- Current treatment modalities:
  - No standard of care, typically electrocautery, cryo, or topical
  - Poor efficacy and cosmesis

(1) 2018 Clinician Survey conducted by SERMO on behalf of Pulse Biosciences, Inc.
(2) 2018 Consumer Survey conducted by SURVATO on behalf of Pulse Biosciences, Inc.

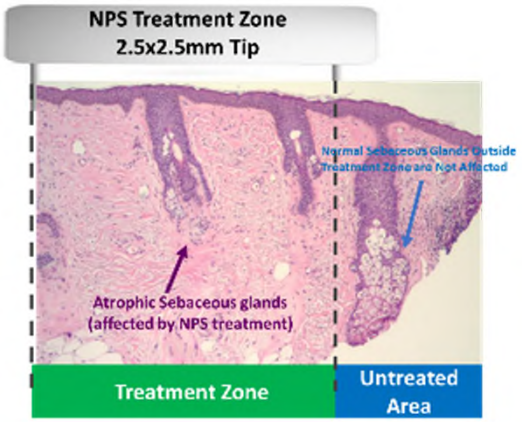
NPS in Dermatology—Sebaceous Hyperplasia (SH) cont'd

NPS SH Clinical Study – ongoing

- Patients: 72 (up to 4 lesions per patient)
- Sites: 5
- Treatment: up to 2 NPS treatments per lesion
- Interim results*:
  - **Study enrollment completed**
  - Data on first 79 lesions treated (~35%) reveal **95%+ of treated SH clear or mostly clear after 60 days**

Significance of Results

- NPS is showing the potential to become the standard of care for SH lesions, with excellent safety and efficacy in early results
- SH is an intradermal lesion, and positive results validate the ability of NPS to reach down into the dermis to treat sebaceous glands



Baseline

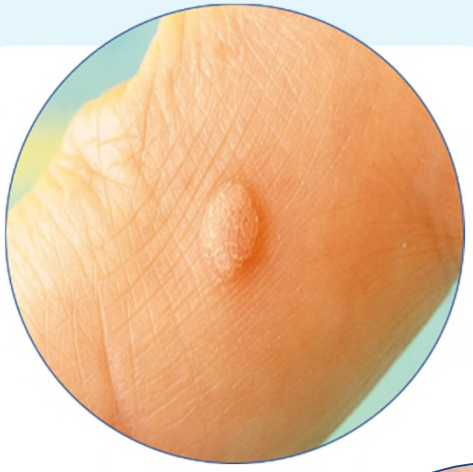
60 Days Post NPS

*Study follow-up continues. Results presented represent data analyzed as of 9/30/2018.

NPS in Dermatology—Warts and Acne

Common Warts

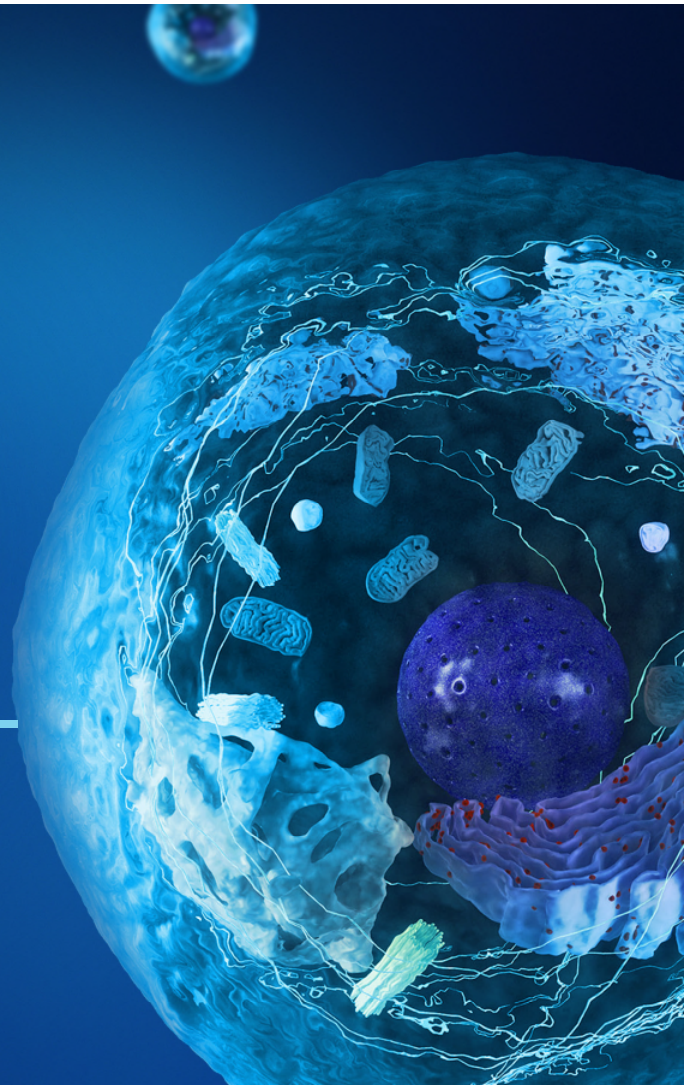
- One of the most common dermatologic complaints
- Reside in the epidermis, fitting nicely with the NPS mechanism
- Estimated prevalence: **~22 million patients**
- Current treatments lack effectiveness
- **NPS Wart Feasibility Study** – starting October 2018
  - IRB approved
  - Patients: Up to 20
  - Sites: One (1) – Scripps Health



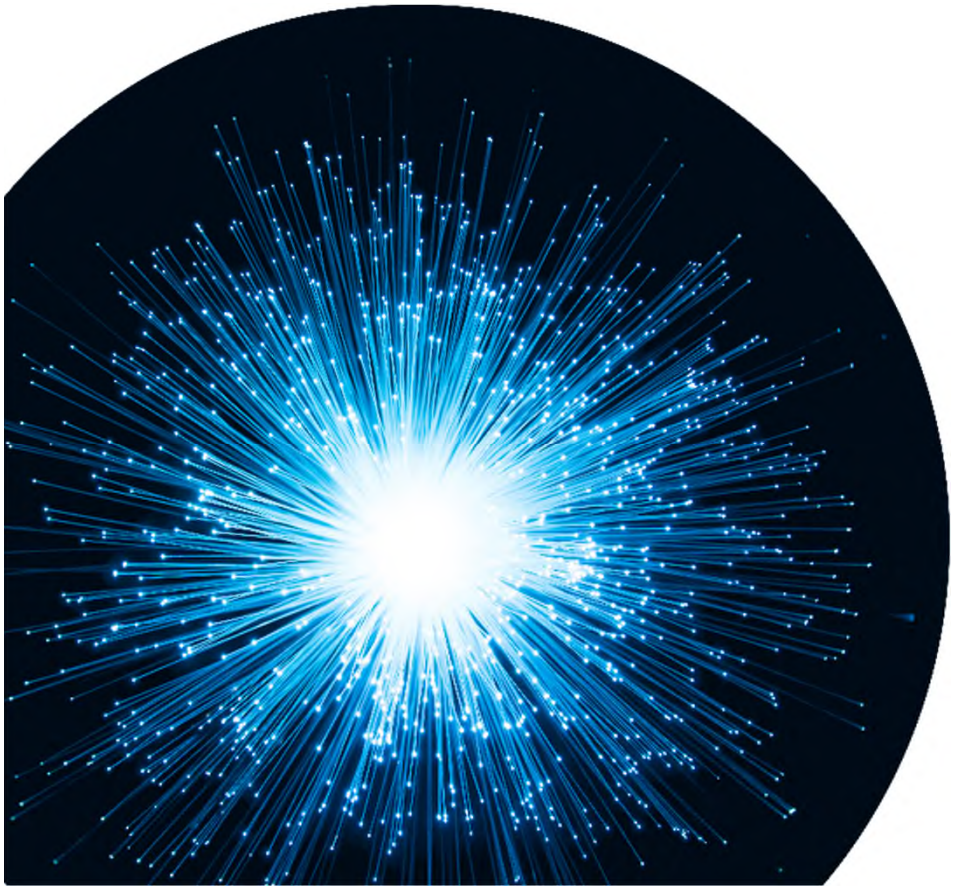
Moderate to Severe Acne

- A form of acne that can lead to scarring in outbreak areas
- Acne is the number one condition seen by dermatologists
- Fit to NPS mechanism – destruction of sebaceous glands
- Estimated prevalence: **~15.1 million patients**
- Feasibility clinical trial protocol under development – expected to start by YE2018

NPS—may provide immune response boost in the treatment of **skin cancer or other cancers**



NPS-Initiated Immunogenic Cell Death



- Demonstration of **immunogenic cell death in multiple cancer cell lines in vitro**[1]
- Demonstration of a CD8+-dependent **adaptive immune response in rechallenge mouse models**[2]
- Ongoing preclinical studies in two tumor models to demonstrate **secondary tumor inhibition with and without the use of adjuvants and combinations**

[1]Nano-Pulse Stimulation is a physical modality that can trigger immunogenic tumor cell death.

Richard Nuccitelli, Amanda McDaniel, Snjezana Anand, John Cha, Zacchary Mallon, Jon Casey Berridge, and Darrin Uecker

Journal for ImmunoTherapy of Cancer 2017 5:32 DOI: 10.1186/s40425-017-0234-5 © The Author(s). 2017

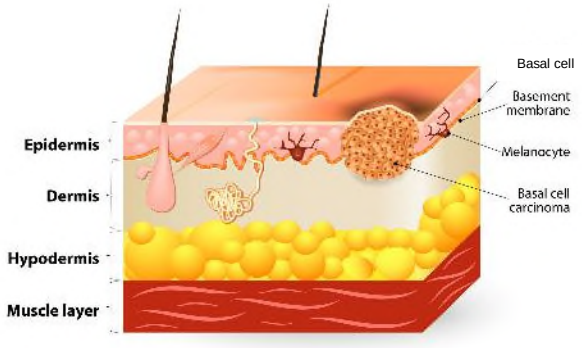
[2]Nanoelectroablation of murine tumors triggers a CD8-dependent inhibition of secondary tumor growth.

Richard Nuccitelli, Jon Casey Berridge, Zachary Mallon, Mark Kreis, Brian Athos, and Pamela Nuccitelli

PLoS ONE 10(7):e0134364

NPS in Skin Cancer / Dermatology—Basal-Cell Carcinoma (BCC)

- BCC is the most frequently occurring form of skin cancer
- More than 4 million cases of BCC are diagnosed in the US each year
- Excision is the standard of care



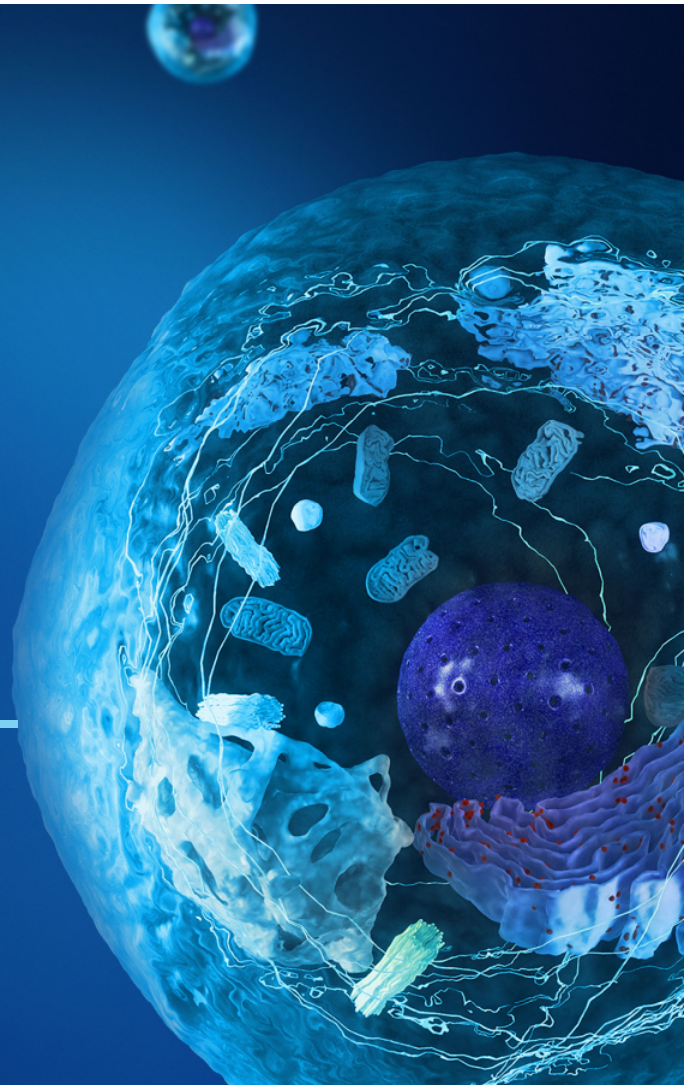
NPS BCC Biomarker Study – ongoing

- Patients: 75
- Sites: 5
- Data available: Q1-2019
- Trial design and outcome measures
  - 75 patients with biopsy-confirmed BCC lesions
  - BCCs will be treated and subsequently excised at the conclusion of the study for tissue evaluation
  - Tissue samples will be evaluated to characterize BCC elimination and changes in the immune response

Study Objective

- Demonstrate the ability of NPS to eliminate BCC cells and investigate the immune cell changes within the BCC

NPS— Commercial launch in cosmetic dermatology with several **high-value applications and a pipeline**



Key Milestones 2018-2019

Seborrheic Keratosis
Clinical Study, n=58, 82% efficacy

Sebaceous Hyperplasia
Clinical Study, n=72, enrolled

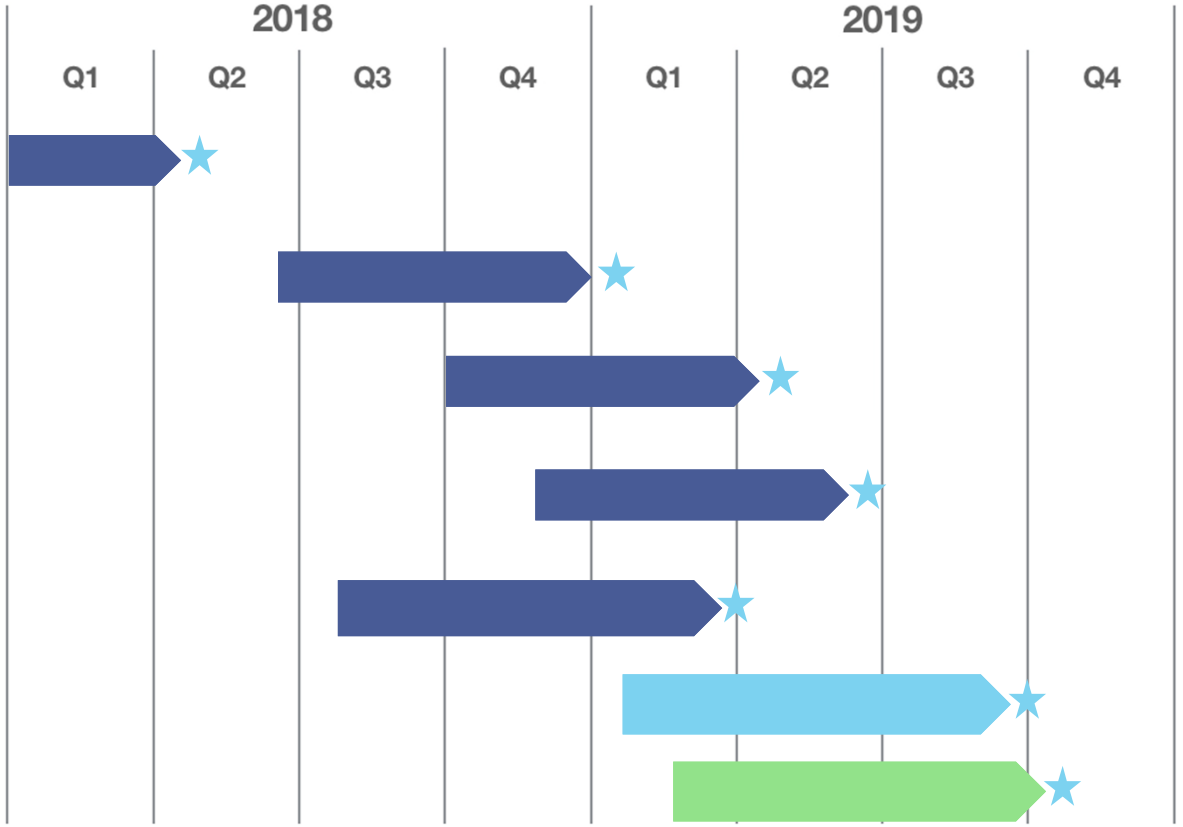
Common Warts
Feasibility Study, n=up to 20

Severe Acne
Feasibility Study, under development

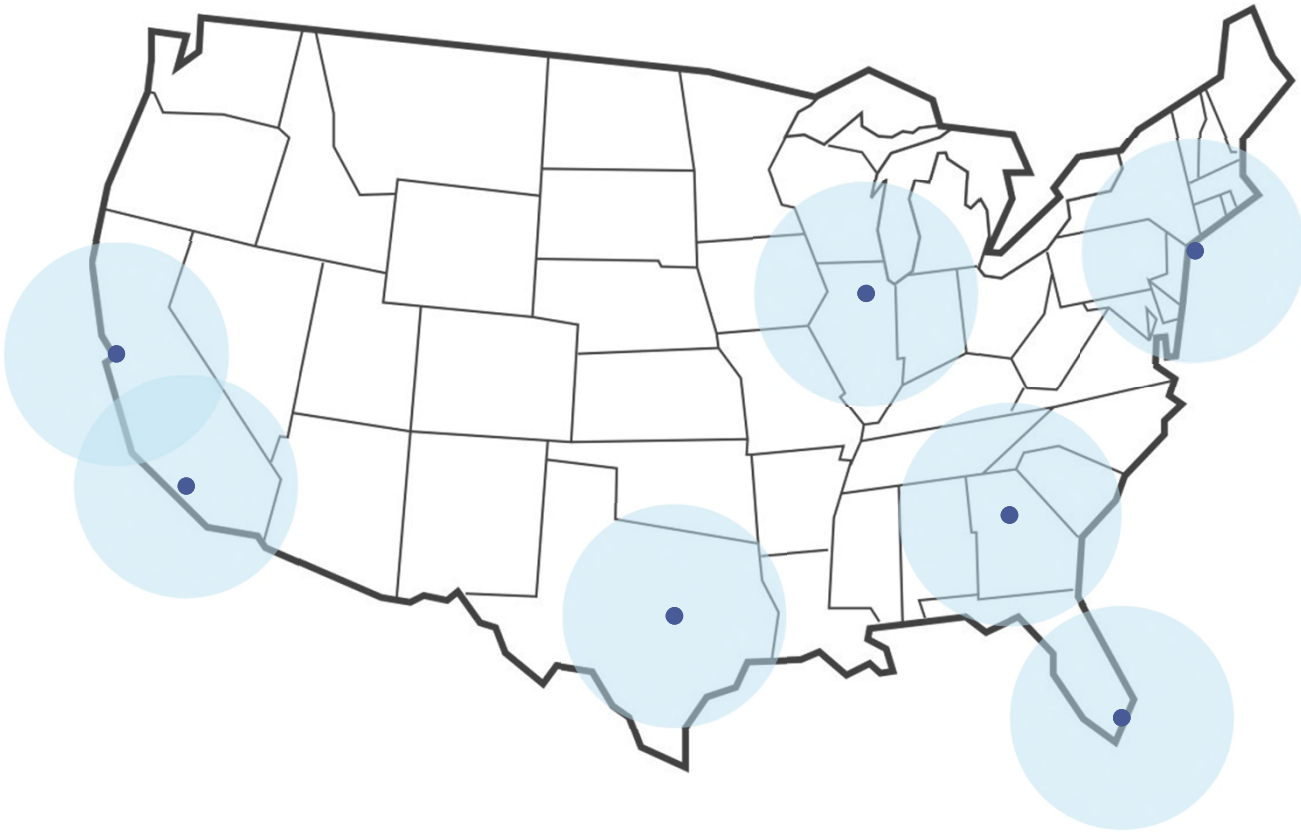
Basal Cell Carcinoma
Biomarker Study, n=up to 75

REGULATORY CLEARANCE

COMMERCIAL LAUNCH



The Go-to-Market Plan—Ensuring Success



Direct to Clinician Sale—US

- 3,000-4,000 dermatologists with high technology usage in their practices
- Key markets with higher density of target clinicians
  - Sales specialist (development of installed base)
  - Clinical specialists (successful patient outcomes and clinician adoption/utilization)
- Utilize market KOLs to drive awareness with pre-launch clinical studies
- Focus on early adopter success

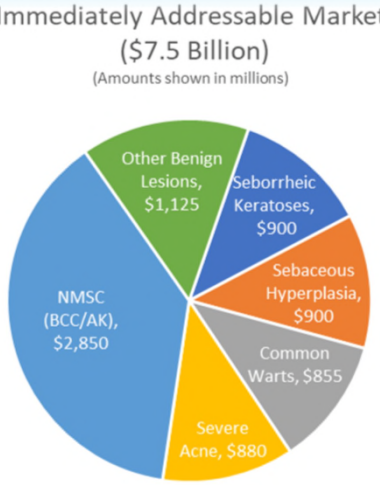
International Opportunity

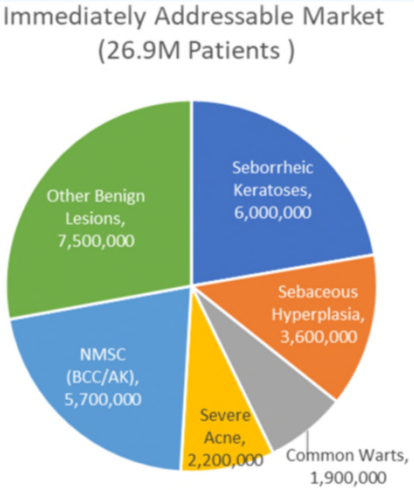
- 2 to 3 years post US launch

Commercial Expansion

Timing	Q3-19	2019	2020	2021	2022	2023
# of Indications	GBL Protocol	3	4	5	6	6
# Sales Team	4 Sales 2 Clin Spec	4 Sales 2 Clin Spec	11 Sales 4 Clin Spec	17 Sales 9 Clin Spec	20 Sales 21 Clin Spec	20 Sales 31 Clin Spec
# of Sales Territories	--	--	6	12	15	20
International Sales	--	--	--	--	Distributor Network	Distributor Network

NPS in Dermatology—A Lucrative Opportunity





CellFX

- Initial system revenue
- Target market: 3,000-4,000 dermatologists
- Designed for broad application and per-use revenue generation
- ASP: $40,000-$75,000
- 2024 installed base: 700-750

Per-Treatment Revenues

- Treatment-based revenue
- Value-based pricing tiered by application
- ASP $150-$500/use
- 2024 system utilization: 700 treatments per system per year

Immediately addressable market = Estimated diagnoses of the identified conditions currently being seen by the target dermatologists based on 2018 Clinician Survey conducted by SERMO on behalf of Pulse Biosciences, Inc.

As of September 28, 2018

82 issued patents globally owned & licensed

87 patents pending worldwide

Pulse—A Robust Intellectual Property Portfolio

Multipronged Patent Strategy

- Fundamental IP in the use of nanosecond pulses in biology
- Platform technology and tools for the application of nanosecond pulses in biology
- Key IP and continued focus on skin-based applications
- Continued focus on systems, applications, and combinations of nanosecond pulsing with other biological technologies and agents

Financial Position

- **$27.5 million in cash on hand**
- **No debt**
- **Quarterly cash use**

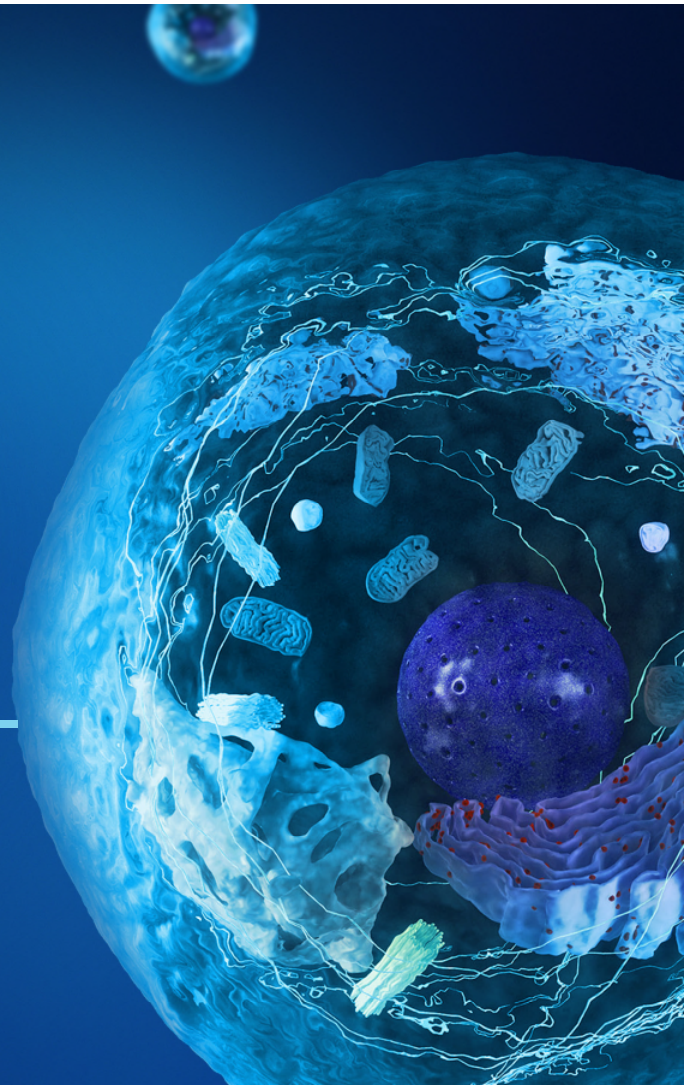
Q1’18(a)	$4.7MM
Q2’18(a)	$5.9MM
Q3’18(f)	$6.5MM
Q4’18(f)	$7.0MM

	June 30, 2018
(in 000's)	
Cash, cash equivalents & investments	$ 27,499
Property, plant and equipments	2,432
Prepaids & other assets	1,262
Goodwill & intangibles	8,336
Total assets	**$ 39,529**
Accounts payables & Accrued liabilities	$ 2,666
Deferred rent	1,816
Debt	-
Stockholders' equity	35,047
Total liabilities & stockholders' equity	**$ 39,529**
Shares outstanding (9/30/2018)	16,984,000
Price per share (9/28/2018)	$ 14.19
Market capitalization	**$ 241,000,000**

Why Pulse Biosciences?

- **Near-term commercialization** in cosmetic dermatology
- **Realize revenue** with a pay-per-click revenue model
- **Significant long-term pipeline potential and large market opportunities** to fuel future growth
- **Proprietary platform** technology
- **Strong intellectual property** estate
- **Outstanding safety and patient tolerability**

Thank you



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