



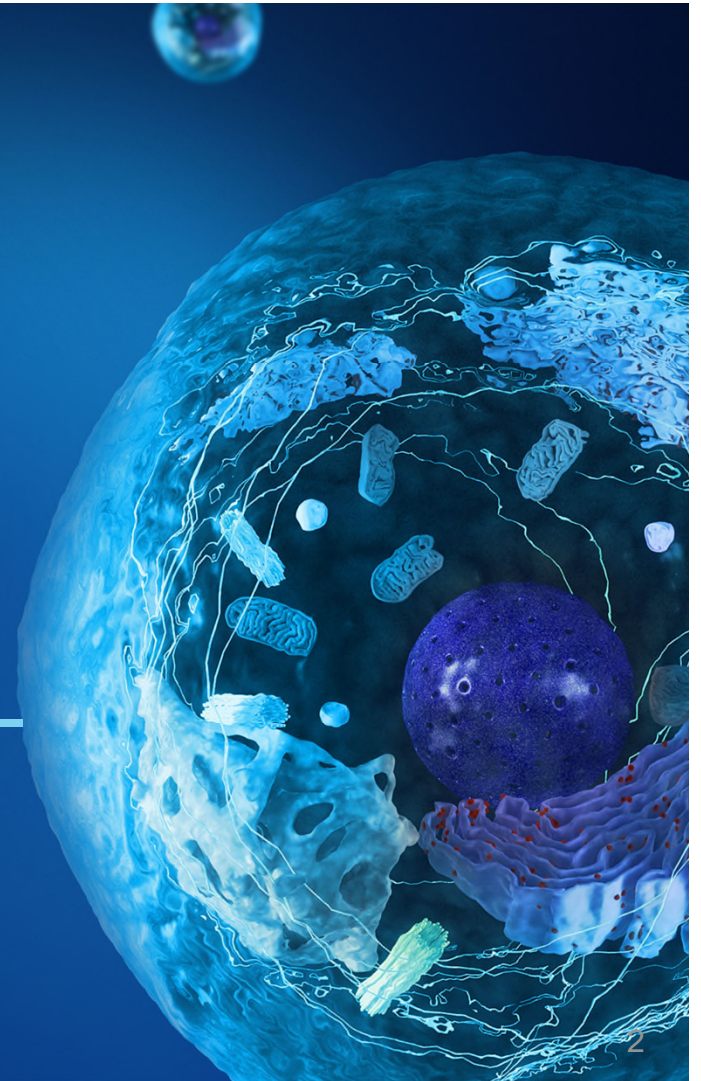
*Welcome to the Pulse Biosciences, Inc. Investor Update Call
Please Stand By: The Call Will Start Shortly*

Pulse Biosciences

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

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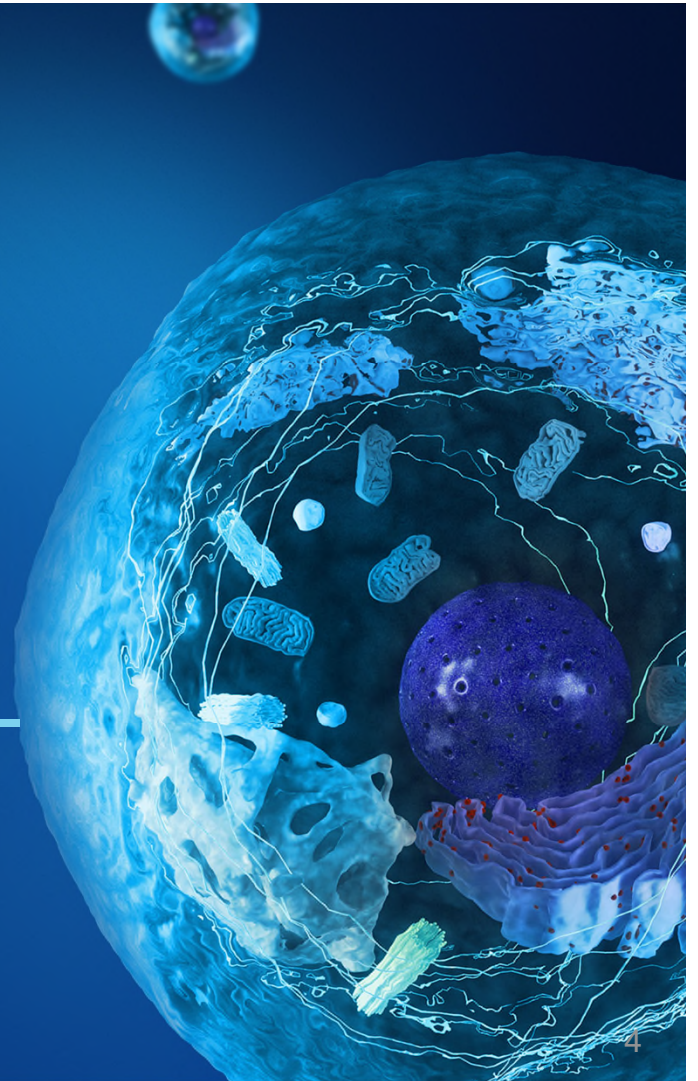
FORWARD-LOOKING STATEMENTS

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, financing, 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

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



Nano-Pulse Stimulation™ (NPS™) Strategy

- Develop an NPS platform for the human clinic
 - Developed the PulseTx System, the first tunable NPS system used in human medicine
- Demonstrate unique medicinal benefits across a number of compelling applications with the guidance of KOL's
 - Over the last two years several clinical studies have demonstrated the safety, efficacy and the unique and highly differentiated mechanism of action of NPS
- Commercialize in markets as the opportunity and clinical evidence dictate
 - Prioritizing the aesthetic procedure market in dermatology

Our mission is to build a viable company



Aesthetic Procedure Market is the Immediate Focus

Large, rapidly growing
self-paying market



Ideal Application for NPS

\$22B

Estimated amount Americans spent on **aesthetic and benign lesion removal** procedures in 2016

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

70%

Percent of **consumers considering a cosmetic treatment** up from 30% in 2013¹

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

#1

Dermatologists ranked **No. 1 influencer** of cosmetic procedure decision¹

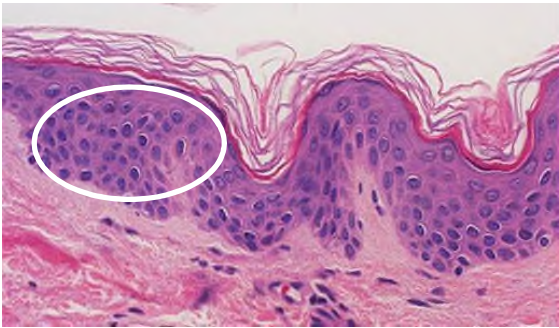
Minimal technical, clinical, and regulatory development risk relative to other areas

¹ASDS Consumer Survey 2017



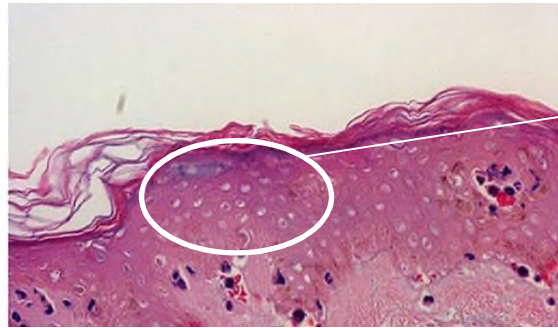
Demonstrated Mechanism of NPS in Skin

Safe, Precise Targeting & Elimination of Treated Cells



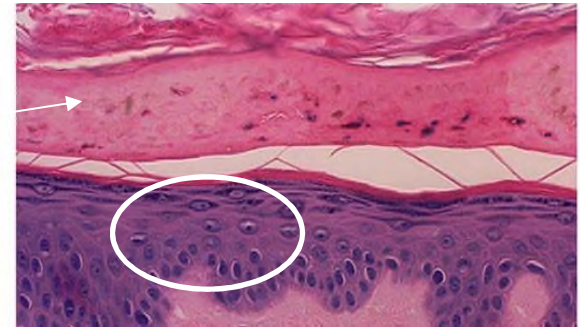
Healthy Skin

- 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

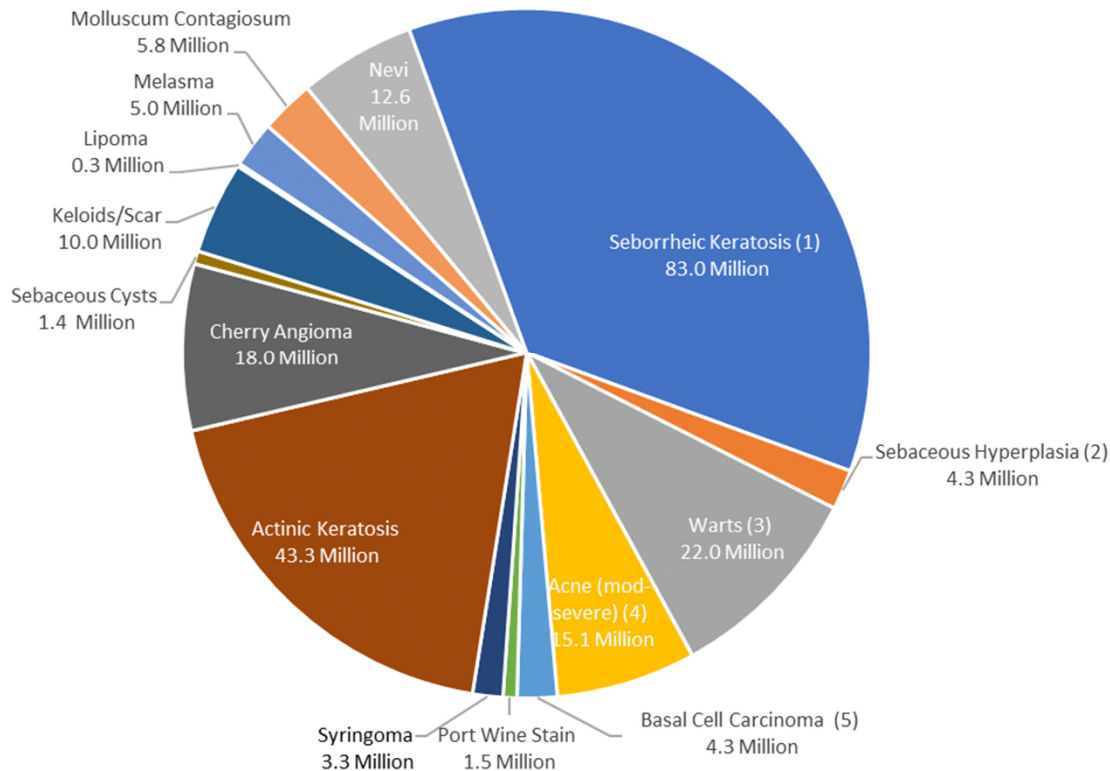


Seven (7) days post-treatment

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



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 initiated October 2018
- (4) Acne – Study planned start YE2018
- (5) Basal Cell Carcinoma biomarker window study – on-going

NPS in Dermatology—Seborrheic Keratosis (SK)

SK is the most common benign skin lesion

Opportunity

- Estimated US prevalence: **~83 million patients**¹
- Immediately addressable US market:
 - **52 patients per week** on avg seen by cosmetic dermatologists²
 - **35% receive treatment**²
 - **83% of consumers** are interested in treatment¹
 - **Estimated addressable market of 6M patients**

NPS SK Clinical Study - Completed

- Patients: 58 (174 treated lesions)
- US centers: 4
- Treatment: Single NPS treatment
- Results:
 - **82% of treated SKs rated as clear or mostly clear** by investigators
 - Patients rated **78%** of lesion outcomes as satisfied or mostly satisfied
 - **Zero device or procedure-related adverse events reported**

Current treatment modalities

- Thermal: marginal efficacy, poor cosmesis
- H₂O₂: multiple treatments, lower efficacy



Cleared SK at 106-day follow-up

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

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

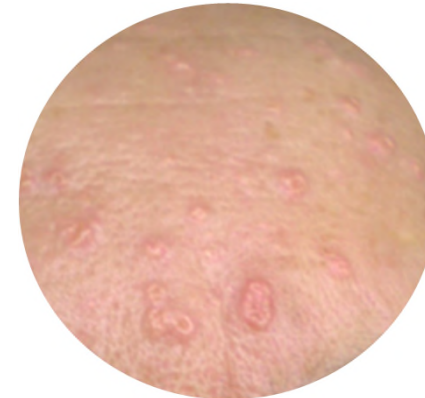


NPS in Dermatology—Sebaceous Hyperplasia (SH)

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 avg seen by cosmetic dermatologists
 - **21% receive treatment**¹
 - **83% of consumers** are interested in treatment²
 - **Estimated addressable market of 3.6M patients**

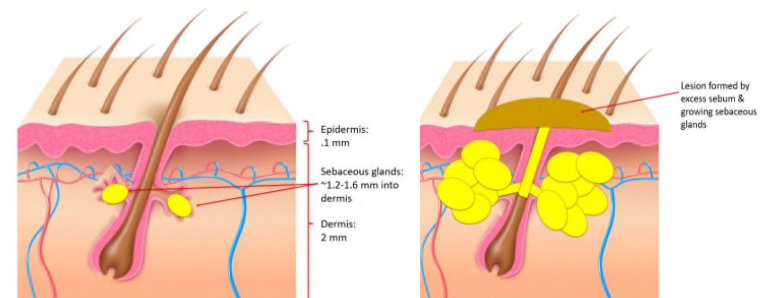


NPS SH Clinical Study – Enrollment & Treatment Complete

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

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—Warts and Acne

Common Warts

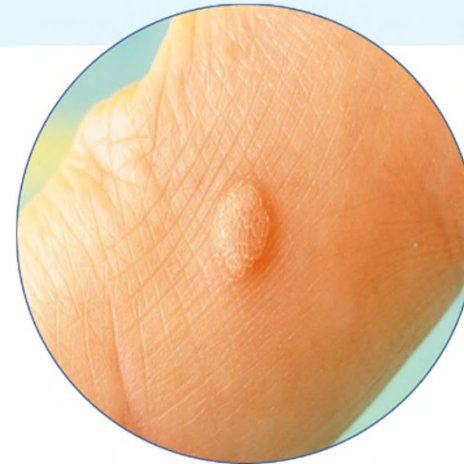
- One of the most common dermatologic complaints
- Reside in the epidermis, fitting nicely with the NPS mechanism
- Estimated prevalence: **~22 million patients**
- Current treatments lack effectiveness

NPS Wart Feasibility Study – started October 2018

- Patients: Up to 20
- Sites: One (1) – Scripps Health

Moderate to Severe Acne

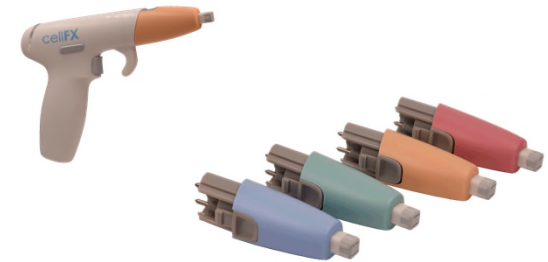
- A form of acne that can lead to scarring in outbreak areas
- Acne is the number one condition seen by dermatologists
- Fit to NPS mechanism – destruction of sebaceous glands
- Estimated prevalence: **~15.1 million patients**
- Feasibility clinical trial protocol under development – expected to start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



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
- Networked **per-click revenue** model

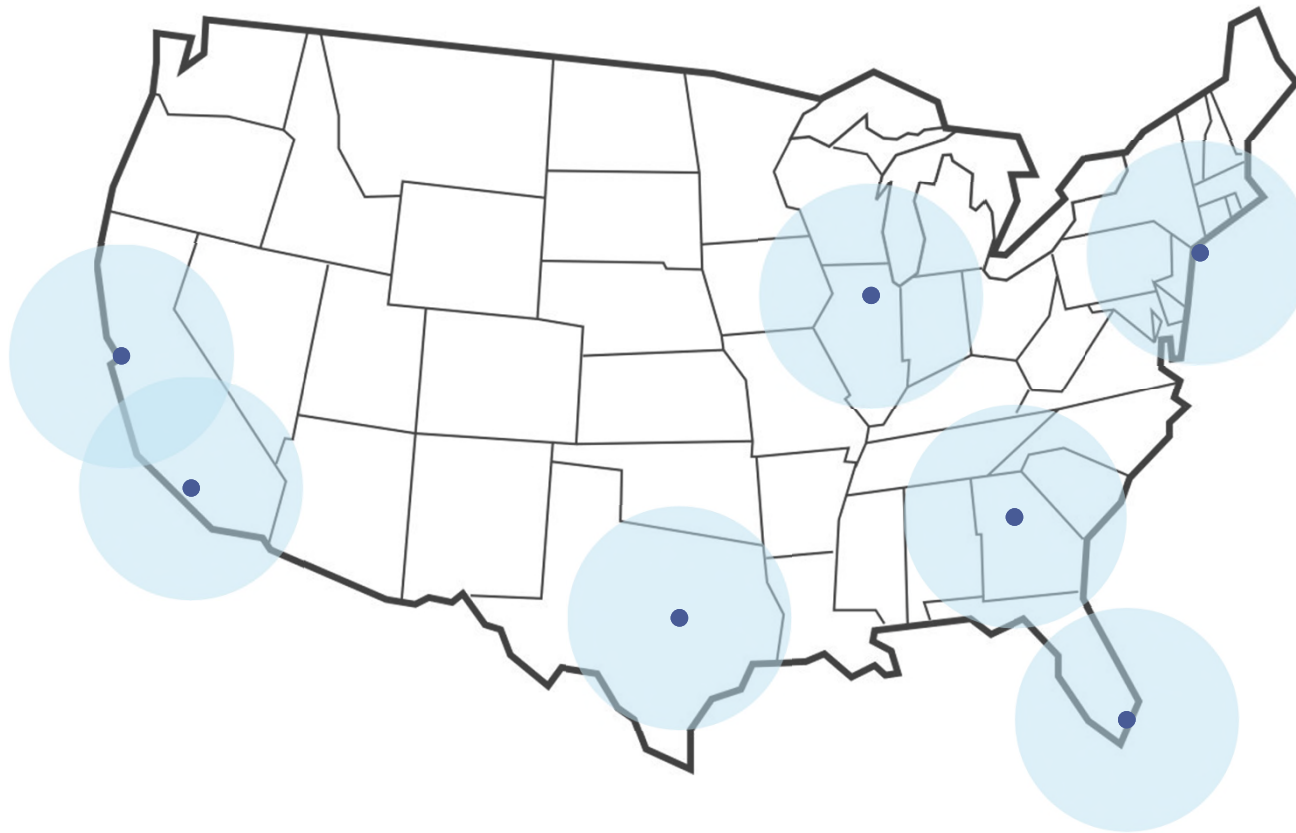


Regulatory Strategy

- Pursuing a dermatologic specific indication for the treatment of lesions including SK and SH using the CellFX System
- Anticipated **510(k)** Pathway
- Filing Scheduled for **Q1-2019**
- Planned Clearance in **Q3-2019**



The Go-to-Market Plan—Ensuring Success



Direct to Clinician Sale—US

- Utilize market KOLs to drive awareness with pre-launch clinical studies
- 3,000-4,000 dermatologists with high volume energy-based device usage in their practices
- Focus on early adopter success to drive the next wave of adoption
- Key markets with higher density of target clinicians
- Grow clinical applications to drive revenue per system

International Opportunity

- 2 to 3 years post US launch

NPS in Aesthetic Procedures — A Significant Opportunity



- Initial system revenue
- Target market: 3,000-4,000 dermatologists
- Designed for broad application and per-click revenue generation
- Initial ASP: \$50,000



Per-Click Revenues

- Treatment-based revenue
- Value-based pricing tiered by application
- Initial ASP \$150-\$500/patient

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.



- 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**

¹Nano-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

²Nanoelectroablation 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 Basal Cell Carcinoma (BCC)

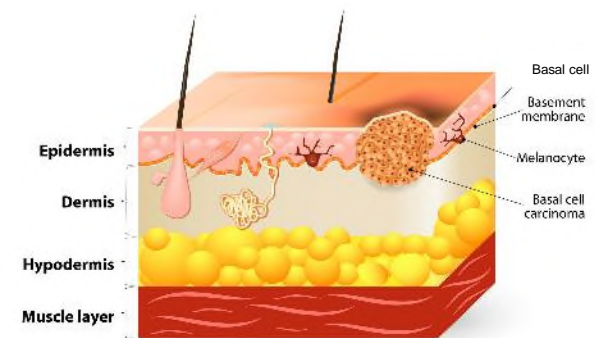
- BCC is the most frequently occurring form of skin cancer
- More than 4 million cases of BCC are diagnosed in the US each year
- Excision is the standard of care

NPS BCC Biomarker Study – ongoing

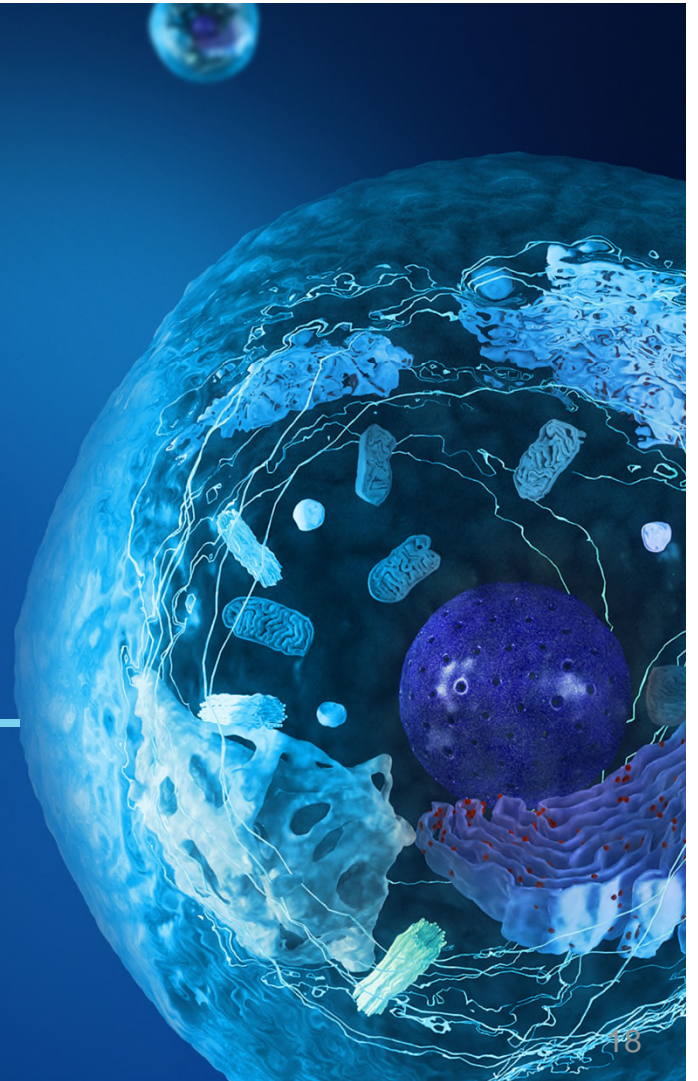
- Patients: up to 75
- Sites: 5
- Data available: Q1-2019
- Trial design and outcome measures
 - 75 patients with biopsy-confirmed BCC lesions
 - BCCs will be treated and subsequently excised at the conclusion of the study for tissue evaluation
 - Tissue samples will be evaluated to characterize BCC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



Financing



Financial Position

- \$21.0 million in cash on hand
- No debt
- Quarterly cash use

Q1'18(a) → \$4.7MM

Q2'18(a) → \$5.9MM

Q3'18(a) → \$6.5MM

Q4'18(f) → \$7.0MM

(in 000's)

	Sept 30, 2018
Cash, cash equivalents & investments	\$ 21,021
Prepays & other assets	1,095
Property, plant & equipment	2,440
Goodwill & intangibles	8,170
Total assets	<u>\$ 32,726</u>
Accounts payable & accrued liabilities	\$ 2,938
Deferred rent	1,714
Debt	-
Stockholders equity	28,074
Total liabilities & stockholders equity	<u>\$ 32,726</u>
Shares outstanding	16,984,000

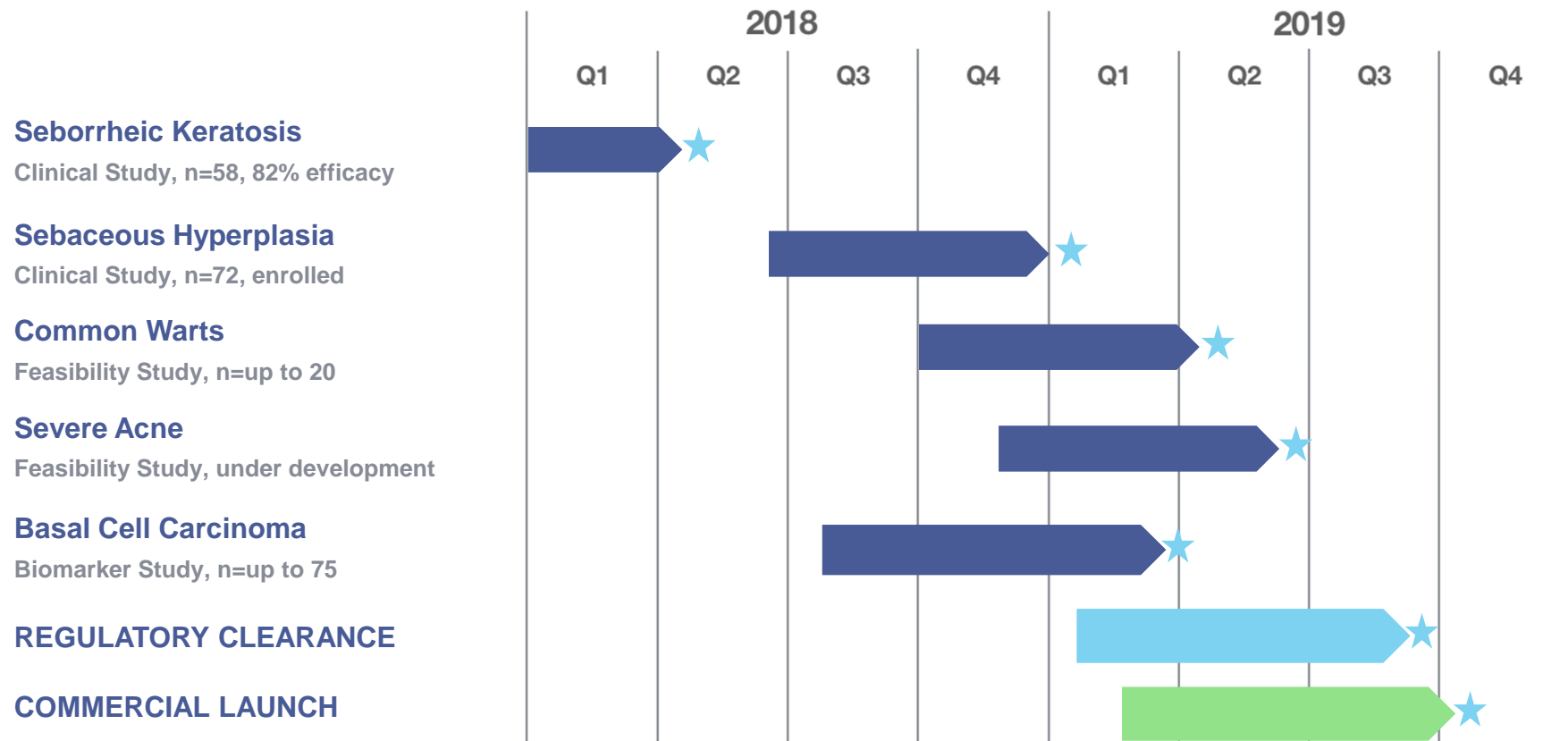


Operating Results

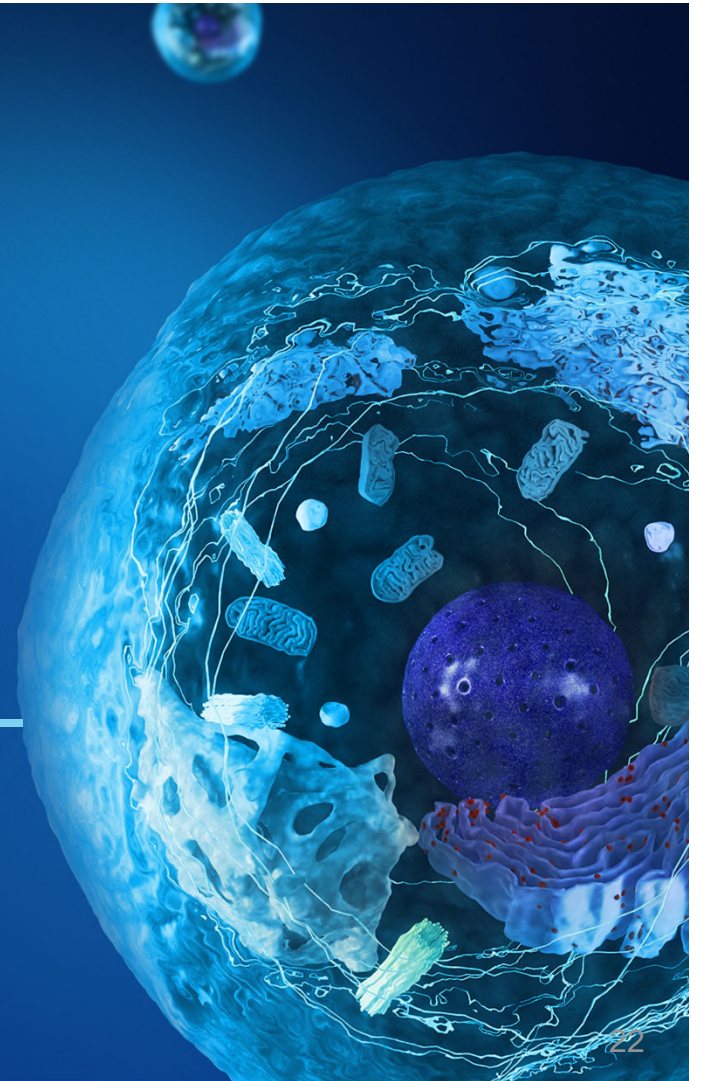
(in 000's)	Three-Month Periods Ended September 30,				Nine-Month Periods Ended September 30,			
	2018	2017	\$ Change	% Change	2018	2017	\$ Change	% Change
Revenue	\$ —	\$ —	\$ —	—	\$ —	\$ —	\$ —	—
Operating expenses:								
General and administrative	5,675	4,434	1,241	28%	16,230	9,702	6,528	67%
Research and development	5,038	2,925	2,113	72%	12,174	6,782	5,392	80%
Amortization of intangible assets	166	166	—	0%	499	499	—	0%
Total operating expenses	10,879	7,525	3,354	45%	28,903	16,983	11,920	70%
Other income:								
Interest income	118	39	79	203%	311	119	192	161%
Total other income	118	39	79	—	311	119	192	161%
Net loss	\$ (10,761)	\$ (7,486)	\$ 3,275	44%	\$ (28,592)	\$ (16,864)	\$ 11,728	70%



Key Milestones 2018-2019



Question & Answers



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**



Thank you