Pulse Biosciences

(Nasdaq : PLSE)

January 2021

Forward-looking statements

This presentation by Pulse Biosciences, Inc., contain estimates and forward-looking statements as of January 12, 2021 including, among others, statements regarding Pulse Biosciences' future business plans, products, commercial applications, intellectual property strategy, clinical trials, regulatory processes and pathways, and markets for its technologies, as well as patient and physician behavior and preferences 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.

Provide superior treatment for a wide range of dermatological conditions through a novel, proprietary, tissue sparing solution

Pulse Biosciences

Nano-Pulse Stimulation Technology

Non-thermal modality that delivers nanosecond duration pulses of electrical energy

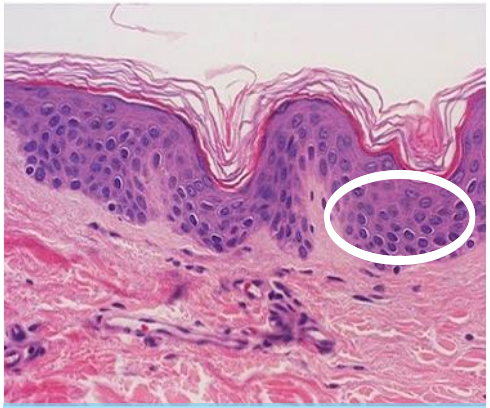
High speed nanosecond energy pulses penetrate the cell membrane and disrupt internal cellular function, leading to regulated cell death

Unlike thermal (heat/cold) technologies, NPS directly impacts cellular structures while sparing non cellular tissue

Pulse Biosciences®

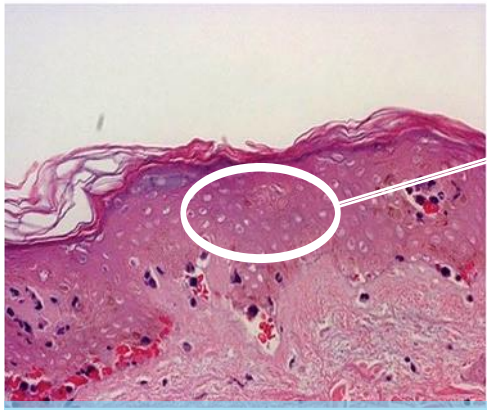
Demonstrated Mechanism of NPS in Skin

Safe, precise targeting and elimination of cells while sparing the dermis



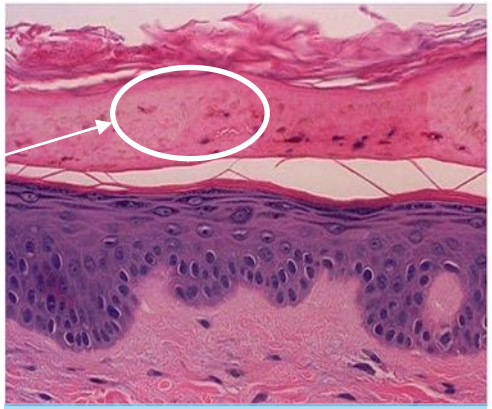
Healthy Skin

- Healthy epidermal cells with dark nuclei



One (1) day post-treatment

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



Seven (7) days post-treatment

- Healthy epidermis emerges below
- Treated epidermal layer peels away

Pulse Biosciences®

As of October 2020

106 issued patents globally owned & licensed

Additional 102 patent applications pending worldwide

Pulse Biosciences

Robust IP Portfolio

Multipronged Patent Strategy

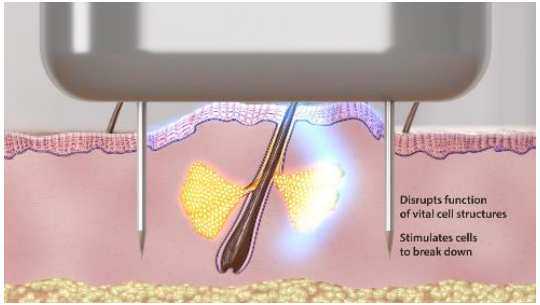
- Pioneering IP for the use of nanosecond pulses in biology
- Covering methods and tools for the application of nanosecond pulses in biology
- Pioneering IP and continued development of IP with focus on skin-based applications
- Continued development and patent filings covering systems, applications, and methods of combining nanosecond pulsing with other biological technologies and agents

NPS Technology Delivery

Through the CellFX System proprietary platform

CellFX™

Broadly applicable platform with the ability to address multiple treatment targets in commercially significant areas of unmet clinical need



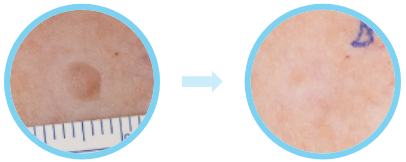
Pulse Biosciences®

Excellent Clinical Data

Safety and efficacy across multiple difficult-to-treat dermatologic conditions

SK

Cleared Raised SK at 106-day follow-up



BEFORE AFTER

Seborrheic Keratosis

- 82% efficacy rate
- Clear or mostly clear with single treatment
- 78% satisfaction rate

SH

Cleared SH at 60-day follow-up

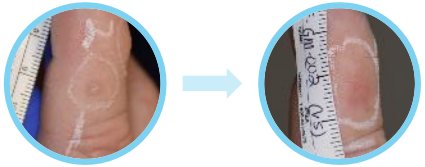
BEFORE AFTER

Sebaceous Hyperplasia

- 99.5% efficacy rate
- Clear or mostly clear – 90% with single treatment
- 77% satisfaction rate

W

Cleared Wart at 60-day follow-up



BEFORE AFTER

Warts (non-genital)

- 79% rate of complete clearance in Recalcitrant Warts
- 71% of completely cleared warts achieved with 1-2 treatment sessions
- Previous modalities failed for majority of patients

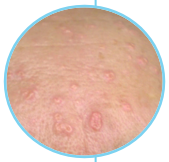
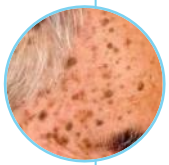
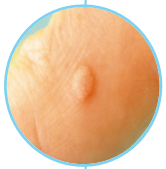
Pulse Biosciences®

Unmet Need in Aesthetic Dermatology

Current treatments lack acceptable cosmetic outcomes or no standard of care exists

Aesthetic Patient Veterans

- Visit skin specialists for cosmetic procedures several times per year
- Seek latest treatment options
- Willingness to invest in procedures to look their best
- Aesthetic procedures are generally elective and cash-pay

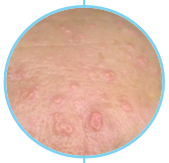
Condition	Current Standards
 **Sebaceous Hyperplasia**	**60%** of patients are untreated
 **Seborrheic Keratosis**	**65%** of patients are untreated
 **Warts** (non-genital)	**90%** of patients receive treatment with high failure rate

Pulse Biosciences®

Market Opportunity

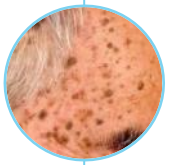
Widespread prevalence among patients visiting aesthetic dermatologists today

4,000 Aesthetic Physicians



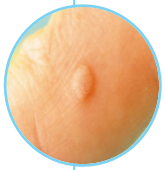
Sebaceous Hyperplasia

42 Patients per week*



Seborrheic Keratosis

84 Patients per week



Warts (non-genital)

37 Patients per week

>$1B

immediately available market

Pulse Biosciences®

*Based on 2019 Clinician (n=304) and "Veteran" Aesthetic Patient (n=405) Surveys conducted by third-party market research firm on behalf of Pulse Biosciences, Inc., full survey results available upon request

Commercialization Strategy

Innovative utilization based business model aligns incentives

- Patients want to pay based on number of lesions treated
- Dermatologists want to treat all patients regardless of condition size/type/amount and want their costs aligned with what they treat

CellFX System is designed to support a business model based on each lesion treated, aligning the patient, physician, and Pulse

Pulse Biosciences®

Practice Economics

MD Franchise Based on Expanding Utilization Over Time

Compelling Short-term Economics

Long-term Practice Franchise

Initial Investment

$45,000

Three Patients / Week

Avg. Lesions per Patient	MD Revenue per Patient
5 / patient	$900-$1,200*

< Four Month

Return on Investment

Avg. Ten Patients / Week

- 10 x 15-minute treatment session (2.5 hrs)
- Benign Lesion, SH, SK, & Warts
- Room for growth with additional apps

Avg. Five Lesions per Patient

Net MD Rev per lesion $150-$200

Revenue to Practice ~$500,000 / Year

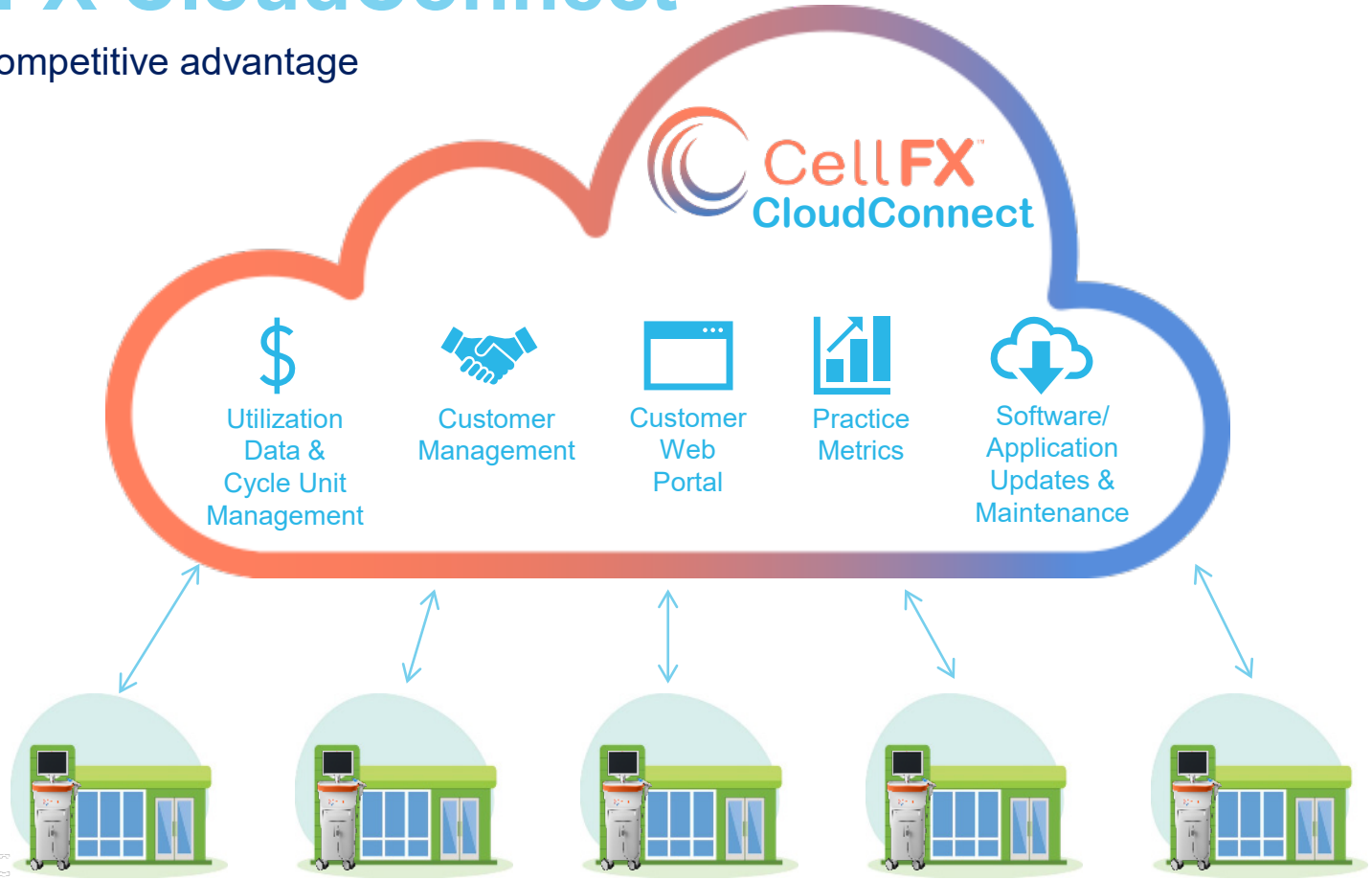
Gross Profit to Practice ~$400,000 / Year

Pulse Biosciences®

*Average revenue per patient of $1,050 used in ROI calculation yields $63,000 revenue in < four months

CellFX CloudConnect

Unique competitive advantage



Pulse Bioscience

U.S. Target Market

80%

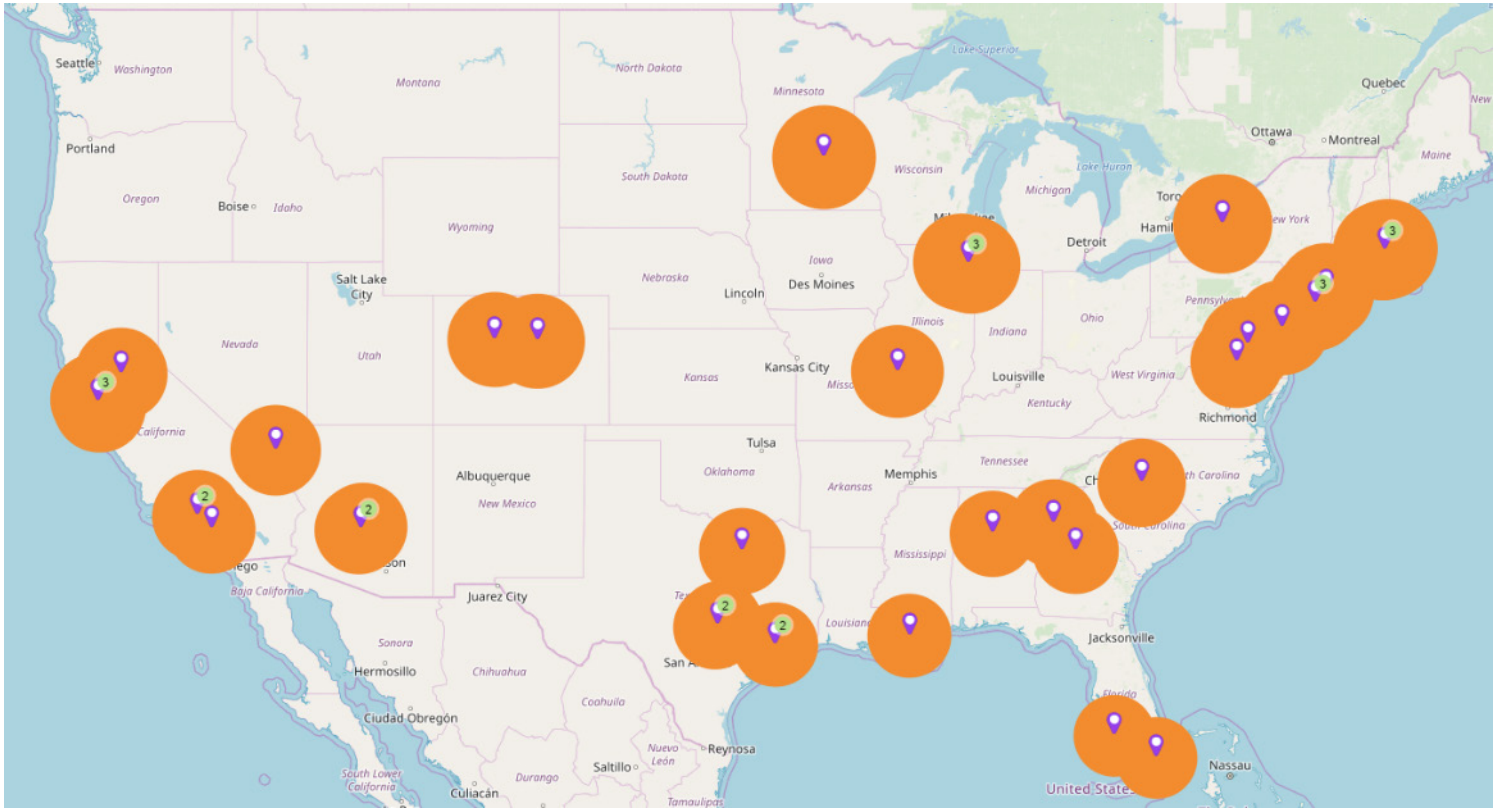
of target early adopter physicians

located within 100-mile radius of the 40 controlled launch participants selected for controlled launch

4.6M

average population

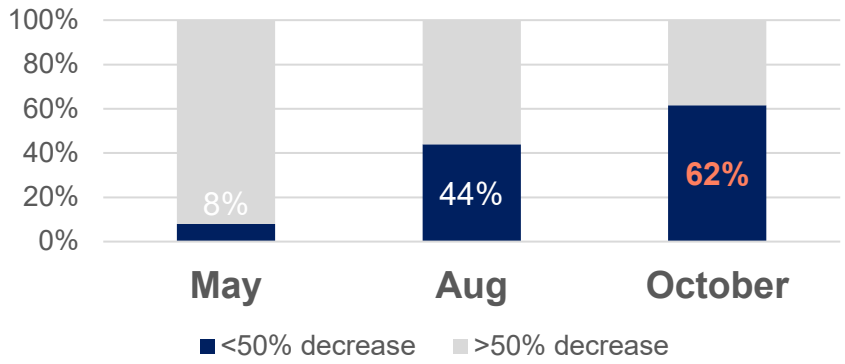
located within 100-mile radius of the 40 controlled launch participants selected for controlled launch



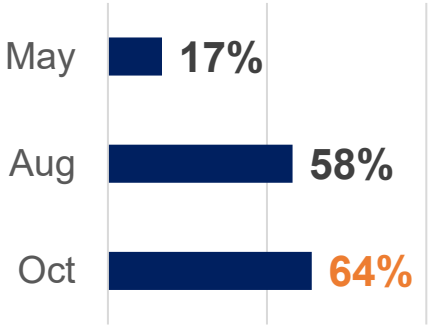
Pulse Biosciences®

October survey of 39 aesthetic dermatologists on COVID-19 Impact shows positive signs of recovery in dermatology clinic activity

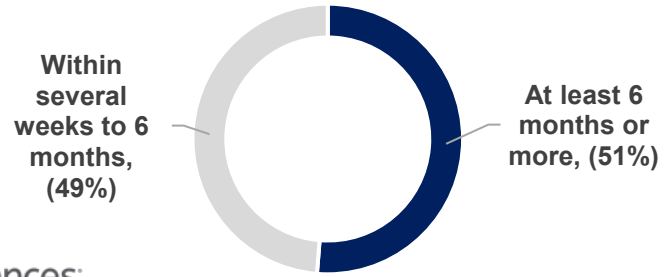
Aesthetic procedure volumes trending towards normal



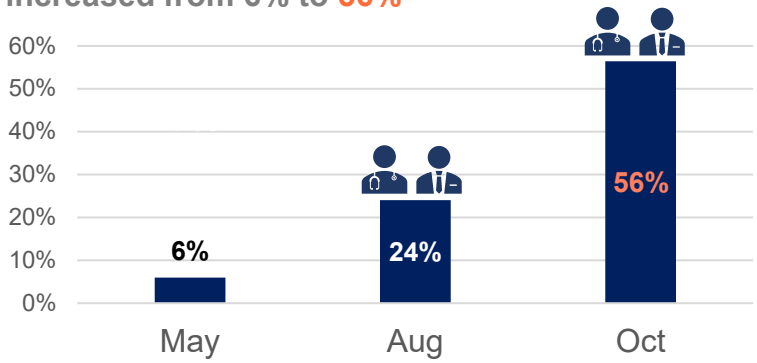
Aesthetic dermatologists are increasingly resuming elective, aesthetic procedures



Majority believe procedure volumes will take another 6 months to return to normal volumes

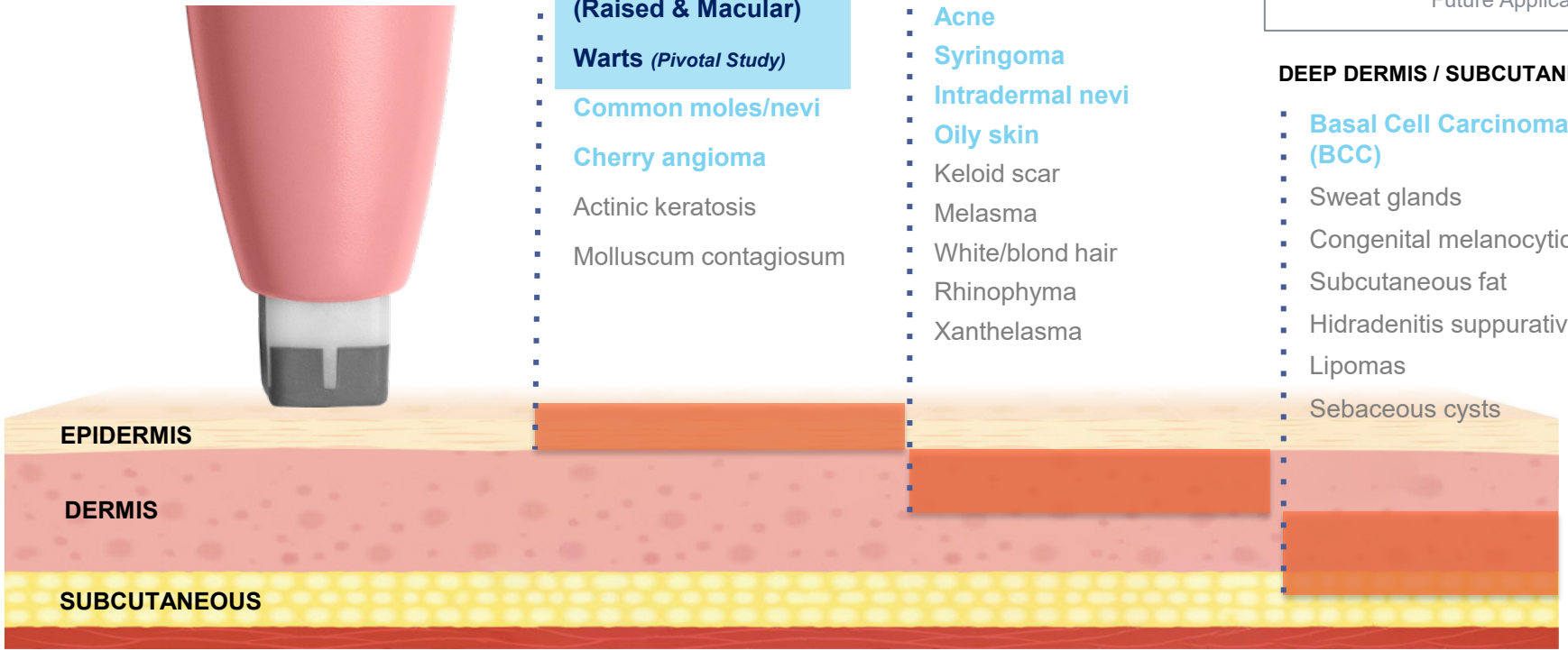


In-person interaction with industry reps increased from 6% to 56%



Pulse Biosciences

Extensive CellFX Application Pipeline



EPIDERMAL

Seborrheic keratosis (Raised & Macular)

Warts ***(Pivotal Study)***

Common moles/nevi

Cherry angioma

Actinic keratosis

Molluscum contagiosum

MID-DERMAL

Sebaceous hyperplasia

Acne

Syringoma

Intradermal nevi

Oily skin

Keloid scar

Melasma

White/blond hair

Rhinophyma

Xanthelasma

DEEP DERMIS / SUBCUTANEOUS

Basal Cell Carcinoma (BCC)

Sweat glands

Congenital melanocytic nevi

Subcutaneous fat

Hidradenitis suppurativa

Lipomas

Sebaceous cysts

Initial Applications
Early Feasibility Work Underway
Future Applications

Caution*: Applications have not yet been cleared by the FDA*

CellFX System Regulatory Strategy

Potential 510(k) clearance, CE mark and Health Canada approval by end of 1Q21

- **Submitted 510(k) application** for an initial FDA clearance with a general dermatologic indication in 4Q20. Received notification from FDA the submission has advanced from Substantive Review to Interactive Review.
- **Completed treatments** in FDA IDE approved 60 patient comparative study to generate data for a subsequent 510(k) submission for a specific indication for the treatment of Sebaceous Hyperplasia, submission planned for 1Q21.
- **Received FDA IDE Approval** for a comparative study to generate data for a subsequent 510(k) submission for a specific indication for the treatment of common non-genital warts, enrollment expected to begin by the end of 1Q21.
- **Submitted Technical File** in pursuit of the CE mark in 3Q20 - the regulatory approval required for commercialization in the EU.
- **Submitted a Medical Device License application** to Health Canada in 4Q20.

Strong KOL Support and Advocacy

Deep network of leading aesthetic dermatologists

PUBLICATIONS ON NPS TECHNOLOGY

4

Dermatologic Surgery

Lasers in Surgery and Medicine

Journal of Cosmetic and Laser Therapy

PODIUM PRESENTATIONS

2018	2019	2020 (as of October)
4	12	16

2021 ABSTRACTS SUBMITTED

3

ASLMS

Scientific Advisors

ASDS American Society for Dermatologic Surgery

ASLMS American Society for Laser Medicine & Surgery, Inc.

American Academy of Dermatology AAD 1938

Dr. Brian Biesman, Nashville, TN
Dr. Eric Bernstein, Ardmore, PA
Dr. Chris Harmon, Birmingham, AL
Dr. Suzanne Kilmer, Sacramento, CA
Dr. Darius Mehregan, Ann Arbor, MI
Dr. Gilly Munavalli, Charlotte, NC
Dr. Tom Rohrer, Chestnut Hill, MA
Dr. Vic Ross, San Diego, CA
Dr. Elizabeth Tanzi, Chevy Chase, MD
Dr. Brian Zelickson, Edina, MN
Dr. Brian Berman, Aventura, FL
Dr. Mark Nestor, Aventura, FL
Dr. James Newman, San Mateo, CA
Dr. Robert Pierce, Seattle, WA

Leadership Team

Proven and experienced in growing medical technology from clinical to commercial stage

Management

Darrin Uecker	President & Chief Executive Officer	gynesonics computermotion
Edward Ebbers	EVP & GM, Dermatology	ZELTIQ thermage
Sandra Gardiner	EVP & Chief Financial Officer	CUTERA tria

Board of Directors

Bob Duggan, Chairman

pharmacyclics INTUITIVE computermotion

Maky Zanganeh, D.D.S.

pharmacyclics computermotion

Mitch Levinson

Cerebrotech MEDICAL SYSTEMS ZELTIQ thermage

Richard van den Broek

HSMR Advisors pharmacyclics

Kenneth Clark

Wilson Sonsini Goodrich & Rosati PROFESSIONAL CORPORATION pharmacyclics

Manmeet Soni

Alnylam pharmacyclics ZELTIQ

Upcoming Milestones

- **Regulatory Steps for the CellFX System**
  - Potential receipt of initial FDA 510(k) clearance for general dermatologic indication as early as 1Q21
  - Subsequent 510(k) submission for SH indication planned for 1Q21
  - Potential receipt of Health Canada Medical Device License as early as 1Q21
- **European controlled launch potentially as early as 1Q21**
- **Progress Clinical and Scientific programs**
  - Continued presence at scientific meetings
- **Continue to Expand Pipeline of Clinical Applications**

Pulse Biosciences

Financial Snapshot

Cash Utilization

2019	$34.2MM
1Q 2020	$9.5MM
2Q 2020	$7.9MM
3Q 2020	$8.2MM

- As of 09/30/20 cash, cash equivalents and investments were $29.6MM
- Closed over-oversubscribed Rights Offering in June 2020 with $29.5MM in net proceeds
- Additional gross proceeds of $4.5MM through the exercise of issued warrants
- No debt

	September 30, 2020 (In thousands)
Cash, cash equivalents & investments	$ 29,586
Prepaids & other assets	1,113
Property, plant and equipment	2,562
Goodwill & intangibles	6,839
Right of use assets	9,595
Total assets	**$ 49,695**
Accounts payable & accrued liabilities	$ 5,543
Lease liability	11,448
Debt	--
Stockholders' equity	32,704
Total liabilities & stockholders' equity	**$ 49,695**
Shares outstanding	25,342

Thank You

Pulse Biosciences