Pulse Biosciences

(Nasdaq : PLSE)

May 2021

Forward-looking statements

This presentation by Pulse Biosciences, Inc., contain estimates and forward-looking statements as of May 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.

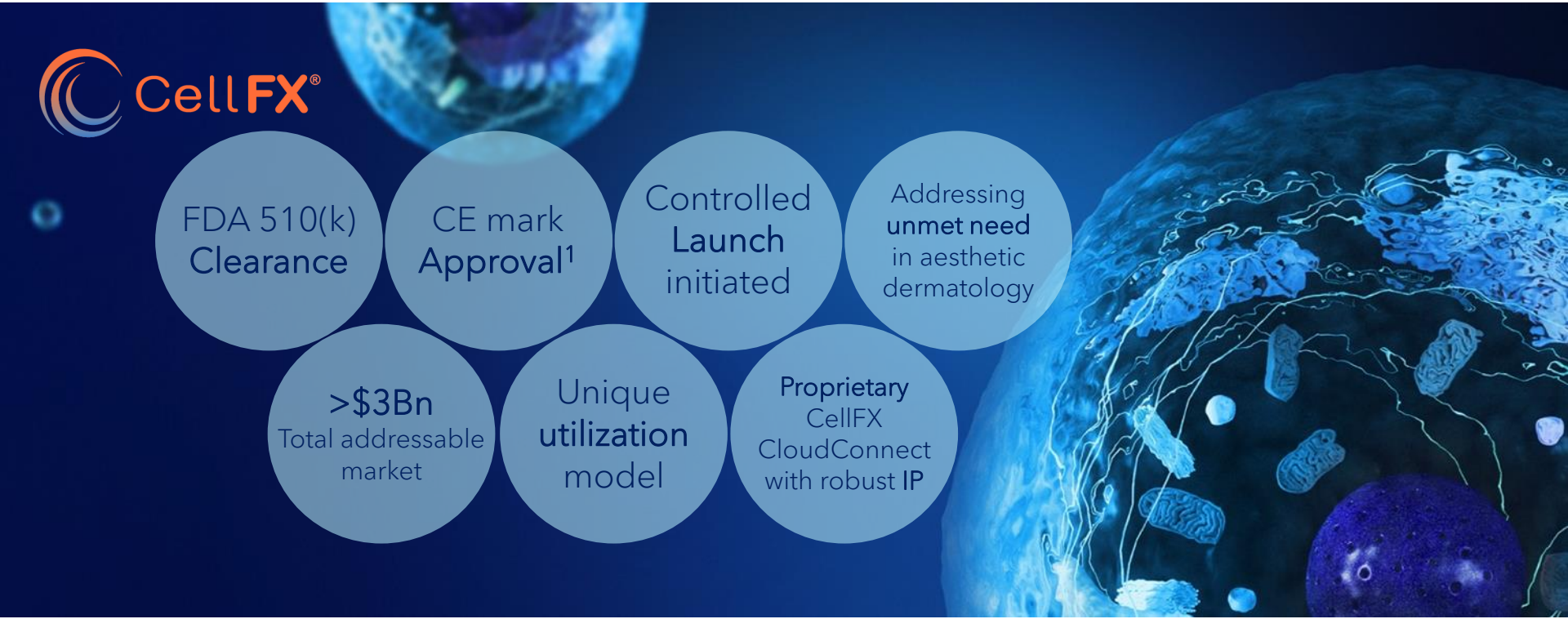
Pulse Biosciences undertakes no obligation to revise or update forward-looking statements to reflect future events or circumstances.

Pulse Biosciences®

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

Pulse Biosciences®

Novel Bioelectric Medicine Platform



[1] Health Canada submission pending

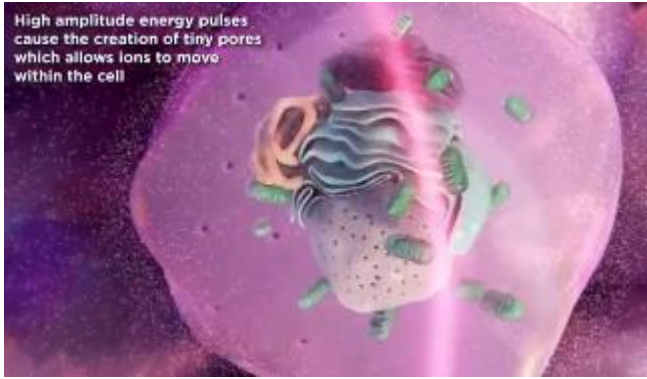
Pulse Biosciences®

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

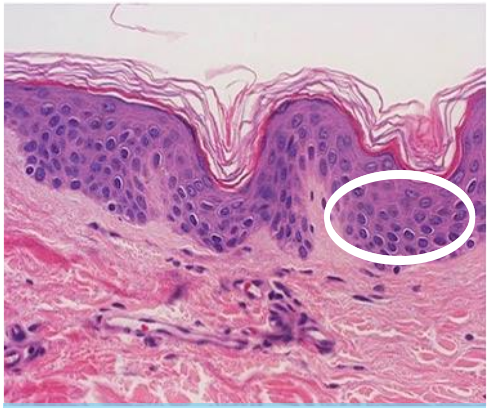
Unlike thermal (heat/cold) technologies, NPS directly impacts cellular structures while sparing non cellular tissue (primarily collagen)



Pulse Biosciences®

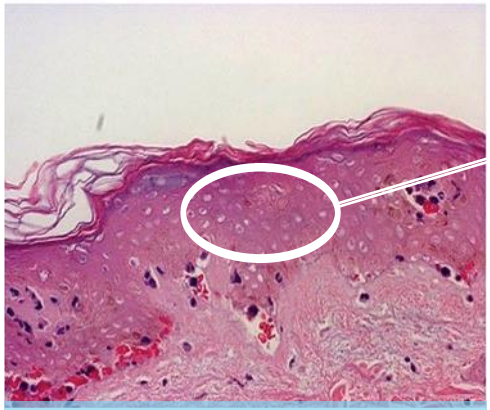
Demonstrated Mechanism of NPS in Skin

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



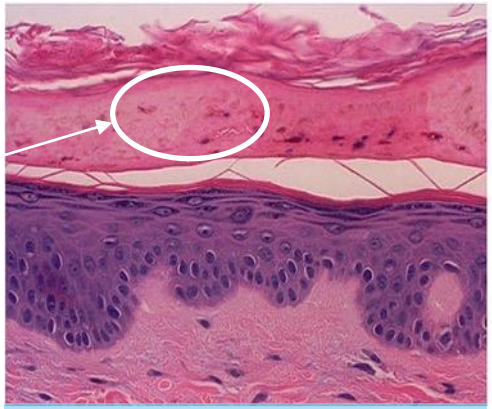
Healthy Skin

- 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

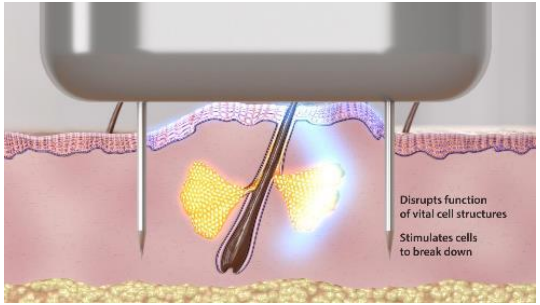
Pulse Biosciences®

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



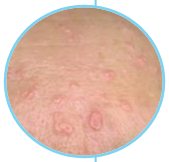
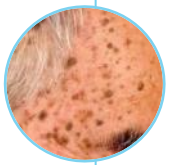
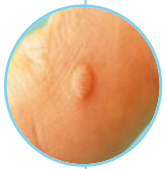
Pulse Biosciences®

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

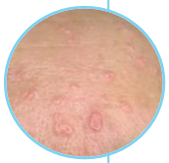
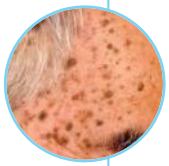
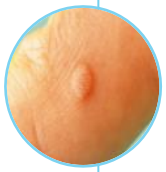
Condition	Current Standards
 **Sebaceous Hyperplasia**	**60%** of patients are untreated
 **Seborrheic Keratosis**	**65%** of patients are untreated
 **Warts** (non-genital)	**90%** of patients receive treatment with high failure rate

Pulse Biosciences®

Market Opportunity

Widespread prevalence among patients visiting aesthetic dermatologists today

6,800 Aesthetic Physicians

	US[1]	Europe[2]
 **Sebaceous Hyperplasia**	**42** Patients per week	**54** Patients per week
 **Seborrheic Keratosis**	**84** Patients per week	**72** Patients per week
 **Warts** (non-genital)	**37** Patients per week	**55** Patients per week

>$3B

Total addressable market

Surveys conducted by third-party market research firm on behalf of Pulse Biosciences, Inc., Full survey results available upon request

1. Based on 2019 Clinician (n=304) in the U.S.
2. Based on 2020 Clinician (n=46) in Europe

Excellent Clinical Data

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

SH

Cleared SH at 60-day follow-up

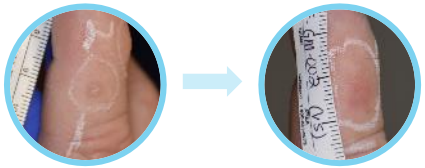
BEFORE AFTER

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



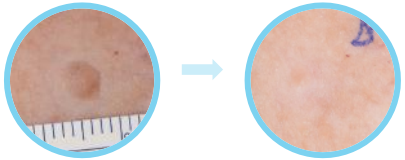
BEFORE AFTER

Warts (non-genital)

- Warts achieved complete clearance at a 79% rate, including recalcitrant warts
- 71% of completely cleared warts achieved with 1-2 treatment sessions
- Previous modalities failed for majority of patients

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

Pulse Biosciences®

Strong KOL Support and Advocacy

Deep network of leading aesthetic dermatologists

4 **CLINICAL PUBLICATIONS ON NPS TECHNOLOGY**

Dermatologic Surgery | Lasers in Surgery and Medicine | Journal of Cosmetic and Laser Therapy

PODIUM PRESENTATIONS

2018	2019	2020
4	12	16

ACCEPTED ABSTRACTS

2021 (Apr/May)
5

Scientific Advisors

ASDS American Society for Dermatologic Surgery | ASLMS American Society for Laser Medicine & Surgery, Inc. | AAD American Academy of Dermatology

Dr. Brian Biesman, Nashville, TN
Dr. Joel Cohen, Denver, CO
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, Boston, MA

Pulse Biosciences®

CellFX Controlled Launch

A comprehensive and disciplined approach

75

KOL Controlled Launch Clinics across the U.S. and E.U.

Track record for both clinical expertise and commercial acumen for introducing new technologies into a market

KOLs experiences establish best practices for implementation of the CellFX System

Shared experiences among peers at high visibility medical conferences and media outlets

Early adopters will be guided by KOL best practices

Pulse Biosciences®

Cycles Enable Treatment Delivery

Innovative utilization based business model aligns incentives

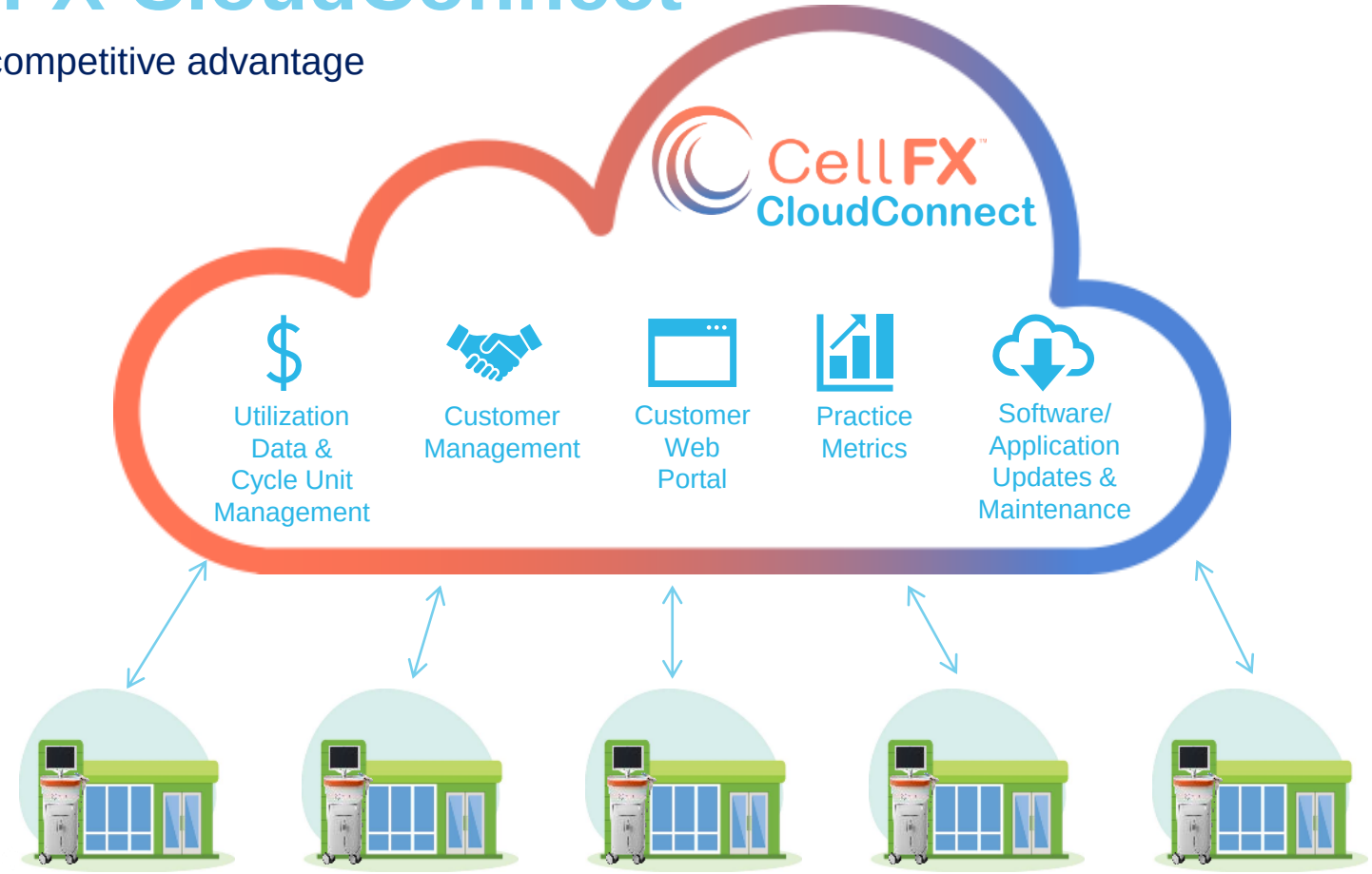
- Patients want to pay based on number of lesions treated
- Dermatologists want to treat all patients regardless of condition size/type/amount and want their costs aligned with what they treat

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

Pulse Biosciences®

CellFX CloudConnect

Unique competitive advantage



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

5 lesions / patient

MD Revenue per 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

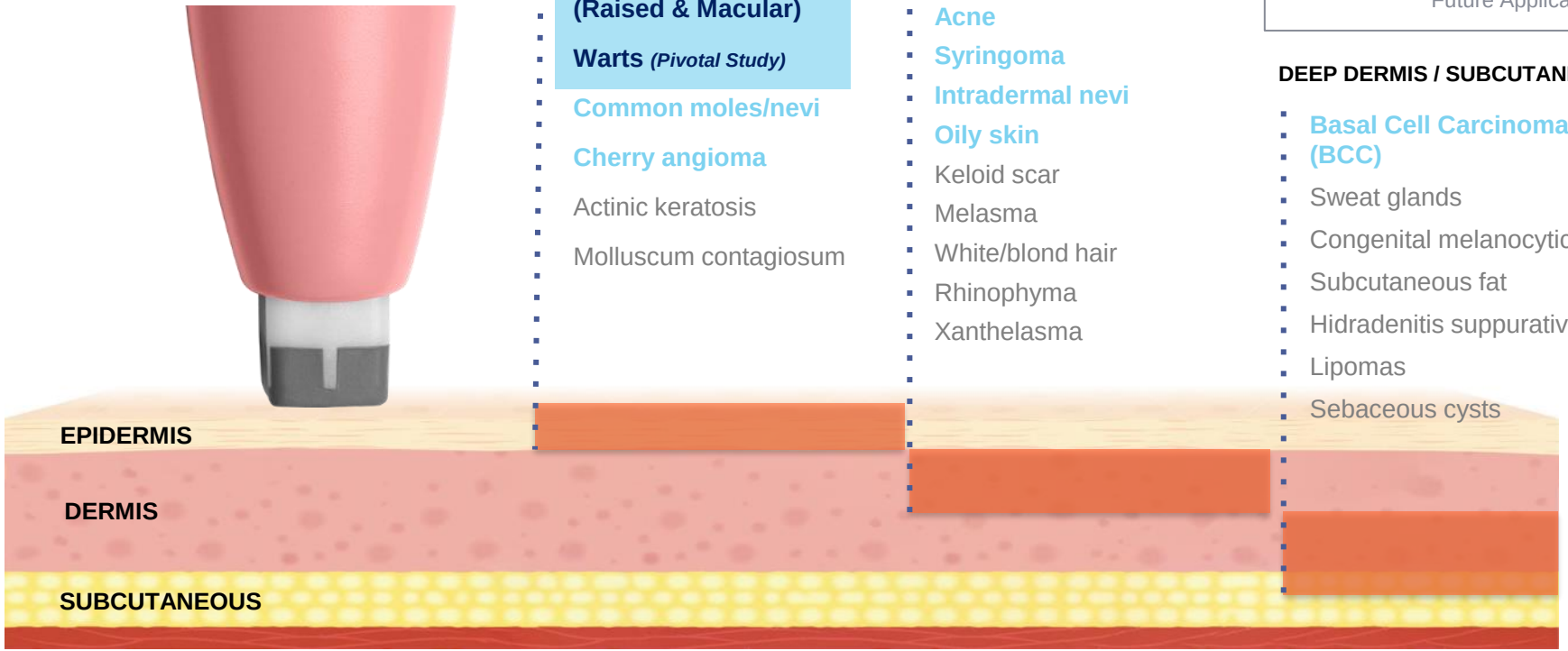
Revenue to Practice ~$500,000 / Year

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

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

Expanding indications in US

- **Received 510(k) Clearance** for general dermatologic indication February 2, 2021
  - **Progressed stepwise FDA strategy** in pursuit of subsequent specific indications
  - **Completed treatments** in FDA IDE approved study to generate data for a 510(k) submission for the treatment of Sebaceous Hyperplasia, submission planned for 2Q21
  - **Completed 51 of 150 treatments** in FDA IDE approved study to generate data for a 510(k) submission for the treatment of common non-genital warts, submission planned for as early as 4Q21
  - **Received FDA IDE approval** for a treat and resect basal cell carcinoma feasibility study, enrollment of 30 patients expected to be completed by the end of 3Q21
- **CE mark approval** received January 22, 2021
- **Health Canada** Medical Device License application under review

Pulse Biosciences®

Upcoming Milestones

- **Onboarding of 75 total controlled launch participant clinics will continue throughout Q2 and conclude in Q3 of 2021**
- **Clinical and regulatory activity to expand of CellFX System clinical applications**
  - Potential receipt of Health Canada Medical Device License as early as 2Q21
  - Subsequent 510(k) submissions
    - SH planned for 2Q21
    - Non-genital wart planned for as early as 4Q21
  - Enrollment of FDA IDE approved BCC feasibility study expected to begin in Q2 and end in Q3
- **Progress Clinical and Scientific programs**
  - Continued presence at scientific meetings

Pulse Biosciences

As of January 2021

112 issued patents globally owned & licensed

Additional 96 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

Financial Snapshot

Cash Utilization

2020 **$34.6MM**

1Q 2020 **$10.7MM**

- **As of 3/31/2021 cash, cash equivalents and investments were $59.9MM**
- **February 2021 At-the-Market Equity Offering of up to $60MM**

	March 31, 2021 (In thousands)
Cash, cash equivalents & investments	$ 59,883
Prepaids & other assets	2,458
Property, plant and equipment	2,430
Goodwill & intangibles	6,506
Right of use assets	9,280
Total assets	**$ 80,557**
Accounts payable & accrued liabilities	$ 7,781
Lease liability	11,261
Debt	41,118
Stockholders' equity	20,397
Total liabilities & stockholders' equity	**$ 80,557**
Shares outstanding (as of 4/30/2021)	26,460

Pulse Biosciences®

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

REATA PHARMACEUTICALS, Alnylam PHARMACEUTICALS, pharmacyclics, ZELTIQ

Thank You

Pulse Biosciences