DAVID LAPOINTE
CEO

TRANSFORMING THE DIAGNOSTIC WORLD
by seeing the unseen

September 2022

TRANSFORMS THE DIAGNOSTIC (Dx) WORLD FOR SILENT & UNDER DETECTED DISEASES

Retinal Deep Phenotyping™ Platform

SERVING THE 50+ AGE POPULATION

✓ *Chronic diseases are detected too late or after a dramatic event*

✓ Current care is failing to solve the problem with chronic conditions
  - *The burden of illness Dementia 7.1 Trillion*
  - *Cardiovascular disease 1.1 Trillion*

FIRST LINE NON-INVASIVE DIAGNOSIS

Supporting physicians when it is still time to act –

WITH THE FIRST INDICATION IN EARLY DETECTION IN AD
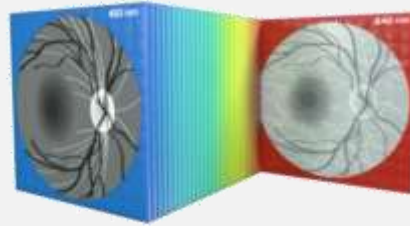
Why Do We Use the Eye?

Because it is highly vascularized, contains nervous tissues and is the only direct access for imaging
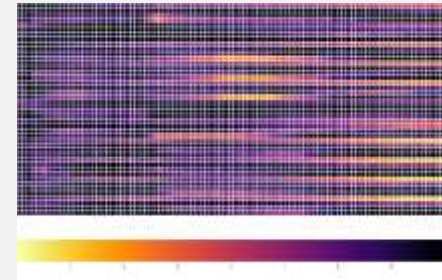
Retinal Deep Phenotyping™ Platform

DATA RICH DIGITAL INFO
Reveals Subtle Phenotypic Changes

> 1,000 AI FEATURES DEVELOPED
Indicative of Diseases

RDP™ Heat Map

RDP™ : Retinal Deep Phenotyping™ Heat-map

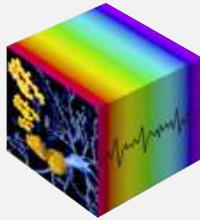# RETINAL DEEP PHENOTYPING™ PROPRIATORY PLATFORM (RDP™)

HYPERSPECTRAL CAMERA

1

Novel Dx Information

+

AI- ALGORITHM

2

Data Rich Images
Structural, Molecular & Functional insights

Digital, Imaging Biomarkers
Proprietary

+

DATABASE

3

Cloud

Database (HIPAA)
Patient Info Gathering and Care Path Support

=

NEW Dx Paradigm

1st INDICATIONS
Alzheimer Disease
Dementia
Biomarkers

OWN DATA CREATION → **OWN DATA ANALYSIS** → **OWN DATABASE**

WINNER TECHNOLOGY INNOVATION LEADERSHIP AWARD

✓ **IMAGING PLATFORM AND AI**

- Precise and accurate phenotyping to detect complex diseases
  - Quantitative approach across test sites
  - Industry largest prospective cohort and install base

✓ **LEADERSHIP POSITION**

- **Alzheimer's disease**
- Atherosclerosis
- Age-related macular degeneration (AMD)

✓ **PARTNERSHIPS** with leading pharma organizations

CLINICAL STAGE COMPANY ENTERING COMMERCIAL DEMONSTRATION

Most Advanced Retinal Scan

- ✓ Only hyperspectral camera FDA cleared
- ✓ Multi-site proof of early Dx in Alzheimer
- ✓ Largest investment from ADDF in eye biomarkers

Robust Regulatory Path Accelerating Time to Market

- ✓ Camera 510K cleared
- ✓ Breakthrouhg Device designation
- ✓ Data development plan with FDA
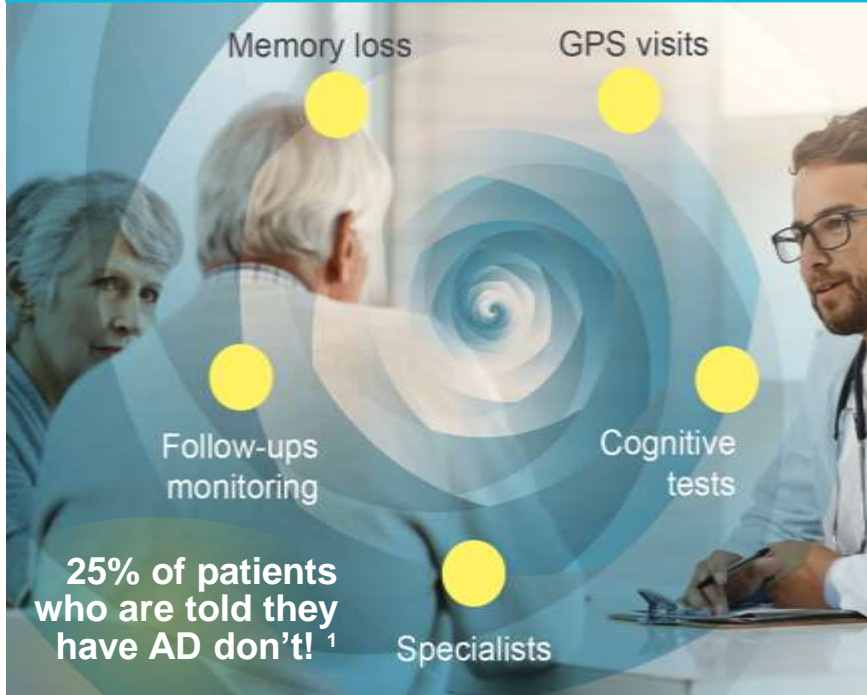- ✓ DeNovo with clinical data recruiting

Well Positioned To Rapidly Be Included in Dx & Rx Guidelines

- ✓ In clinical development with leading medical centers and clinicians
- ✓ New Rx will require a biomarker base test to be prescribed

Currently Dx Takes > 2.7 Years

Memory loss

GPS visits

Follow-ups monitoring

Cognitive tests

Specialists

25% of patients who are told they have AD don't! [1]

Low access - Academic β-amyloid Status Required for Dx
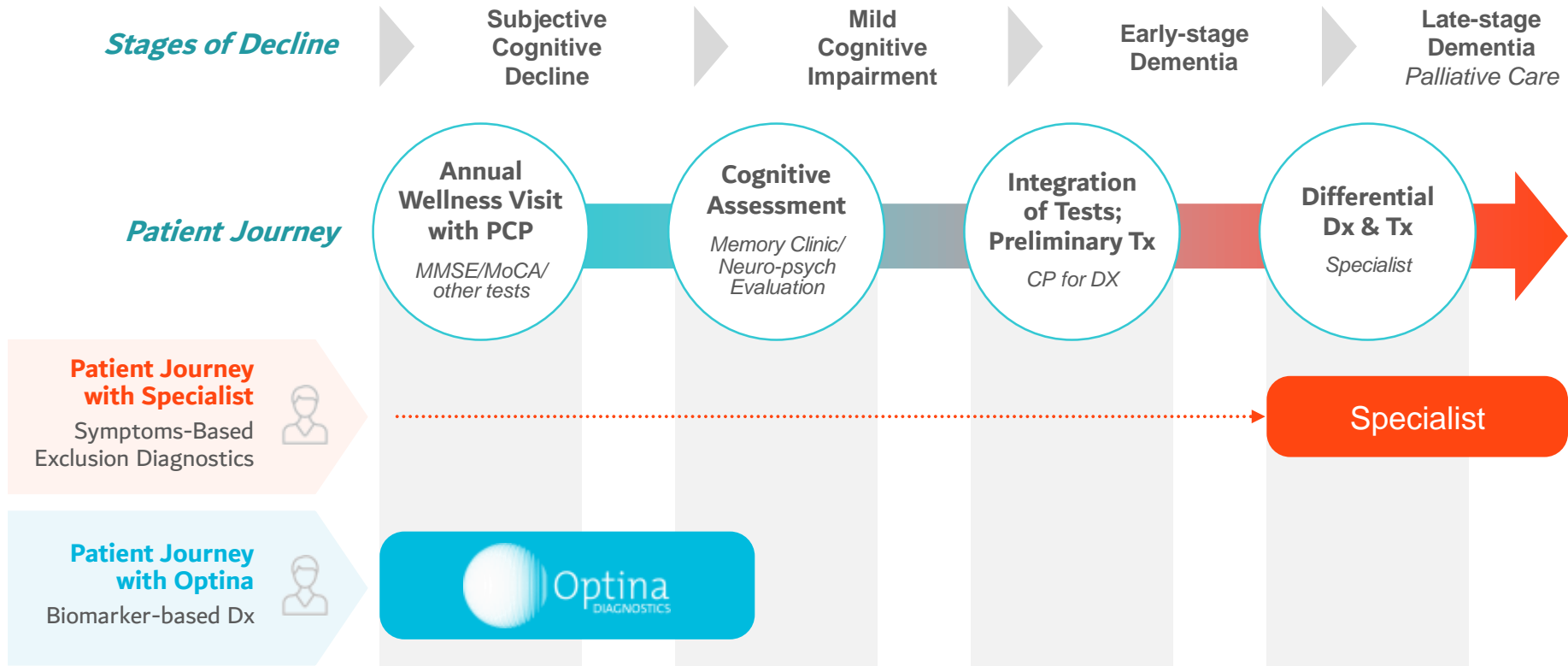

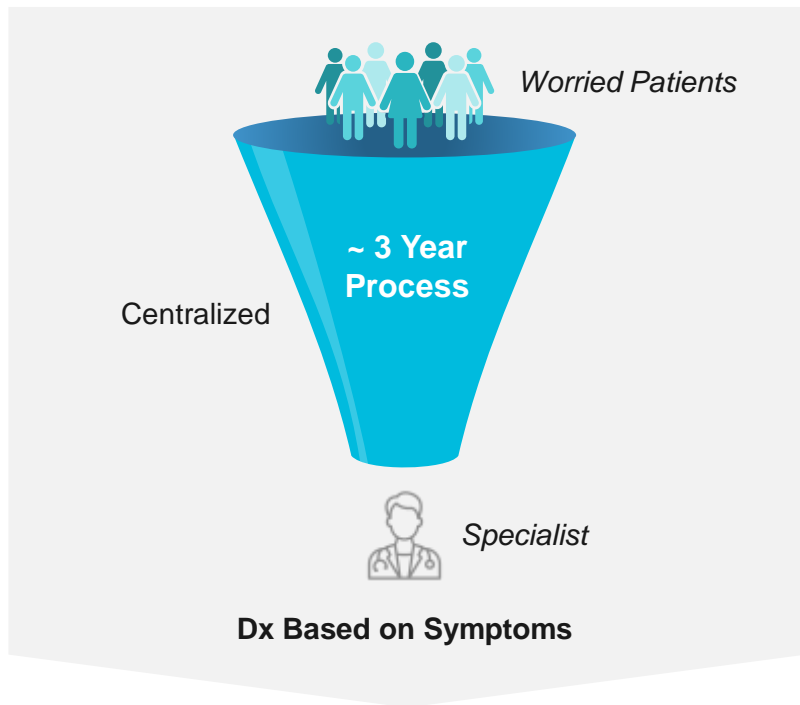**PET-scan**
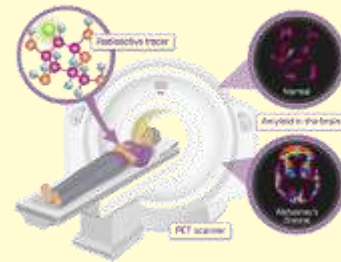
CSF, Research
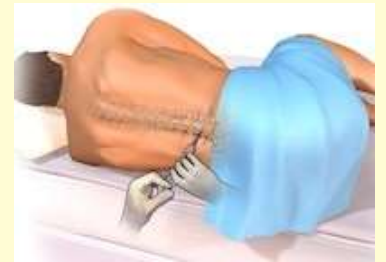
INVASIVE TESTS

- Expensive and not easily accessible
- Not reimbursed
- Not suitable, not sustainable for early screening

OPTINA – TO BRING ALZHEIMER Dx & Rx TO PCP WITH EARLY STAGE DIAGNOSTIC

Stages of Decline

Subjective Cognitive Decline → Mild Cognitive Impairment → Early-stage Dementia → Late-stage Dementia *Palliative Care*

Patient Journey

Annual Wellness Visit with PCP
MMSE/MoCA/ other tests

Cognitive Assessment
Memory Clinic/ Neuro-psych Evaluation

Integration of Tests; Preliminary Tx
CP for DX

Differential Dx & Tx
Specialist

Patient Journey with Specialist
Symptoms-Based Exclusion Diagnostics

Specialist

Patient Journey with Optina
Biomarker-based Dx

Optina DIAGNOSTICS

10-15% POPULATION OVER 55 COMPLAINING OF MEMORY LOSS WILL SEEK A DIAGNOSTIC

CURRENT: Late-stage Diagnostics

Worried Patients

Centralized

~ 3 Year Process

Specialist

Dx Based on Symptoms

60-70% ACCURACY

FUTURE: Optina Early-stage Diagnostics

Worried Patients

Near Patient Access

Same Day Results

Optina DIAGNOSTICS

PCPs

Retinal Deep Phenotyping

✓ **Timely access to therapeutics**
✓ **FDA requires biomarkers in Drug indication**

80-90% ACCURACY

Retinal Dx Market Size
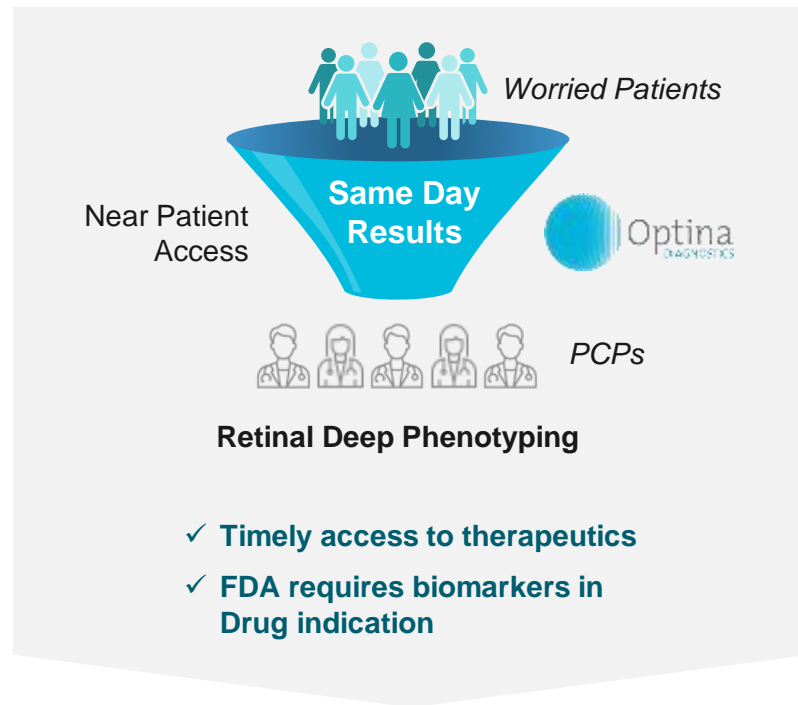
18 Clinical Sites 5,000 Subjects

BRAIN HEALTH (+2000 Subject)
1ST INDICATION – CEREBRAL AMYLOID STATUS
Cognition & neurodegeneration test in development

$10bn +

VASCULAR HEALTH
ATHEROSCLEROSIS – STENOSIS

$7bn +

EYE HEALTH
AGED RELATED MACULAR DEGENERATION

$4bn +

FUTURE OUTLOOK – DIABETES, NASH, etc.

Supports Optina's Innovation Pipeline

Sites For Initial Market Launch (Approved Camera)

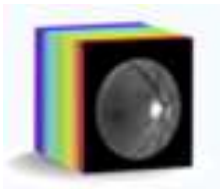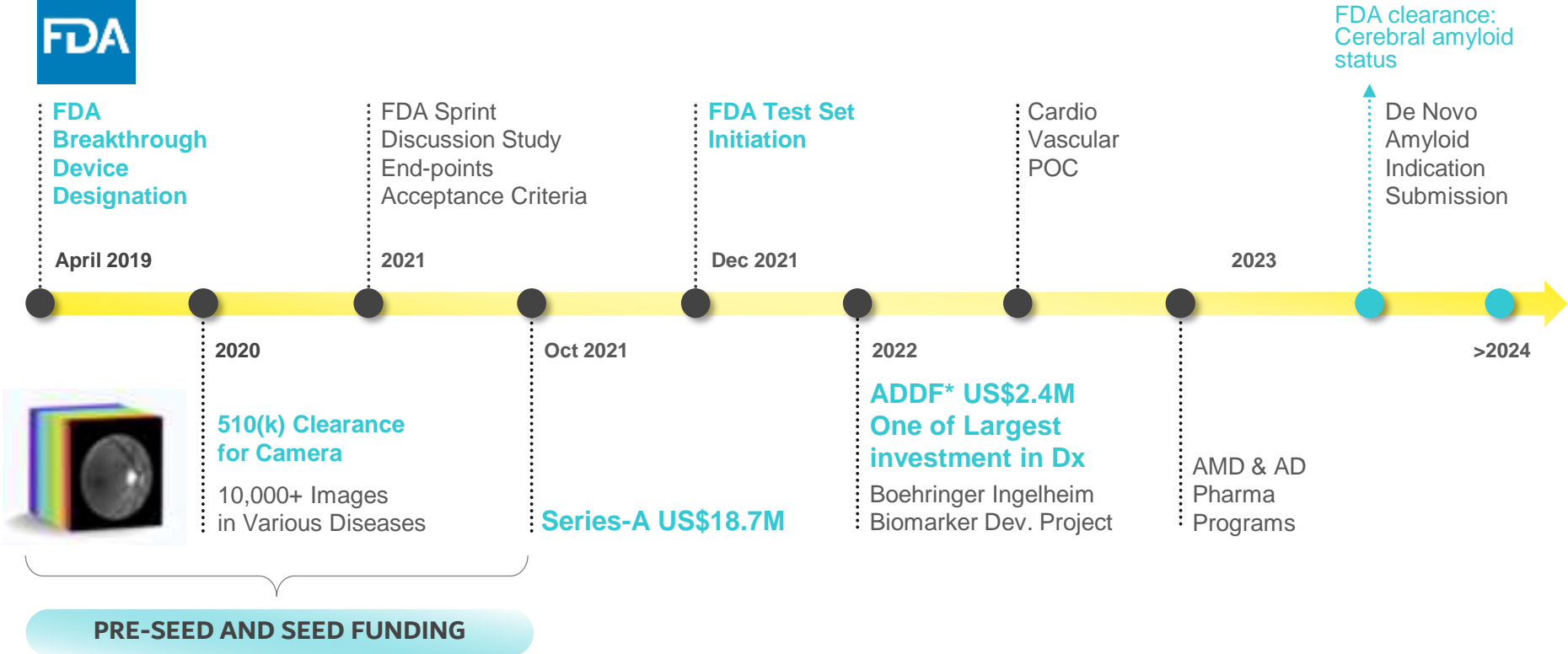## Market Need Driving +100,000 Diagnostic Locations of High-value Tests

Hardware as a Service (HaaS)

- Starts end of 2024

- Retail price for cognitively impaired patients: $400-2000 PER TEST

- Revenue sharing with business partners (max 50%)
  - Converting 20 clinical sites into revenue-generating sites
  - Revenue per camera at 8 patients per day = $800k/year @ $400 / test

- **Expect preliminary reimbursement** within 24 months of approval
  - Code for high price Dx for amyloid – high value Dx

Project-based with Pharma

- Supporting pipeline of indications
- Generating revenues

ACHIEVEMENTS and OUTLOOK

FDA

FDA Breakthrough Device Designation

April 2019

FDA Sprint Discussion Study End-points Acceptance Criteria

2021

FDA Test Set Initiation

Dec 2021

Cardio Vascular POC

2023

FDA clearance: Cerebral amyloid status

De Novo Amyloid Indication Submission

2020

510(k) Clearance for Camera

10,000+ Images in Various Diseases

Oct 2021

Series-A US$18.7M

2022

ADDF* US$2.4M One of Largest investment in Dx

Boehringer Ingelheim Biomarker Dev. Project

AMD & AD Pharma Programs

>2024

PRE-SEED AND SEED FUNDING

Alzheimer's Drug Discovery Foundation

● Completed ● Planned

13

KEY EXPERTISE & STRUCTURE – INVOLVED, CONTRIBUTING, LONG-LASTING BOARD

Claudia Chevrefils	Jean-Philippe Sylvestre	Chantal Miklosi	David Lapointe	George Mallin	Shannon Lastname
PhD, CIO	PhD, CTO	MBA, CFO	CEO	MBA, VP Ops	Title

MANAGEMENT TEAM

Strong USA experience with scientific leadership from leading institutions
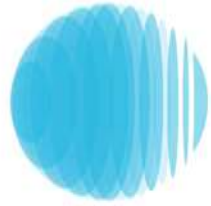*9 Bachelor, 12 Master, 6 PhD*

14

✓ Current 1st indication product to market already financed

➢ Seeking US$5M Bridge Round to accelerate programs and maximize Series-B value

- Advance commercial demonstration
- Augment pharma collaborations infrastructure capacity
- Continue expansion of pipeline in chronic diseases

We are transforming the Diagnostic World by Seeing the Unseen – Join Us!

15

THANK YOU