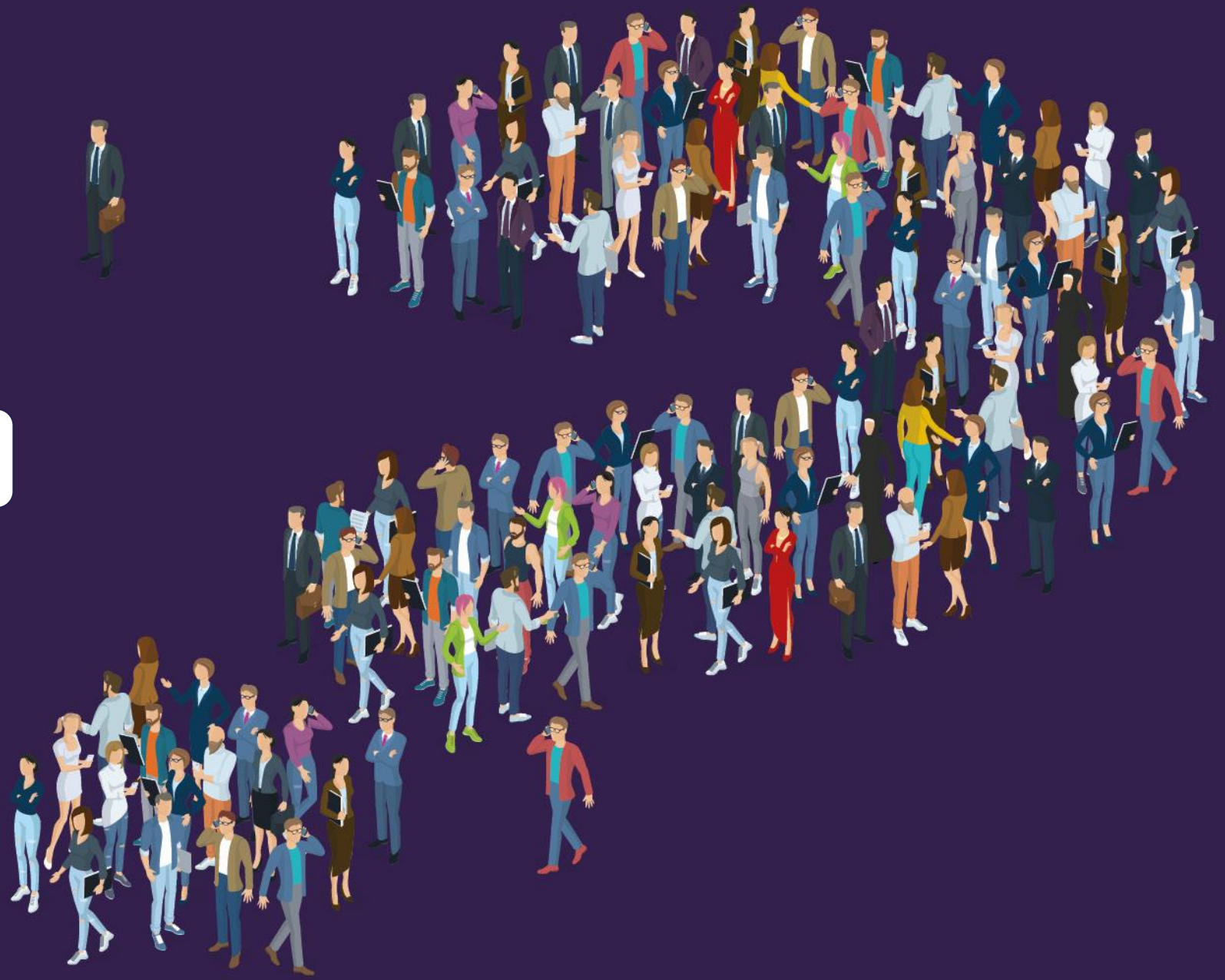
MDNA Life Sciences

Corporate Presentation



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Management Team

Chris Mitton
Chief Executive Officer
Director

Background

- Seasoned leader with over 20 years of management experience in medical diagnostics
- Successful in building and leading commercial operations in the area of personalized healthcare with a focus in molecular oncology diagnostics
- Held several senior executive roles with responsibility for sales and marketing, business development, licensing, sales operations, and product commercialization strategy
- Prior to joining MDNA in 2016, Mr. Mitton headed sales operations for Cancer Genetics Inc.

Jonathan Mills
Chief Financial Officer

- Practicing Chartered Certified Accountant with over 30 years' experience
- Joined MDNA in January 2020 on a part-time basis
- In December 2022, Mr. Mills was appointed the Company's full time Chief Financial Officer

Management Team (cont.)

Jennifer Creed

Chief Development Officer

- Leader in identifying non-invasive approaches to previously invasive molecular tests
- Joined MDNA in November 2014
- Was the Chief Development Officer of Mitomics Inc.
- DNA analyst at Lakehead University's Paleo-DNA Laboratory

Dr. Andrew Harbottle, Ph.D.

Chief Science Officer

- Was Chief Science Officer of Mitomics Inc.
- PhD from the University of Newcastle; specializing in cancer research
- Previous experience examining mitochondrial DNA deletions in skin cancer and UV damage

Robert Poulter

Chief Business Officer

- Was the President and CEO of Mitomics Inc.
- Management consultant where he consulted on several commercial and retail banking projects
- Practice leader for IBM's business consulting division in the area of Customer Relationship Management

Board of Directors

Harry Smart
Chairman

- Established a track record of successfully taking companies and organizations through major strategic changes
- Helped establish the Euronet UK network
- Holds a B.Sc. in chemical technology, a B.A. in applied computing, as well as an M.B.A. from the University of Newcastle upon Tyne

Robert Thayer, PhD
Director

- Mitomics Inc. co-founder, where he worked from 2001 to 2008
- Authored 52 peer-reviewed publications, book chapters and abstracts
- Former Olympic athlete and coach for the Canadian Olympic Team in the 1976 Montreal Games and the 1980 Moscow Games

Christopher Hill
Director

- Former director on the board of Geneius Laboratories Ltd – the UK's leading independent microbiological testing company
- Highly respected track record in marketing planning, creative communications and brand development

MDNA Life Sciences – Novel Diagnostic Platform for Liquid Biopsy

- Molecular diagnostic platform company exploiting the biological advantages of mitochondrial DNA (mtDNA)
- Non-invasive, blood-based, liquid biopsy format to detect disease
- Unmatched rapid, agile development of proprietary diagnostic tests
- Two product candidates in development for early disease detection, eight more in pipeline
  - Prostate cancer detection; Mitomic™ Prostate Test (MPT™)
  - Endometriosis detection; Mitomic™ Endometriosis Test (MET™)
- Two analytical studies completed for biomarkers related to MPT™ and MET™, three more planned in 2023 for CE IVD approval
- Licensed our IP related to the MPT™ biomarker with Laboratory Corporation of America Holdings

Discover mtDNA based biomarkers and develop a pipeline of disease screening and diagnostics tests

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mtDNA: The Perfect Liquid Biopsy Biomarker

Mitochondrial DNA

Biological Feature	Clinical Benefit
High Copy Number	Enables much earlier detection
Mutation at High Frequency	Tests are highly sensitive / specific
Lack of Repair/ Cell Death	Mutations persist… Accumulate in detectable state
Occur in “Healthy” Cells	Actionable… Detects real-time disease, not hereditary risk
Disease-Specific	Multiple biomarkers per disease state
	Highly quantitative… Even with low sample material

Comparable Biomarker Technology

Biomarker	Disadvantage
Circulating Tumor Cells	Gathering intact cells, Analysis methods are early in development
Circulating Tumor DNA and cell free DNA	May rapidly degrade in plasma
MicroRNA	Early in development, Inconsistent results
Tumor Educated Platelets	Early in development
Tumor-Derived Exosomes	Early in development

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Developed for Real-time PCR (rtPCR) Systems

- Techniques to analyze cell free DNA include several polymerase chain reaction (“PCR”)–based methods and next-generation sequencing (“NGS”)
- PCR technology has formed the basis of many FDA-approved clinical diagnostic assays
- Readily obtained blood samples contain (1) high quantities of disease associated biomarkers that (2) can be quantified using quantitative real-time or digital PCR assays (3) at a lower cost compared to traditional NGS genomic testing panels

Technique	Advantages	Disadvantages
Next-generation sequencing (NGS)	High throughput; low cost per sequencing after initial implementation	Analysis is complex; high cost to implement
Real-time PCR	Low-cost, readily available and simple to implement	Lower sensitivity than dPCR; analysis is specific to regions of DNA sequence
Digital droplet PCR (dPCR)	High sensitivity and specificity; able to analyze multiple samples simultaneously	Analysis is specific to regions of DNA sequence

Significant Clinical Problems With Unmet Need

Endometriosis

- Globally, 1 in 10 women are affected by endometriosis during their reproductive years.
- There is a significant diagnostic delay in diagnosing endometriosis.
- Symptoms of the disease are not readily recognised in primary care, average of 10 years
- When patients are finally diagnosed, greater than 90% have moderate to severe symptoms
- There is a significant need for a non-invasive, blood-based test to aid earlier diagnosis

Prostate Cancer

- PSA is not specific to prostate cancer
- Many men with a positive PSA test are false-positive for prostate cancer
- Up to 50% of these men will be 'over' diagnosed with cancer that never harms them[1]
- The risks associated with treatment of low-grade cancers (≤ Gleason 6) appear to outweigh the benefits – e.g. urinary incontinence, erectile dysfunction
- There is a significant need for a non-invasive, blood-based test to identify men with medium and high-grade cancer (≥ Gleason 7) that need treatment

World Health Organization (https://www.who.int/news-room/fact sheets/detail/endometriosis); Endometriosis.org (http://endometriosis.org/endometriosis/diagnosis/); UpToDate.com; and NY Endometriosis Center

1. NIH National Cancer Institute reports this number is even higher at ~ 75%1 based on 5-year survival rates. Seer database (https://seer.cancer.gov/statfacts/html/prost.html)

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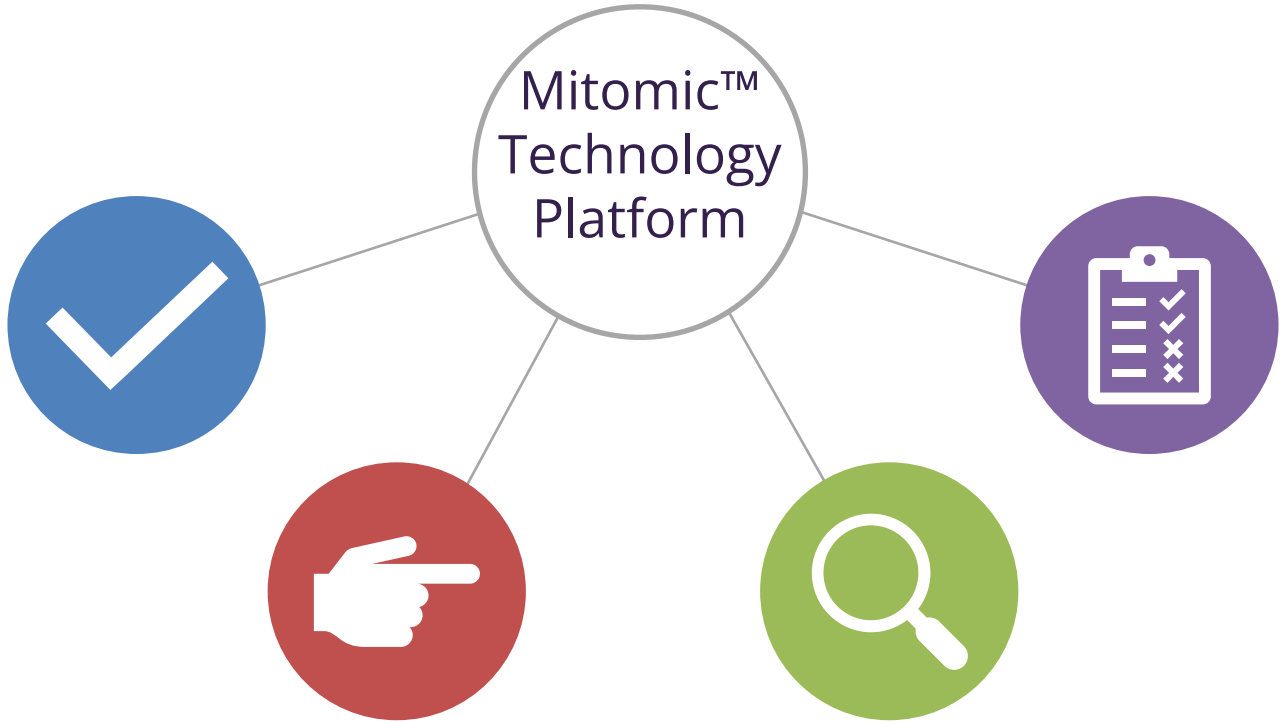
Product Overview – Mitomic™ Technology Platform



Biomarker identification
Determine whether mitochondrial genome mutations can be detected and correlated with the presence or absence of disease

Analytical Validation
Specification of the assay and methods are defined and measured

Product Launch
IVD Service launch followed by IVD kit launch

Clinical Validation
Clinical performance is measured

Novel biomarkers to detect cancer earlier, more accurately, and less invasively than traditional methods

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Deep Product Pipeline

Indication	Biomarker Identification	Assay Development & Analytical Validation	Clinical Validation	Manufacturing & CE-IVD Kit Approval
Endometriosis (MET™)				
Prostate Cancer (MPT™)				
Ovarian Cancer (MOT™)				
Lung Cancer (MLT™)				

U.K. laboratory service

Product launch & 3rd party distribution

High burden diseases with significant unmet clinical needs

Significant women's health pipeline

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Published Analytical Studies

MET ™

- **No. of participants:** 182 with suspected endometriosis
- **Primary endpoint met:** Prediction of surgical outcome of endometriosis
- **Secondary endpoints met:** Correlation with different stages of disease, stage groups, different disease subtypes, phase of menstruation at time of blood collection, hormone status, and patient age
- **Provide a low risk, quantitative measure of a patient's probability of diagnosis without immediately undergoing surgery**

Allows for use earlier in the clinical pathway

Rapidly identified for interventions appropriate for earlier, lower risk treatment

Detects clinically significant disease

MPT ™

- **No. of participants:** 218 with a total PSA less than 10 ng/ml (grey zone)
- **Primary endpoint met:** Prediction of clinically significant prostate cancer
- **Secondary endpoints met:** Absence of correlation with total PSA and patient age
- **Guide the decision to biopsy for patients suspected of prostate cancer with a total PSA in the 'grey zone'**
- High negative predictive value (NPV)

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Planned Clinical Trials

MET ™

- **No. of participants:** 1000
- **Planned Completion:** 2023
- **Endpoint:** Prediction of surgical outcome of endometriosis

- **No. of participants:** 100
- **Planned Completion:** TBD
- **Endpoint:** Evaluate diagnostic accuracy
- **Secondary:** Evaluate optimal disease screening strategies compared to SoC

MPT ™

- **No. of participants:** 1000
- **Planned Completion:** 2023
- **Endpoint:** Prediction of clinically significant prostate cancer (same as previous study)

Pivotal clinical studies

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Market Opportunity - MET™

Approx. 7,163,000 women in the USA

Approx. 78,000,000 women in rest of world

Age Group	USA Female Population	Symptomatic (with disease) *	Symptomatic (disease free) **	Symptomatic Screening Population
15 – 29	32,560,162	3,256,016	3,907,219	7,163,235

- Conducting CE clinical validation study in collaboration with leading medical centers in the UK and other markets
- Globally, 1 in 10 women are affected by endometriosis during their reproductive years
- There is a significant diagnostic delay in diagnosing endometriosis, average of 10 years
- Symptoms of the disease are not readily recognized in primary care

* i.e. 1 in 10
** i.e. 1.2 in 10

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Market Opportunity - MPT™

Age Group	USA Male Population	Prostate Specific Antigen (PSA) Tests *	Elevated PSA's *	Grey Zone Screening Population **
45 – 49	10,410,171	3,154,282	757,028	18,169
50 – 54	10,766,906	3,262,373	782,969	71,250
55 – 59	10,734,476	3,252,546	780,611	71,036
60 – 64	9,339,967	2,830,010	679,202	103,918
65 – 69	7,945,458	3,551,620	852,389	130,415
70 – 74	5,480,744	2,449,893	587,974	216,375
75 – 79	3,761,931	1,527,344	366,563	134,895

Approx. 746,000 men per year in the USA

Approx. 3,865,000 men per year in rest of world

* Per annum
** (PSA <= 10ng/ml)

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Facilities

- State-of-the-art, 2,658 square foot clinical laboratory in Newcastle upon Tyne in the UK for R&D
- ISO 15189:2012 accredited medical testing laboratory
- ISO 13485:2016 International Standard
- Bespoke laboratory facility optimized for contamination prevention including dedicated workspaces for key functions
- Advanced molecular biology capabilities including digital PCR, real-time PCR, automated electrophoresis with scale-up capacity and redundancy
- Automated and semi-automated (robotic) processes for DNA/RNA isolation and liquid handling to achieve efficient and standardized workflows

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Regulatory Strategy

Commercialization in U.S.

- First market entry via out-licensing
  - Third-party U.S. Commercial CLIA laboratory to market an in vitro diagnostic test as Laboratory Developed Test (LDT)
- LDT pathway shares many similarities with the FDA premarket clearance or approval pathway in that performance of the test must be demonstrated with sufficient evidence to support its validity
- In contrast, the FDA premarket clearance pathway requires that the documentation is submitted, reviewed, and approved *before* marketing the product

Commercialization in Europe

- In-House In Vitro Diagnostic testing services offered through our U.K. laboratory
- Strategy is intended to provide patients access to the test once performance has been validated while the development of in vitro diagnostic kits, including CE-IVD marked kits, are pursued in parallel

Growing our network of license and distribution partners globally

Growth and Business Opportunities

Short-Term

- Complete development for the MPT™ and MET™
  - If successful, proceed to enter into a third-party manufacturing agreement for a reagent kit
  - Seek CE-IVD regulatory approvals
- Enter into third-party license and/or distributor agreements in primary target market countries

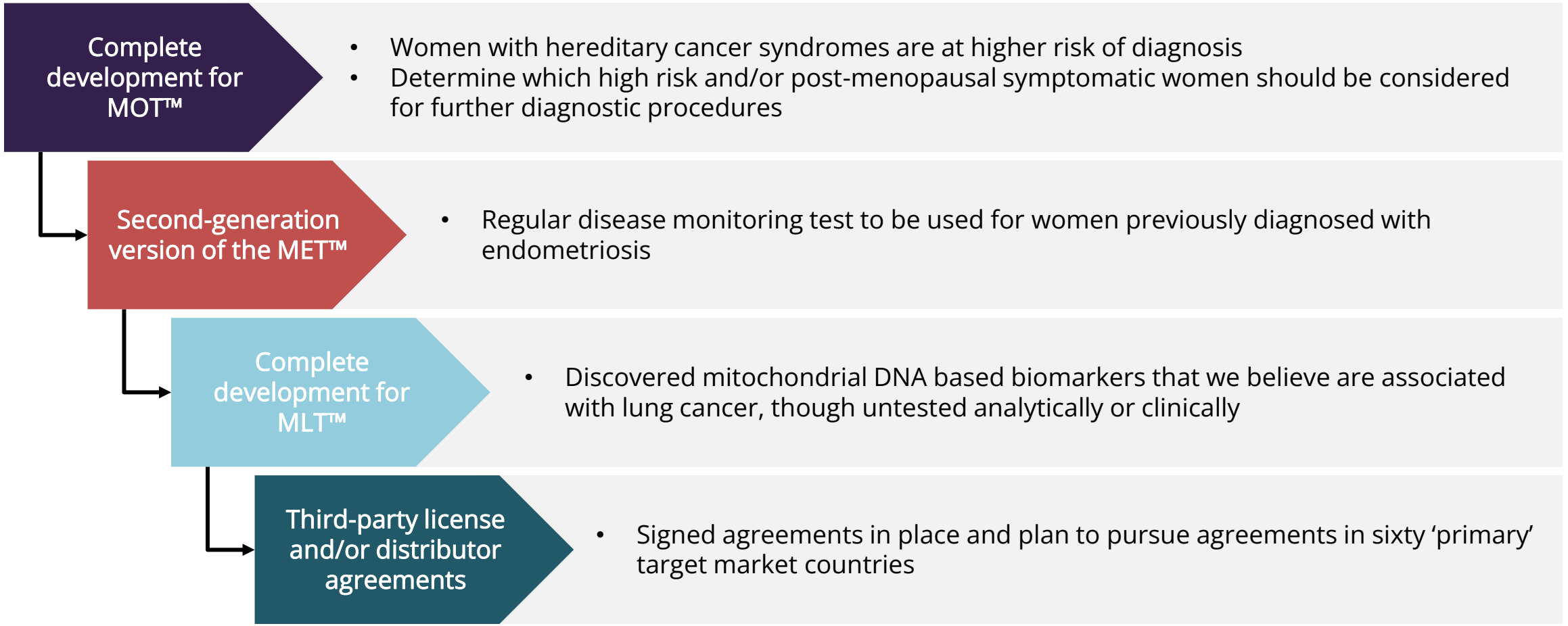
Medium-Term

- Complete development for the Mitomic™ Ovarian Test (MOT™)
- Complete development for a second-generation version of the MET™ for disease monitoring
- Complete development for the Mitomic™ Lung Test (MLT™)
- Enter into third-party license and/or distributor agreements in secondary market countries

Long-Term

- Conduct biomarker identification and complete development for our pipeline
  - Pancreatic cancer
  - Liver cancer
  - Breast cancer
  - Stomach cancer
  - Esophageal cancer
  - Colorectal cancer

Growth and Business Opportunities (cont.)



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Financials

Balance Sheet

December 31, 2022	
Cash	$219,536
Current assets	298,395
Total assets	2,011,425
Current liabilities	26,610,347
Total liabilities	26,660,805
Total shareholders' deficit	(24,649,380)

Income Statement

	3 Months Ended		Year Ended	
	December 31, 2022	December 30, 2021	September 30, 2022	September 30, 2021
Revenue	$475	$1,093,004	1,554,697	3,602,296
Cost of goods sold	40,505	484,077	887,177	1,819,352
Gross profit	**(40,030)**	**608,927**	**667,520**	**1,782,944**
Operating expenses:				
G&A	646,014	422,001	1,906,523	717,066
Research and development	100,629	535,225	1,934,077	2,084,864
Total operating expenses	**746,643**	**957,226**	**3,840,600**	**2,801,930**
Loss from operations	(786,673)	(348,299)	(3,173,080)	1,018,986
Net Loss	**(1,542,267)**	**(1,701,834)**	**(6,065,868)**	**2,999,522**

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Funding Clinical Programs and Operations

Activity	Estimated Expense
R&D	$3,500,000
Regulatory review process for each of our products	$1,000,000
Fund payment of accounts payable to vendors	$1,250,000
Deferred compensation	$750,000
Working Capital	Remainder
EST. TOTAL	$11,900,000

Capitalization Table	
Common Stock Equivalents	*As of Dec. 31, 2022*
Common Stock	1,411,928
Series A Preferred Stock (1)	1,682,264
Convertible Notes (1) (2)	3,831,913
Warrants	2,676,187
Options & RSUs	488,056
Total	**10,090,348**

1) Convertible into the Offering
2) Conversion of $19,036,795 in aggregate principal amount of our Secured Convertible Notes outstanding as of Dec. 31, 2022

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Investment Highlights

Novel Proprietary Technology:	▪ Detects clinically significant disease in high burden indications
Future Product Pipeline:	▪ Lead indications commencing pivotal enabling trials with eight more in pipeline
State-of-the-Art Laboratory Facilities:	▪ R&D of mitochondrial DNA technology and development of Mitomic liquid biopsy tests ▪ Commercial launch of testing services
Global Partnership Network:	▪ Entered a license of our intellectual property related to the Mitomic prostate cancer biomarker with Labcorp
Industry Tailwinds:	▪ Increasing market demand for non-invasive tests and expanding market size due to expanding coverage of diagnostic tests

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THANK YOU