# Akers Biosciences, Inc.



Transformational Healthcare Technologies for Rapid Screening and Diagnosis



### Forward Looking Statements

All statements pertaining to future financial and/or operating results, future growth in research, technology, clinical development, and potential opportunities for Akers Biosciences, Inc. (Akers or the Company) products and services, along with other statements about the future expectations, beliefs, goals, plans, or prospects expressed by management constitute forward-looking statements.

Any statements that are not historical fact (including, but not limited, to statements that contain words such as "will," "believes," "plans," "anticipates," "expects," "estimates") should also be considered to be forward-looking statements.

Forward-looking statements involve risks and uncertainties, including, without limitation, risks inherent in the development and/or commercialization of potential products, uncertainty in the results of clinical trials or regulatory approvals, need and ability to obtain future capital, and maintenance of intellectual property rights and other risks discussed in the Company's recent Form 10-K and other reports filed with the Securities and Exchange Commission which are available for review at www.sec.gov.

Actual results may differ materially from the results anticipated in these forward-looking statements and as such should be evaluated together with the many uncertainties that affect the Company's business.

The Company disclaims any intent or obligation to update these forward-looking statements.



## Free Writing Prospectus Statement



This presentation highlights basic information about the Company and the offering. Because it is a summary, it does not contain all of the information that you should consider before investing. This offering may only be made by means of a prospectus. Except as otherwise indicated, this presentation speaks only as of the date hereof.

This presentation does not constitute an offer to sell, nor a solicitation of an offer to buy, any securities by any person in any jurisdiction in which it is unlawful for such person to make such an offering of solicitation. Neither the Securities and Exchange Commission (the "SEC") nor any other regulatory body has approved or disapproved of our securities or passed upon the accuracy or adequacy of this presentation. Any representation to the contrary is a criminal offense.

This presentation includes industry and market data that we obtained from industry publications and journals, third-party studies and surveys, internal company studies and surveys, and other publicly available information. Industry publications generally state that the information contained therein has been obtained from sources believed to be reliable. Although we believe the industry and market data to be reliable as of the date of this presentation, this information could prove to be inaccurate. Industry and market data could be wrong because of the method by which sources obtained their data and because information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. In addition, we do not know all of the assumptions that were used in preparing the forecasts from the sources relied upon or cited herein.

We have filed a registration statement on Form S-1 (including a preliminary prospectus) with the U.S. Securities and Exchange Commission (the "SEC") for the offering to which this presentation relates. The registration statement has not yet become effective. Before you invest, you should read the preliminary prospectus in the registration statement (including the risk factors described therein) and other documents we have filed with the SEC for more complete information about the Company and the offering. You may get these documents for free by visiting EDGAR on the SEC website at http://www.sec.gov/. Alternatively, the Company or any underwriter participating in the offering will arrange to send you the prospectus if you contact: Joseph Gunnar & Co., LLC., Prospectus Department, 30 Broad Street, 11th Floor, New York, NY 10004, telephone: (888) 248-6627 or email: prospectus@jgunnar.com

Developing and selling rapid testing technology into multibillion dollar global markets



#### Who we are

Akers Bio is a healthcare technology company that develops and sells diagnostic tests that are fast, accurate and highly cost effective

### What we do

Our proprietary technologies form the basis for products in three testing areas, each with significant global markets:

- . Clinical Diagnostics (rule-out tests and screening assays without expensive capex or lengthy turnaround times)
- . Speciality Retail or OTC
- . Health and Wellness (rapid breath testing with innovative digital and mobile technology)

### Why we do it

- . Fast, accurate tests are key to good decision-making in medicine and personal health; and also key to reducing the cost of healthcare
- . Our testing technologies have the capacity to transform existing testing methods in multi-billion dollar global markets

Experienced executive team focused on profitable growth, fiscal responsibility, and building a world class culture





### John J. Gormally Chief Executive Officer

39 years with global medical technology companies (Becton Dickinson, BMS, and GEM, LLC).

BD Preanalytical Systems US Business Leader with \$656 million in revenue and \$310 million of OIBT.

Has led global sales teams with up to 250 people and \$1.1 billion in revenues Commercial Leader of start-up that sold for 33x earnings in 2 years



# Raymond F. Akers, Jr. Ph.D. Executive Chairman & Chief Scientific Director

Co-founder of Akers Bio 30+ years in medical diagnostics Invented Akers Bio's products and technologies; holds numerous patents Ph.D. in Neurochemistry, Northwestern University



### Gary M. Rauch, Vice President, Finance

35+ years in accounting, information systems and operations consulting Engagements in healthcare, manufacturing and distribution



# Douglas Carrara SR. Vice President, Global Marketing & Commercial Ops

25 years experience in sales, marketing and global operations in clinical diagnostics Held similar positions with Quest Diagnostics and Becton Dickinson



### Pamela E. Hibler Vice President, Sales & Distribution, North America

 $25+\ \mbox{years}$  of success in the medical device sector, specializing in new and innovative technology

Senior-level sales positions at Cogentix Medical, United States Surgical Corporation and Medical Horizons Inc.







Focus on Growth and Innovation

Growing Product Portfolio	Growing Sales and Distribution Capability	Significant Global Market Potential
Five products currently generating income	Pay-for-Performance culture	Point-of-care diagnostics market to reach \$27.5bn by 2018 <sup>(1)</sup>
Strong pipeline with multiple products poised for commercialization	New strategic partnerships  Enhanced sales and marketing Strategies	Need for significant healthcare cost savings is driving demand <sup>(2)</sup> for new point-of-care tests



Akers Bio competes in multi-billion<sup>(1)</sup> dollar markets of Clinical Diagnostics, Specialty Retail and Health and Wellness

 $<sup>^{(1)}</sup>$  "Point of Care Diagnostic Market Projected to Hit \$27.5B by 2018" http://hitconsultant.net/2014/03/28/point-of-care-diagnostic-market-projected-to-hit-27-5b-by-2018/

<sup>(2) &</sup>quot;Demand for Point-of-Care Diagnostics" https://www.bu.edu/research/articles/demand-for-point-of-care-diagnostics/

Company
underpinned
by valuable
intellectual
properties
which form
the basis for
product
development
and licensing

Technology Platform	Description	Product Example
MPC™ - Micro Particle Catalyzed Biosensor	Permits the rapid determination of biomarkers in breath condensate	BreathScan  OxiChek
PIFA® - Particle ImmunoFiltration Assay	Selective filtration of microparticles in response to antibody / antigen binding	PIFA Heparin/PF4  Eust Into
seraSTAT®	Rapid production of Serum from Whole Blood in minutes through the use of membrane technology	SCHOOL SEAMOND TO SEA CONTROL OF
REA™-Rapid Enzymatic Assay	Detection of blood and urine metabolites through enzymatic chemistries in quantitative or semi- quantitative formats	Tri-Cholesterol





**Overview of Selected Commercialized Products** 



# Akers Digital Health / mHealth Platform

Health and Wellness focused breath tests put Akers Bio at heart of multi-billion dollar market



Market Opportunity	Antioxidants <sup>(1)</sup> and weight loss products <sup>(2)</sup> - multi-billion dollar markets Akers Wellness products provide valuable health information in a consumer- friendly format
	BreathScan OxiChek™ – breath-based device providing rapid, non-invasive determination of free radical levels and the efficacy of antioxidant supplements, nutrition and exercise
Usage	BreathScan KetoChek™ – breath-based device providing rapid, non-invasive identification of optimal fat-burning state for weight loss (nutritional ketosis) Targeted launch 1H 2018
	Akers Wellness Lync <sup>™</sup> – app-enabled, multi-device reader, providing easy, quantified personal health information via a smartphone or tablet
Status	Signed Aero-Med strategic partnership for selling and fulfillment Direct selling to multi-level marketing organizations
	Distribution model:
Sales Channels	Multi-level marketing organizations     Weight loss centers

Health and fitness clubsAnti-aging physicians

<sup>(3) &</sup>quot;Global Antioxidants Market Expected to Reach \$4.5 Billion by 2022" https://www.nutraceuticalsworld.com/contents/view\_breaking-news/2017-01-26/global-antioxidants-market-expected-to-reach-45-billion-by-2022/

<sup>&</sup>lt;sup>(2)</sup> "Supplement Industry Contributes \$122 Billion To U.S. Economy" <a href="http://www.nutraceuticalsworld.com/contents/view\_online-exclusives/2016-06-10/supplement-industry-contributes-122-billion-to-us-economy">http://www.nutraceuticalsworld.com/contents/view\_online-exclusives/2016-06-10/supplement-industry-contributes-122-billion-to-us-economy</a>

# Akers Wellness app

The app allows the user to track and monitor their health over time

First diagnostic tests in the connected health and wellness market





# Akers Wellness app

Yields personalized results under 2 minutes







PIFA™ Heparin/PF4
Rapid Assay

Akers Bio's rapid diagnostic tests transform traditional healthcare testing



There are 4 million tests for Heparin-induced thrombocytopenia every year in the US alone using slower, traditional methods

# Traditional Testing (ELISA)

### PIFA Heparin and PIFA-PLUSS® (Akers Bio)



Equipment and Process	Capex required Commonly outsourced	No Capex Performed in-house	Simple
Time to Results	1 to 3 DAYS' turnaround(1)	Rapid - 10 MINUTE test	Faster
Cost per Test	(US) \$150 - \$300	(US) \$110 - \$125	Better Value
Significant Related Costs	~ \$1,000 to \$3,000 pharmacy costs  ~ \$2,000 to \$6,000 extended length of hospital stay	None for 80%+ of patients testing negative NPV >98%	Key Value Driver

# Customer Value: Potential to save a typical US hospital well over \$1 Million annually

Source: Warkentin 12



PIEA™ Heparin/PF4
Rapid Assay

The only rapid test to detect a potentially fatal allergy (HIT) to the blood thinner Heparin



Market Opportunity	4 million tests conducted annually in the US alone – all of which could be replaced with Akers Bio's PIFA test	
Usage	Results within 10 minutes vs. 24-72 hours for outsourced lab results  Reduces unnecessary costs incurred with standard protocols, saving a typical U.S. hospital > \$1 Million per year	
Status	Currently selling in the US and China Agreement with Acurity (formerly Greater New York Hospital Association)	
New Go-to-Market Strategy with 3 phases of growth:  1. Value expressed in price 2. Integrated Delivery Networks 3. Awareness campaigns Sales and Marketing Structure: • Physician focus • Cardinal and Fisher: US medical device distributors • Direct sales force • Telesales partner • Internationally via in-country distribution partners • Evidence-based outcomes value proposition		
HIT = Heparin-Induced Thr	ombocytopenia	

Source: ABI Financial

Rapid cholesterol test selling through popular "First Check" brand in major drugstores nationwide





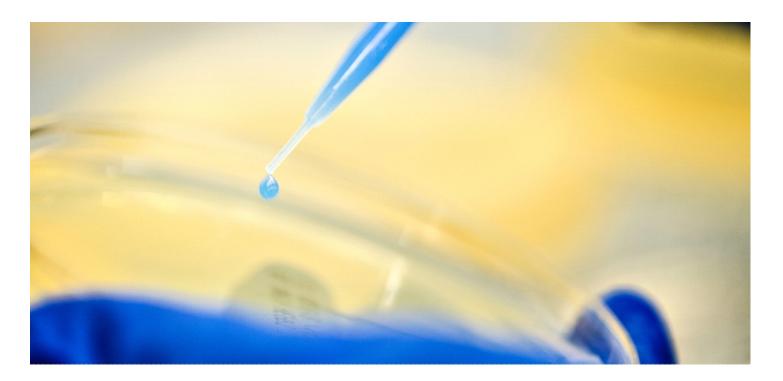
### Tri-Cholesterol "Check"

The only combined rapid test for Total, HDL and LDL cholesterol

Retail markets in US and EU targeted with strategic partners

Selling in US under "First Check" brand (presence in major retailers incl. CVS, Rite Aid, Target, Kmart, Meijer, Giant Eagle, Stop & Shop, Giant and ShopKo)

Exploring global markets including Australia, Western Europe and Asian markets



Overview of Selected Products in Development

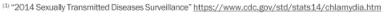




Point of care assay that delivers accurate detection of antibodies to Chlamydia in minutes



Market Opportunity	Most prevalent sexually transmitted disease <sup>(1)</sup> 4.7% prevalence in women aged 14-24 (no symptoms in women) <sup>(2)</sup> >4 million tests annually at Planned Parenthood Approximately 3.4 million cases go undiagnosed
Usage	Single-use device based on PIFA technology Simple test using whole blood Results within 5 minutes vs. 24-72 hours for outsourced lab results
Status	Clinical trials highly successful Under FDA review (Submitted May 2017)
Sales Channels	Target markets include but are not limited to: 1. Planned Parenthood 2. Ambulatory care, clinics, urgent care and Federally Qualified Health Clinics 3. US Government 4. College campus clinics
Value Driver	<ul> <li>Focus on Turnaround Time – achieving diagnosis and, if necessary, prescribing treatment prior to patient leaving facility (unlike existing formats)</li> <li>Accuracy</li> <li>Reimbursement</li> </ul>



(2) "Planned Parenthood at a Glance" <a href="https://www.plannedparenthood.org/about-us/who-we-are/planned-parenthood-at-a-glance">https://www.plannedparenthood.org/about-us/who-we-are/planned-parenthood-at-a-glance</a>

## **Breath** PulmoHealth

Breath tests for biomarkers indicating Lung Cancer, Asthma and COPD





LUNG CANCER: > 1.6 million people worldwide diagnosed annually Market ASTHMA: 300 million people worldwide diagnosed; prevalence up to 18% Size COPD: 210 million people currently in treatment; up to 1 billion smokers at risk Single-use, non-invasive device for pulmonary health screenings with the capacity Usage to dramatically change the speed and cost of diagnosing major respiratory conditions Asthma clinical trials highly successful Status File 510(k) for FDA clearance. In order of filing: Asthma, COPD, Lung Cancer Next Seek distribution as companion diagnostics with prescription medicines; partner Steps with primary care-based diagnostic sales organizations and distributors that

market to retail health clinics

Source: ABI Financial

Multiple rapid tests are being developed, targeting large diagnostic markets



### Targeting 2019 Launch

- PIFA Chlamydia (submitted FDA 510(k))
- BreathScan KetoChek™
- · BreathScan pH (Asthma)
- BreathScan PulmoHealth (COPD)
- BreathScan PulmoHealth (lung cancer)
- · Heart attack test
- BreathScan THC
- BreathScan DKA (diabetic ketoacidosis)



2017 revenues tracking 10% over FY 2016



	2016 Full Year	9M to Sep 30, 2017
Revenue:		
- PIFA & PIFA Associated Products	\$2,577,148	*\$1,977,726
- MPC Biosensor Products	\$282,516	\$381.569
- REA Products		27,500
-Other Products	\$97,498	\$116,647
-License & Service Revenue	\$3,750	\$37,500
Total Revenue:	\$2,960,912	\$2,540,942
Gross Profit:	\$1,877,825	\$1,694,455
Operating Expenses:		
-General & Administrative	\$3,008,811	**\$2,440,023
-Sales & Marketing	\$2,137,282	\$1,382,416
-Research & Development	\$1,188,868	\$952,724
(Reversal of Allowance) for Bad Debt	\$(1,299,609)	-
Net Loss Attributable to Shareholders:	\$(3,303,538)	\$(3,193,571)
Basic & Diluted (Loss) Per Common Share	\$(0.61)	\$(0.39)

<sup>\*</sup>Includes \$500,000 of PIFA-associated products shown as "Other Products" in the Form 10-Q

 $<sup>^{*\,*}</sup>$  Approximately \$243,000 of G&A expenses incurred in 9M 2017 were in respect of extraordinary legal expenses

# Balance sheet

no commercial debt



	Aso	As of	
	Dec 31, 2016	Sep 30, 2017	
Total Assets	\$5,085,107	\$5,528,333	
Cash & Marketable Securities	\$122,701	*\$145,311	
Total Liabilities	\$1,697,430	\$1,581,792	
Total Equity	\$3,387,677	\$3,946,541	

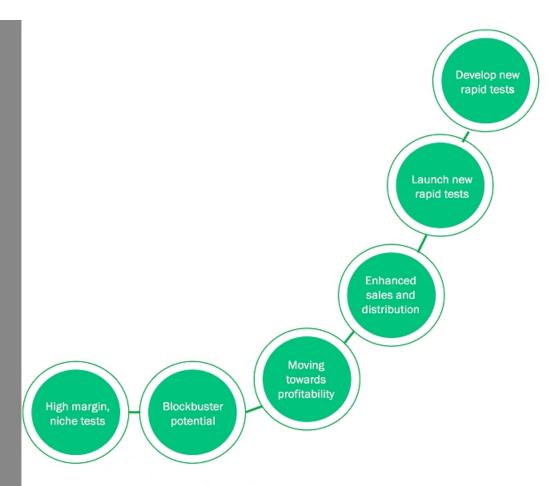
<sup>\*</sup>Cash & Marketable Securities boosted after quarter-end following receipt of \$680,748 in net proceeds from the conversion of warrants during  $Oct\ 2017$ 

# Company capitalization





Clear path to grow value





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