

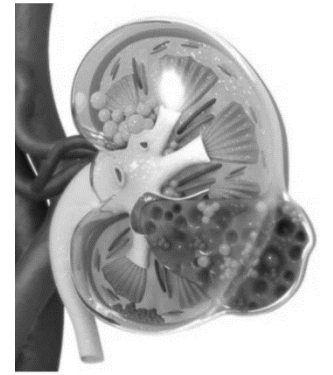


Real-Time Monitoring and Predictive Analytics to reduce Acute Kidney Injury



Sept 2024

Acute Kidney Injury – A \$9 Billion Problem¹



1. Chertow GM, et al., J Am Soc Nephrol 2005



- 15% of ALL hospital admissions...
 - 50% of ICU patients ...
 - up to 75% of Pediatric ICU patients...
- } develop AKI



20% Mortality rate in ICU with AKI



2x Length of Stay in ICU from AKI

Beginning 2025 CMS
will implement AKI as
an eCQM



Urine output is a sensitive and early marker for AKI!

Macedo E, et. al.: Oliguria is an early predictor of higher mortality in critically ill patients. Kidney Int 80:760–767, 2011

Ok...So let's monitor Urine Output

Manual Measurement¹:

- “Hourly” – average 18 minutes late
- 39% missing entries
- >17 ml/hr inaccuracy (>50% of AKI staging rate)
- Transcription errors

¹Minor et al, Scientific Reports, 2021



Automation: A “No Brainer”? ... (Not Quite!)



Weight Sensor

- Needs to be level and not moving
- Low resolution / Can't measure low flows
- Can't handle changing urine composition
- Inaccurate at high flows
- Takes up precious floor space



Ultrasonic Level Sensor

- Needs to be level and not moving
- Low resolution / Can't measure low flows
- Inaccurate at high flows



Thermal Flow Sensor

- Low resolution / Can't measure low flows
- Inaccurate at high flows



Unparalleled Accuracy - microliter resolution allows measurement of very low volumes, including Pediatrics



Continuous Real Time Measurement with Alerts – Earlier identification of AKI, connects to any EMR

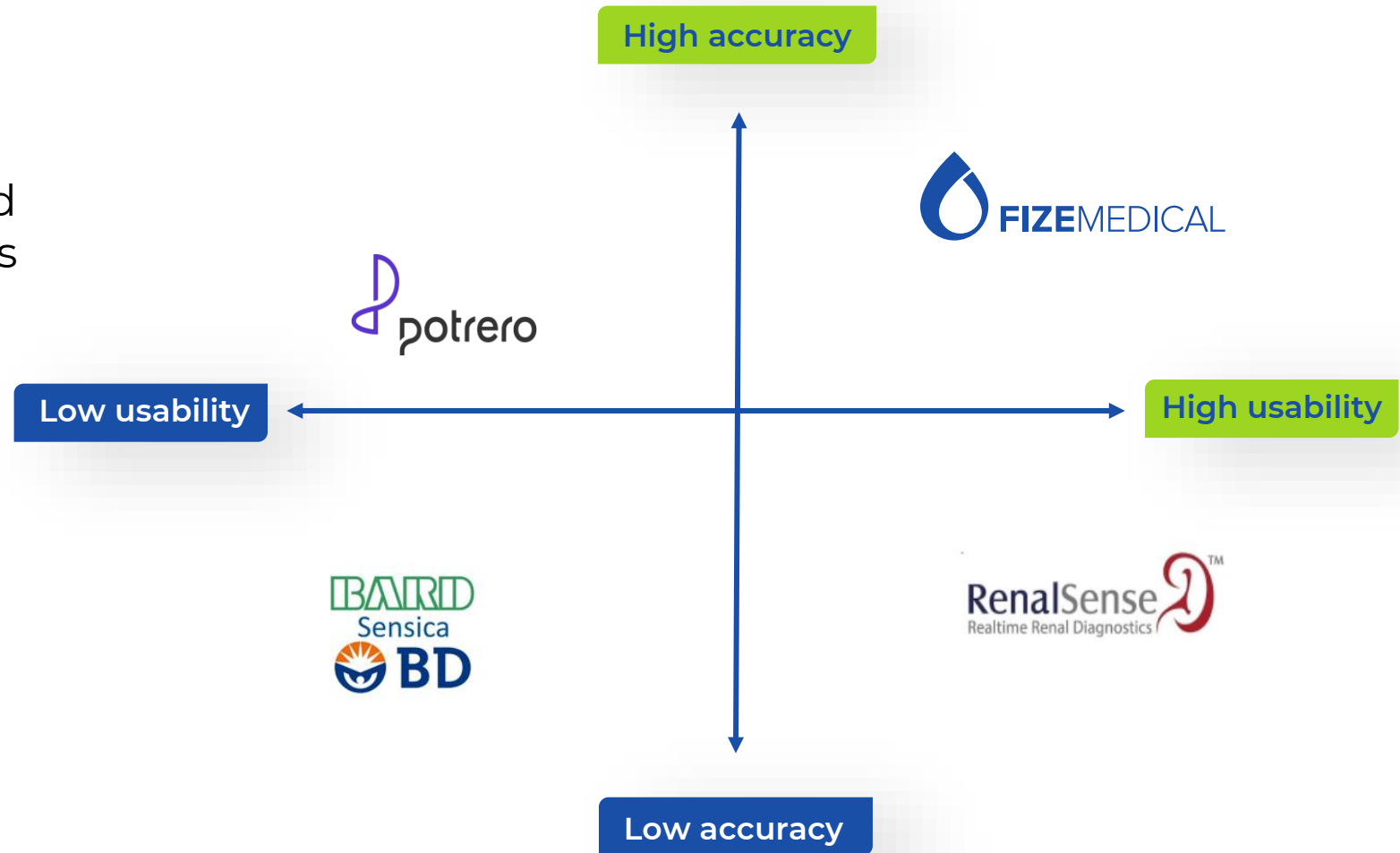


Maximum Usability – Mount anywhere, large screen, position independent, works in transport



Competitive Landscape

- ✓ FIZE kUO is the only system that is accurate at very low and high flows, including pediatrics
- ✓ Usability is Key – Monitors that interfere with workflow, take up precious room on the floor, or are sensitive to movement or positioning, not adopted by Nursing staff



Commercial Achievements



Fize kUO Cleared as Class II medical device.



US Commercial traction: Major children's hospital implemented + 5 pilots upcoming in premier hospital centers



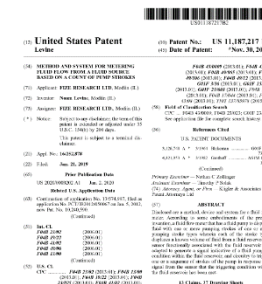
Innovation Contract Award from largest GPO in the USA



Sole winner of a supply contract with largest healthcare provider in Israel, 3 hospitals on board + 6 active pilots

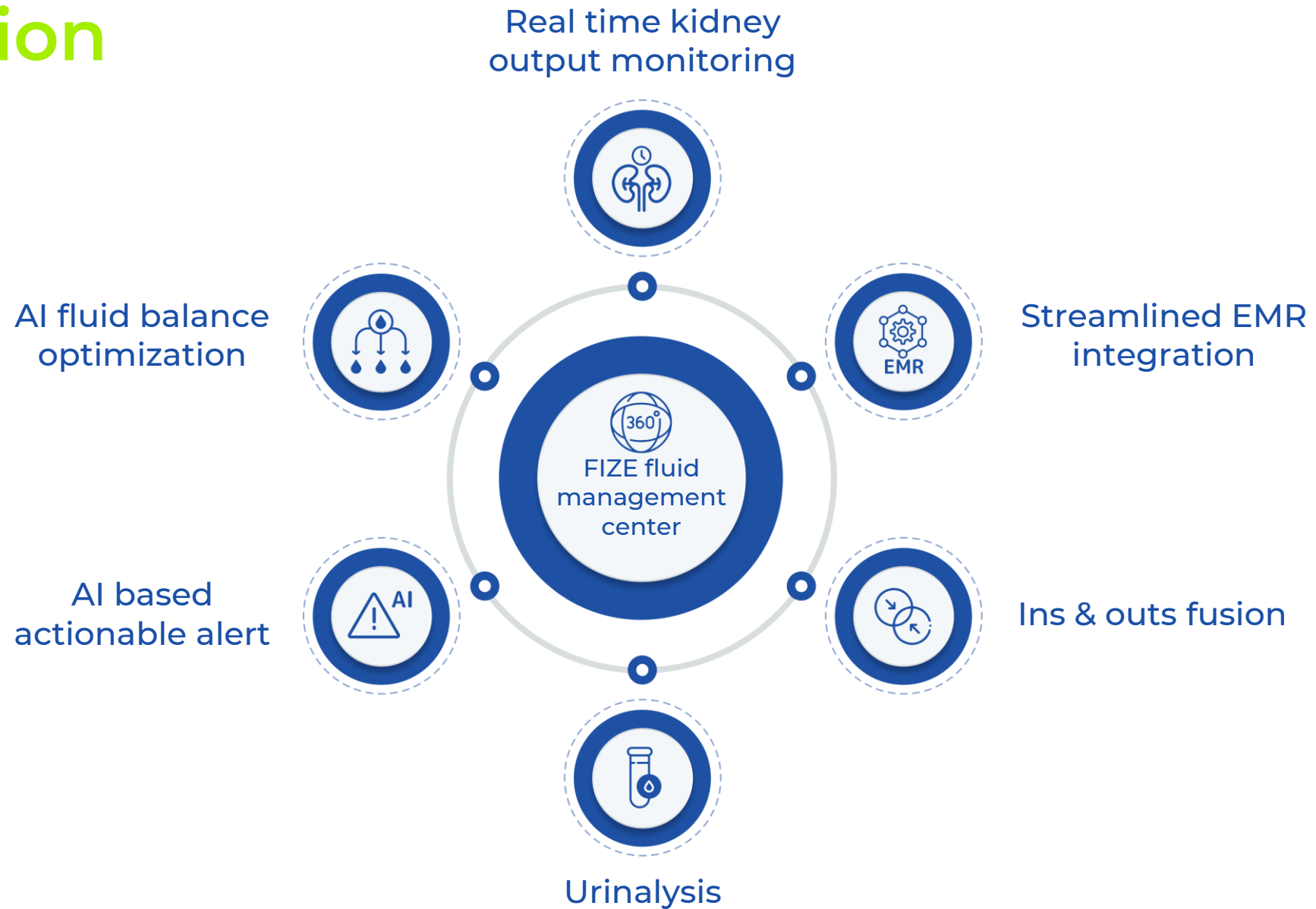


Innovation contract and participation in the Kiindo program from second largest GPO



Broad and robust IP portfolio including 3 families with granted patents, and 2 additional pending families

Our Vision



The Need **in ICU**

Managing the hemodynamic balance is one of the most critical and challenging tasks in the ICU



Transforming the Paradigm

AI Prediction capabilities

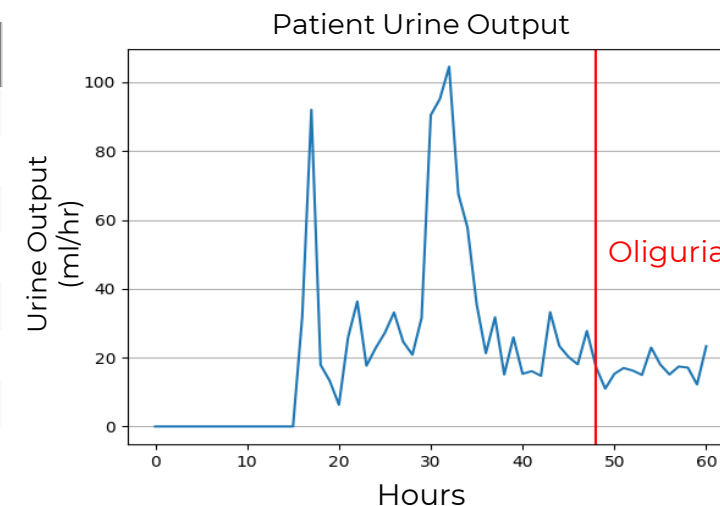
KDIGO Guideline
AKI Stage 1
Urine volume < 0.5 mL/kg/h
for **6-12 hours**



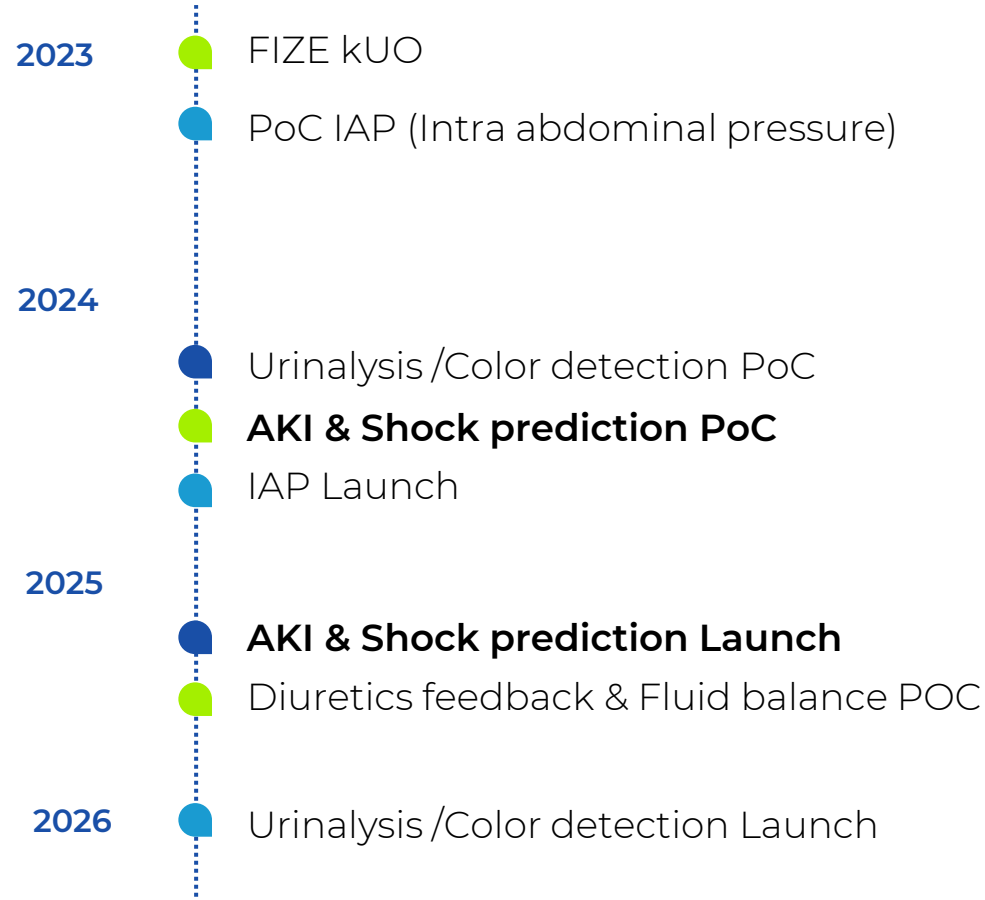
AI-based Alerts from Over 1000 Patients

- Data implies a dramatic change in protocols and guidelines
 - **Urine output is a strong indicator for deterioration by itself**
- Preliminary model
 - **Model is highly predictive**, even with initially low UO cases removed

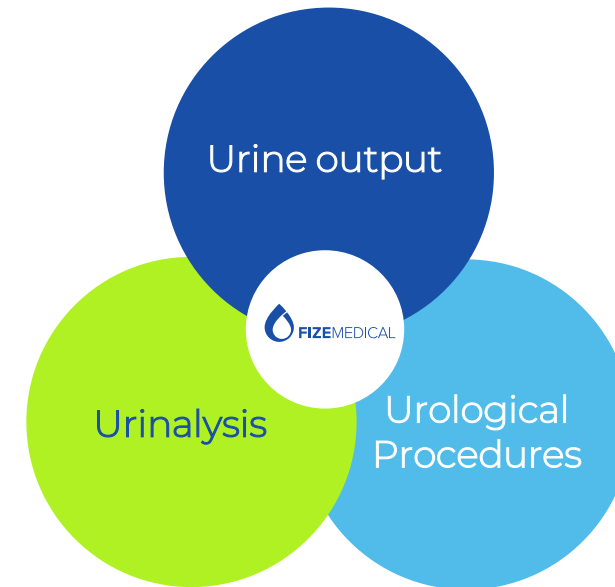
Time	Accuracy	AUC
-1 hr	92%	0.88
-2 hr	90%	0.85
-3 hr	88%	0.84
-4 hr	87%	0.79
-5 hr	85%	0.78
-6 hr	84%	0.78
-10 hr	77%	0.76
-24 hr	67%	0.58



AI-Driven Predictive Analytics



FIZE K UO®



Next Steps



- Accelerating US Sales and Marketing
- R&D
 - Real Time Intra-Abdominal Pressure
 - AI Driven AKI and Shock Prediction
 - Urinalysis
 - Treatment optimization tool
- Clinical
 - Validation of predictive tools in real-world setting
 - Treatment optimization tool validation
 - Post marketing studies

Series A1/2/3
\$15M
Raised to date

Series A4
Raising
\$15-20M

(+\$12M already committed)

FIZE – An Experienced and Successful Team



**Dror Zerem,
CEO**

Over 20 years of executive management experience, building operations in the U.S, Europe and Israel.
Exits: Ophir optronics (acquired by Newport), VisionMap (acquired by Rafael)



**Noam Levine,
CTO & Founder**

Over 30 years of experience in R&D and executive-level positions for high-tech companies. Exits: Redux (acquired by BATM)



**Eran Blankenstein
CFO**

Over 15 years of experience in significant financial positions multinational private and public companies, such as Teva, 888.com, Ophir Optronics and Optimal Plus



**Sima Faifman Kuchersky
CCO**

Over 10 years of managerial experience in business and marketing positions for medical device companies.



**Yuval Kolodny,
VP R&D**

A multidisciplinary background encompassing electrical and computer engineering, applied physics PhD, biomedical entrepreneurship, and technology breakthroughs



**Hani Rauch,
Director of QA&RA**

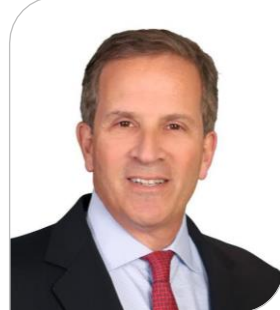
Over 15 years of experience in regulatory affairs across various markets, medical device development and manufacturing

Medical Advisory Board



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Director of the Men's Wellness Program, Mount Sinai Health System and Chair of the American Urological Association Office of Research



Neal Shore, MD, FACS

Medical Director, Carolina Urologic Research Center and Chief Medical Officer, Urology and Surgical Oncology, for GenesisCare, US.



Professor Vivek K. Moitra, MD, MHA, FCCS

Allen Hyman Professor of Critical Care Anesthesiology at Columbia University Medical Center



Jonathan Halevy, MD

Professor Halevy is the Co-Director-general of Shaarei Zedek Hospital and Chairman of the Israel Center for Organ Transplantation. He has undergone advanced training at Yale Medical School and is widely published in prestigious medical journals.



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Professor Phillip D Levin, MD

Director, General Intensive Care Unit, Shaare Zedek Medical Center



Thank you

www.fizemedical.com

