Bringing the Lab to the Patient

EFA

MED-TECH FOR EVERYBODY

CE ANVISA

tmura
The Israeli Public Service Venture Fund
Share a Little Upside with Society
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The Problem

Hematology tests depend on traditional laboratory infrastructure, which involves specialized, heavy, and expensive equipment, trained personnel, and controlled environments. This setup can be slow, costly, and less accessible, especially in remote, at-home or resource-limited areas.

Late treatment

Prolonged suffering

Higher healthcare costs

Our Technology: RevDx™

Portable System for Essential Hematologic tests at the Point-of-Care

1 → 2 → 3

Micro-fluidics

Auto Microscopy

Advanced AI Algorithm

Portability, Ease of use, Cost

Clinical use-cases for first application: Complete Blood Count with 5D

Infection

Differentiating suspected bacterial from viral infection

Avoiding antibiotic overuse and antimicrobial resistance (AMR)

Bleeding

Early identification of blood clotting disorders (Thrombocytopenia)

Pre-op routine bloodwork

Anemia

Diagnosing anemia – A global health problem

Affecting 9-16% of young women in the USA and up to 42% of children worldwide

Blood Dyscrasia

Oncology, early detection of drug induced leukopenia Prophylactic monitoring of the WBC count and differential.

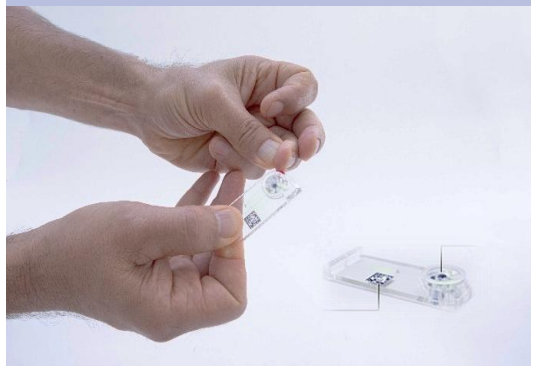
Because of its wide-reaching potential for disease diagnosis, the complete blood count (CBC) and complete blood count with differential (CBC w/diff) tests are, respectively, ***the FIRST and SECOND most performed tests in the clinical hematology laboratory****.[8]*

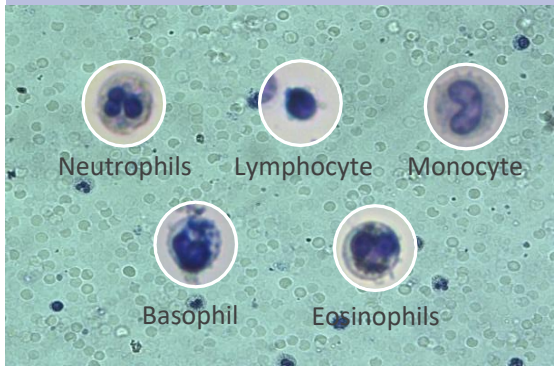

RevDx
Join us!
SUSTAINABLE DEVELOPMENT GOALS
EFA
Where you live should not determine whether you live

RevDx™ — How it works?

Test & learning platform Leveraging Advanced Proprietary Technologies

Microfluidics	+	Microscopy	+	Advanced AI	=	Lab Quality Tests
Single Step proprietary test chip		**Automatic, portable** proprietary Scanner		**Hybrid & Deep learning** proprietary algorithms		**On device results** On the spot





Result in minutes | **Very easy to use** | **Single unifying Platform** | **Multiple Applications**

Test. Treat. Track.

Our RevDx™ Platform

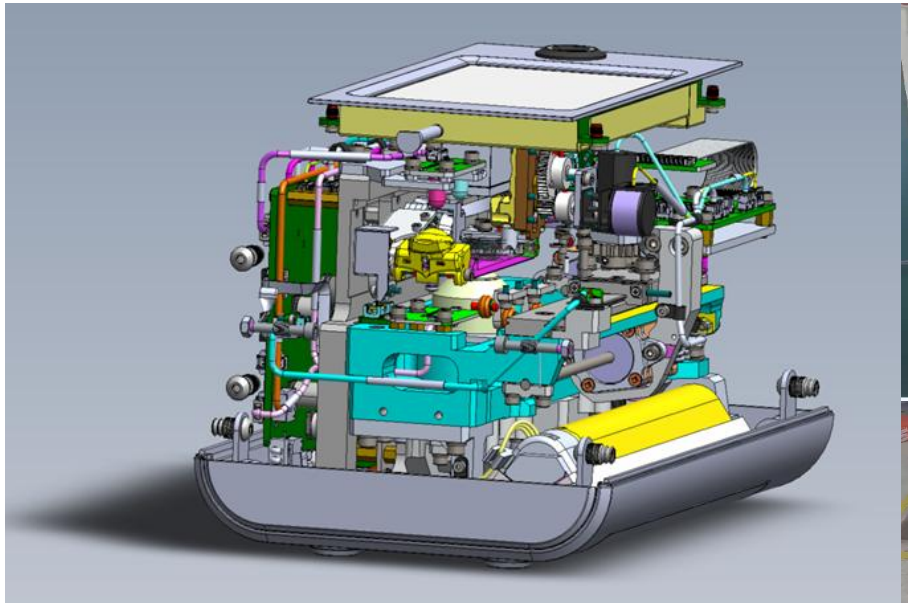
The Only Fully Autonomous and Portable Platform for Hematology Diagnostic Tests

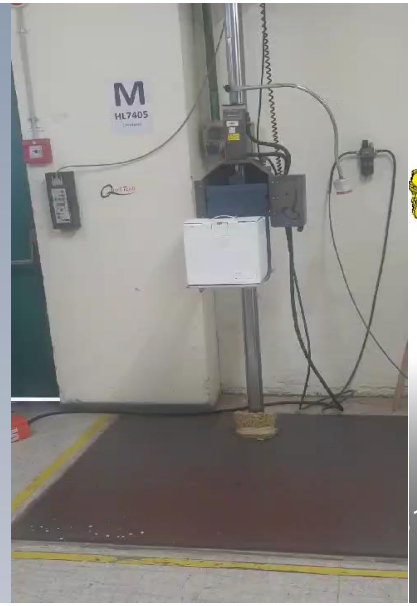
- ✓ Portable
- ✓ Battery operated
- ✓ Fully Automated
- ✓ No need for connectivity
- ✓ Cutting-edge technologies

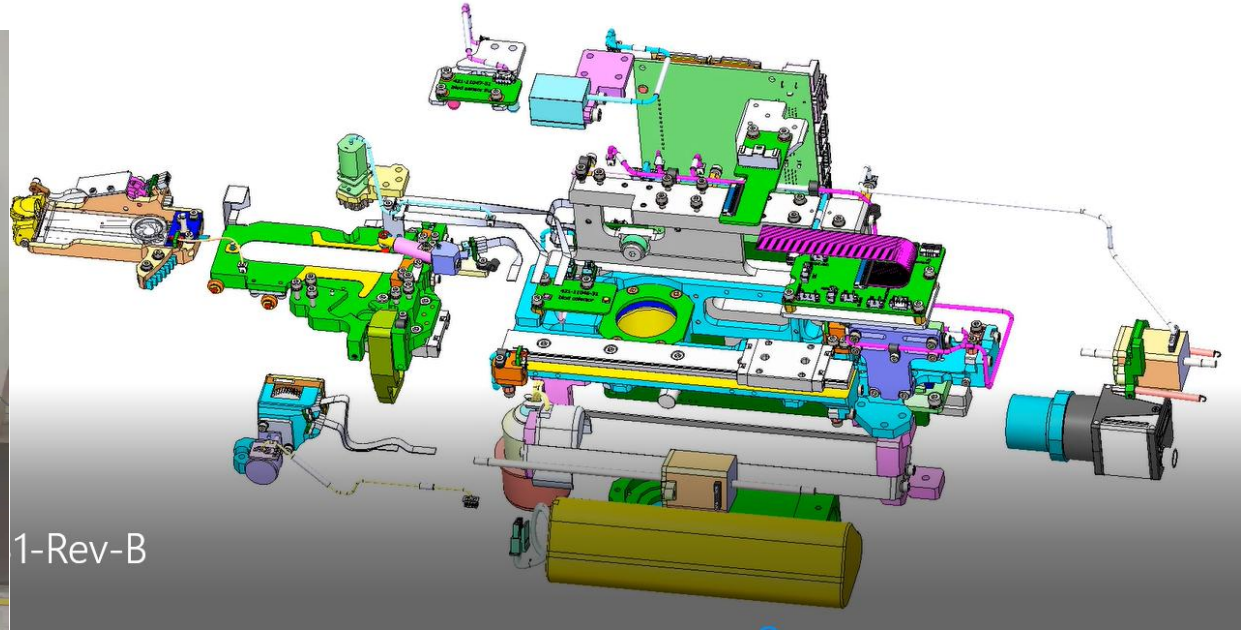
RevDx™ How it is assembled

Military technology to medical device

Automated robotic microscopy process in a fully portable device

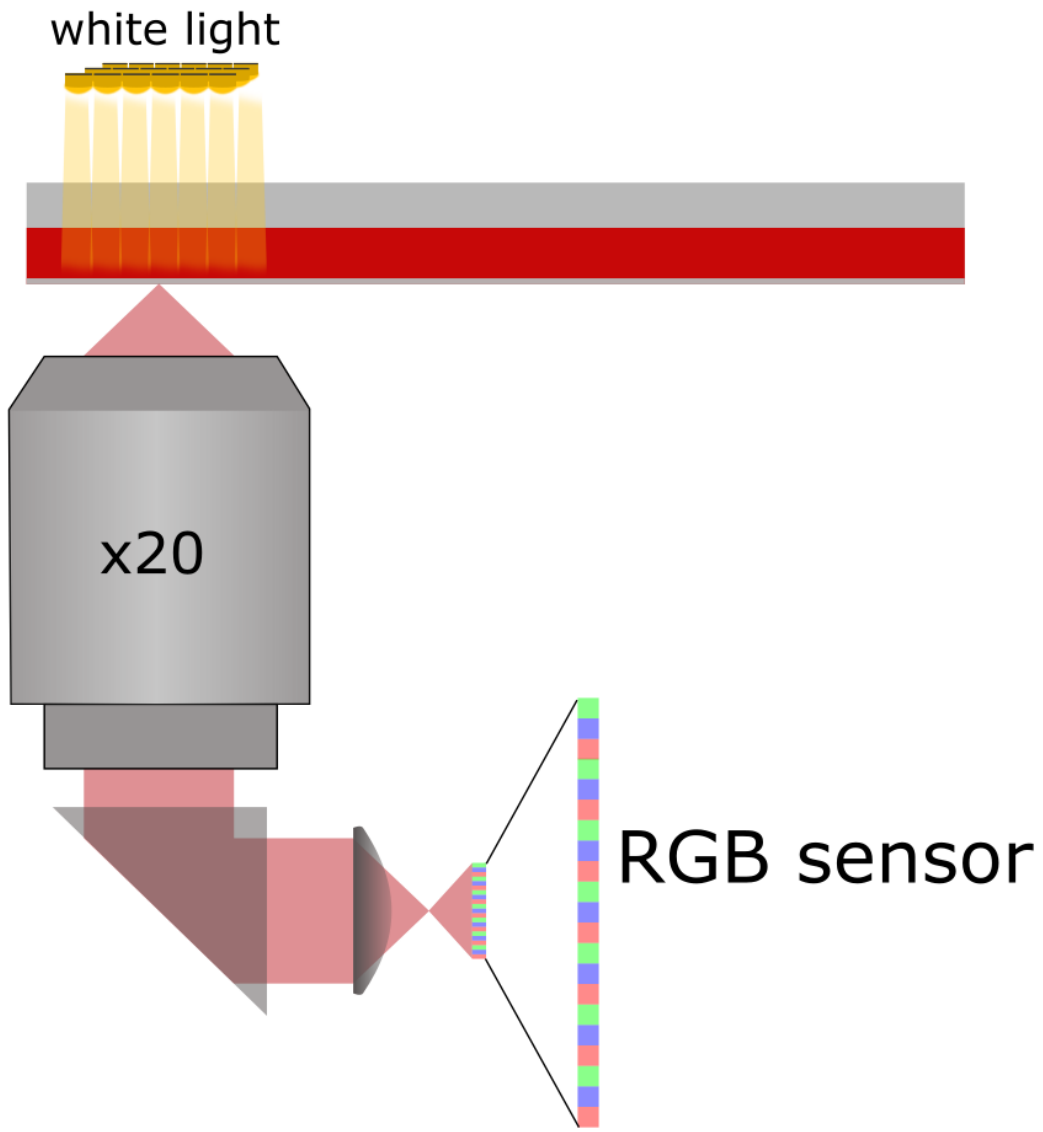






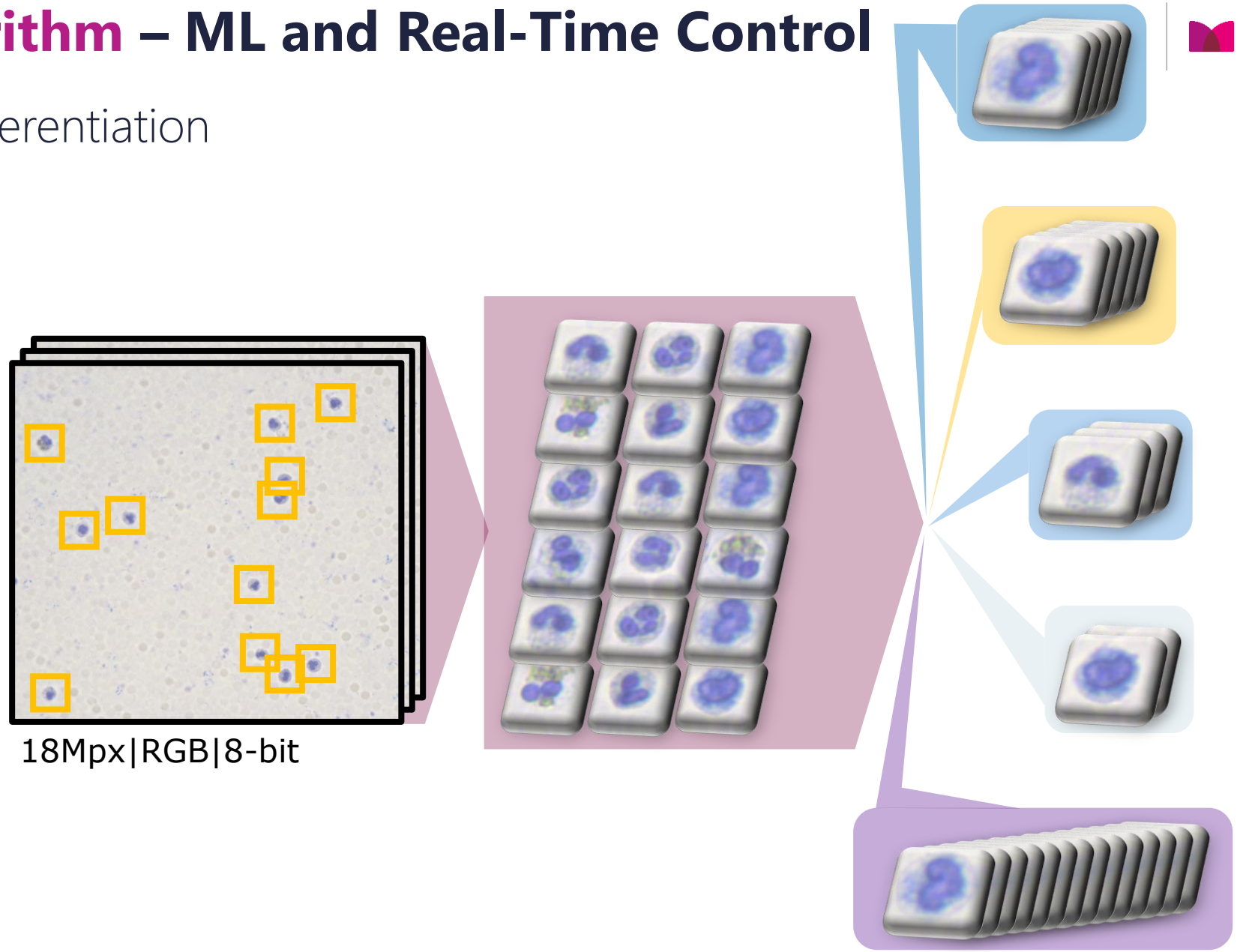
Test. Treat. Track.

RevDx™ Platform – Working Principles



RevDx™ Algorithm – ML and Real-Time Control

DCNN – Cells differentiation



Production lines

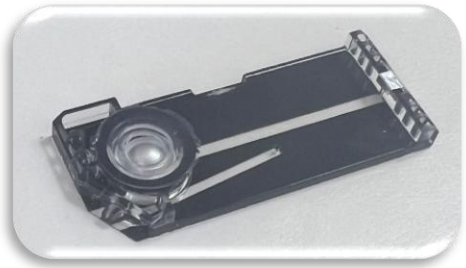
RevDx device – Production and assembly line




RevDx Test Chip– Production and automation line







Design Practices and Dilemmas

- System optimization Approach
- What to do In-House/Out-Sourcing
- Choosing your long-term partners
- Physician's advisory role in early stage
- Early Users and business partners
- Early commercialization as a push and a risk - Brazil as an example

Our Partners – It is all about the People

Design and Engineering

1. IotChefs – Electronics board design and real-time SW
2. FIBO &Galgash – Optics, Mechanics
3. Intovision – Product Design
4. BioT Medical
5. HAMADA – QA&RA
6. Ouli – Advanced Engineering https://www.youtube.com/watch?v=rWRhb8qi9ZU
7. Mondeo Studio – UI https://www.mondeostudio.com/projects/revdx
8. Occasional Experts

Our Partners – It is all about the People

Manufacturers

1. **DigitalCut** – RevDx Test Chip manufacturing line
2. **Medimor** – RevDx Device assembly line
3. **KAST Silicon** – Silicon Molding
4. **PlastArt Medical** - Automated Machines for mass production
5. **ShahakTec** – Plastic Molding

Main Providers

1. Olympus
2. IDS (sensors)
3. NVIDEA

Lessons learned

- **Push for early user's experience => Halt a ‘non-product’ concept earlier**
- **Value the insights of experienced providers and manufacturing partners.**
- **Start early with manufacturing process =>DFM**
- **Bring in-house experts earlier => move from outsourcing to inhouse**
- **Push to market by balancing critical factors: Expenses, Focus, and MVP.**