

GATTACo INC.

Rapid Plasma at Your Fingertips™

Michael McNeely, Ph.D., Pres/CEO

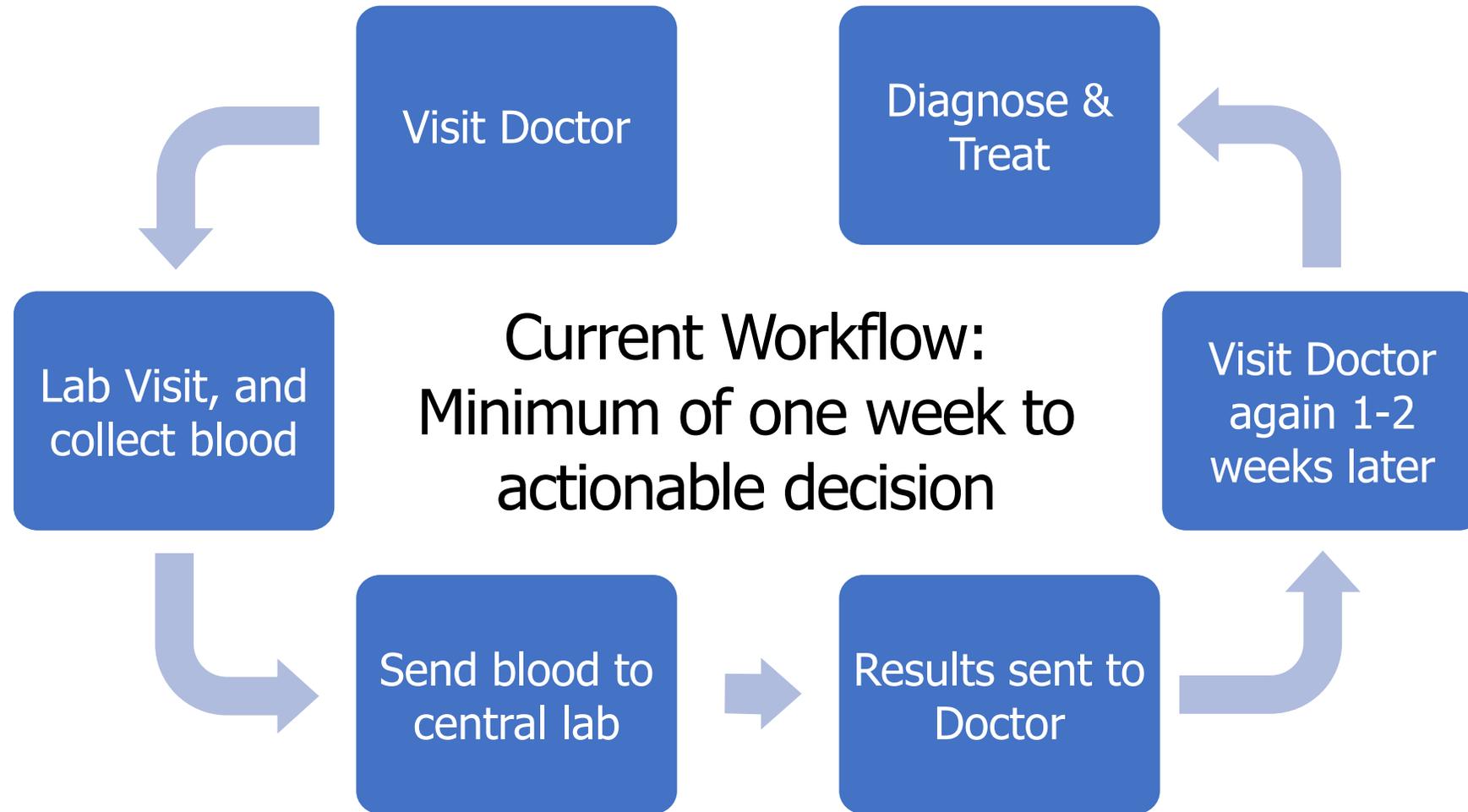
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Status Quo: Delays in Actionable Decision Making

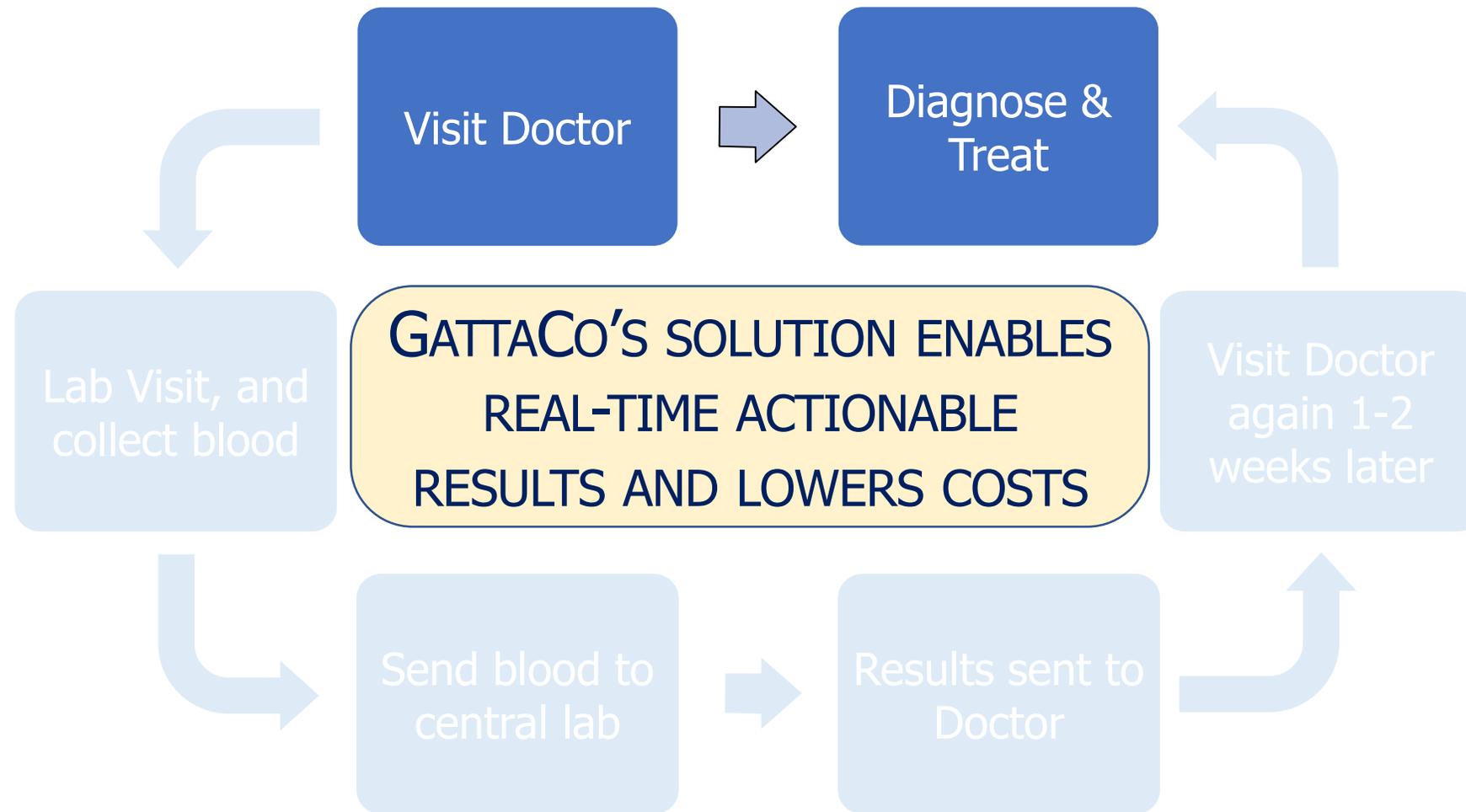


Lab Processing is a Major Bottleneck in Diagnostic Testing

- 95% of biological samples require purification
- 90% of blood tests require plasma/serum
- Sample prep is time-consuming, capital equipment intensive and requires skilled labor



What Doctors and Patients Want...



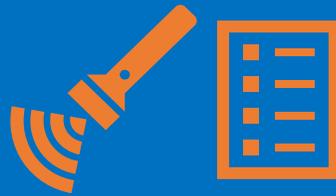
Diagnostic Testing Workflow

GATTACo & CAP-RESET
TECHNOLOGY

Sample
Collection and
Processing



Analyte
Detection, and
Results
Generation

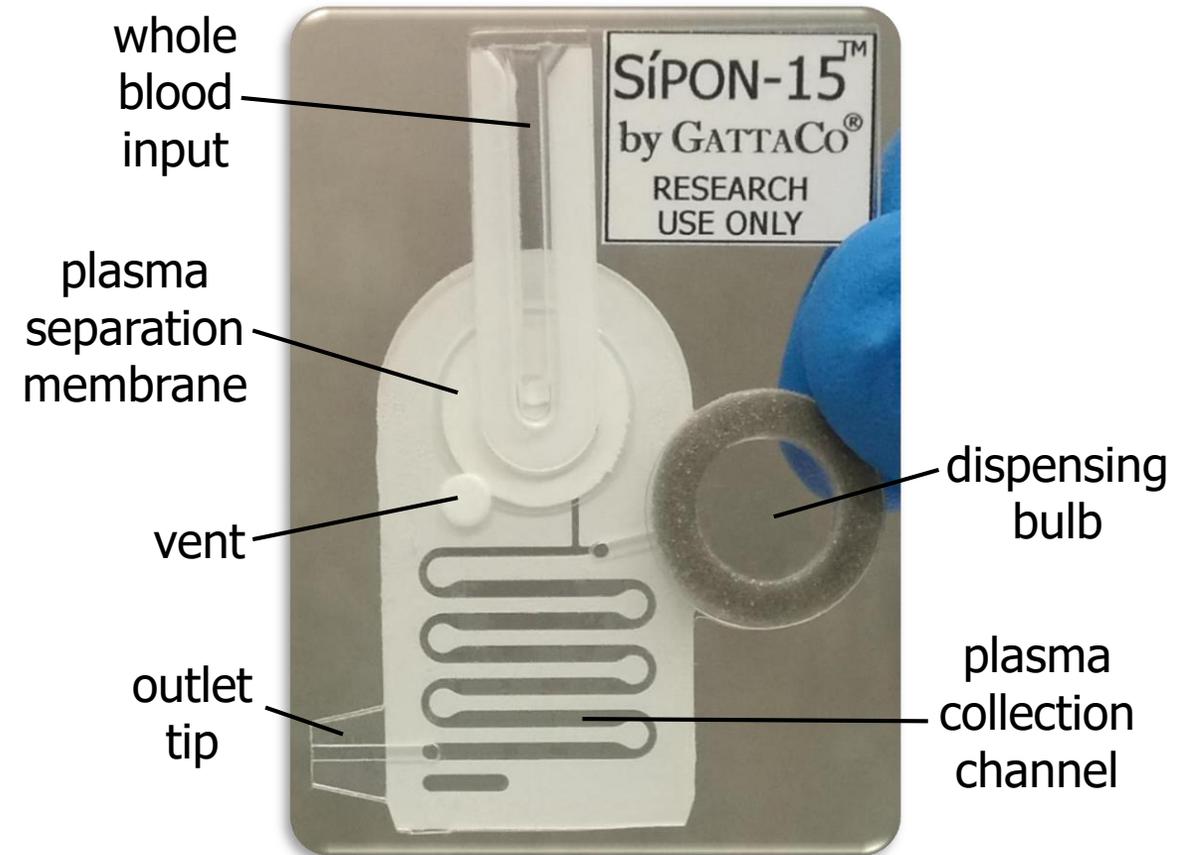


Data Analysis,
AI Processing,
EHR Reporting

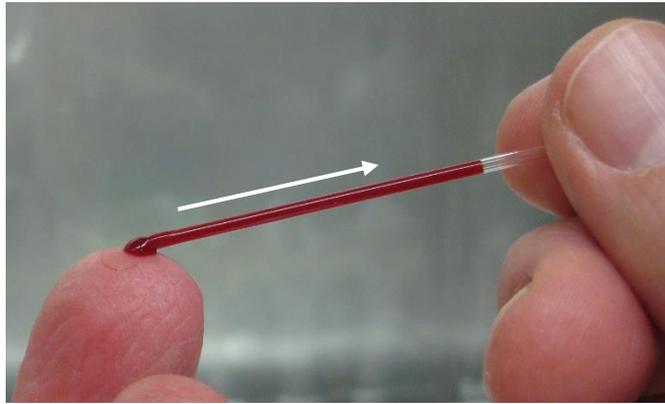


The Solution: Cap-Reset™ Technology & The Sipon™

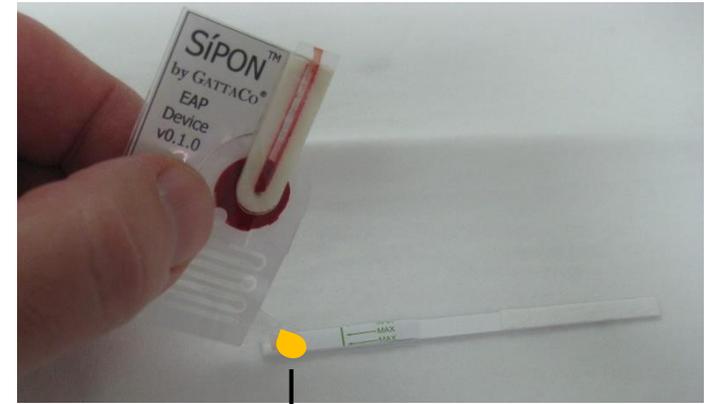
- 'No Moving Parts' centrifuge replacement tool, the Sipon
- Microliter amounts of blood separation
- Immediate diagnostic testing



How the SiPON Works

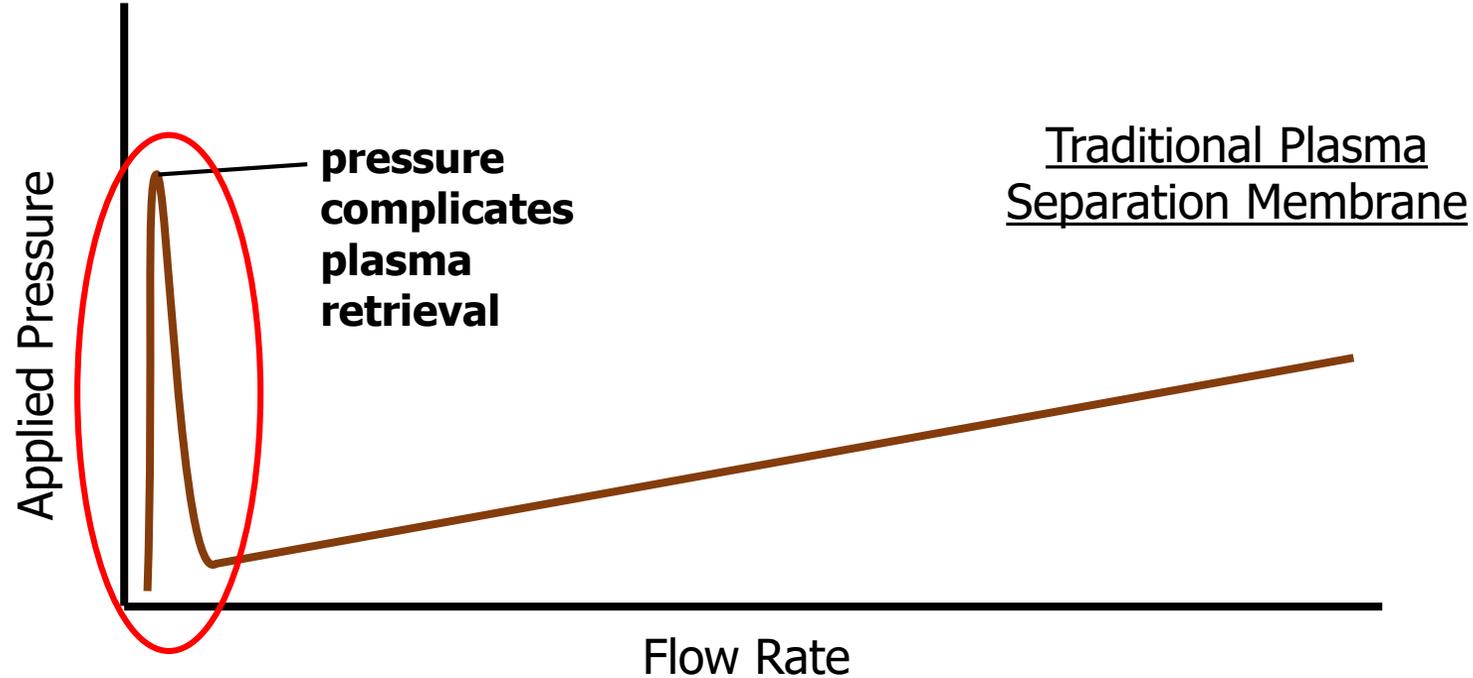


75µL whole blood



15µL separated plasma

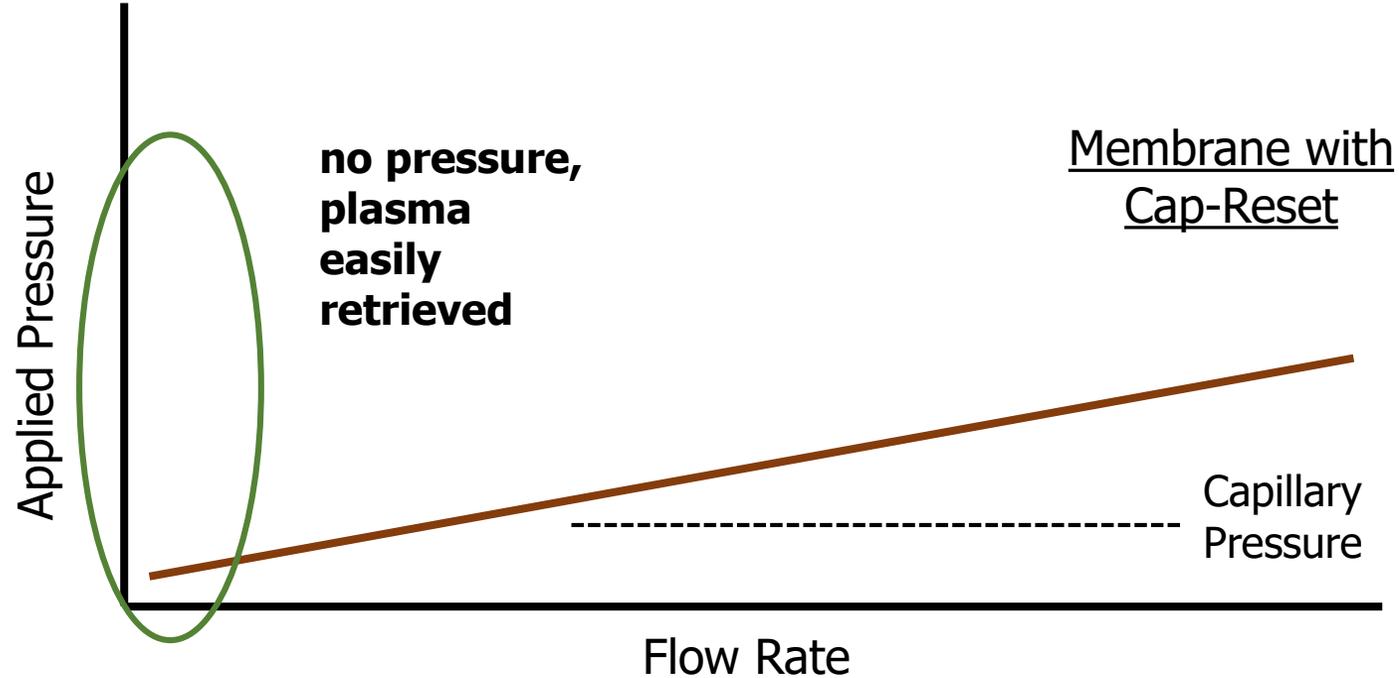
The Problems with Traditional Membrane Separation



The Problems-

- Mechanically complex
- Requires manual processing
- Poor quality sample (hemolysis)

Cap-Reset Technology Breakthrough



Cap-Reset Technology eliminates initial high pressure constraint on filters/membranes:

- Easier & better separation and collection of plasma and cells
- Affordable, cost-effective, automatic and versatile sample prep solutions

Centrepon – SÍPON Development

1st Generation

- Vertical Format
- Detachable Pipette
- Glass Capillary Tubes
- Centrepon –
Centrifuge
Replacement Tool for
use at the **Point of**
Need



2nd Generation

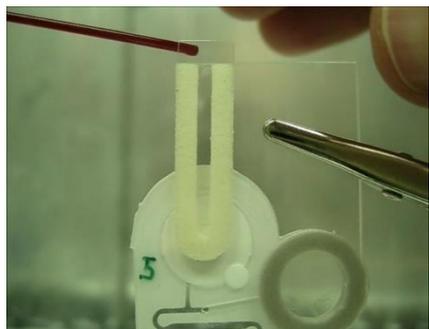
- Planar Format
- Direct Dispense
- New Super-Hydrophilic Plastics Replace Glass
- Fully Laminated, Inexpensive
- SÍPON – Say *YES* to Point of Need Testing

Initial Specifications

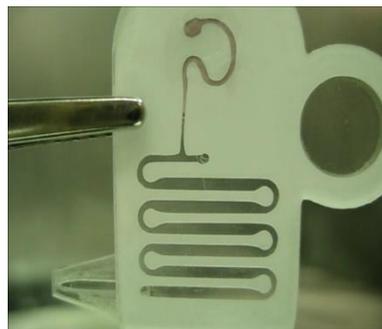


15 μ L SÍPON

- 75 μ L Whole Blood w/ anti-coagulant input
- 15 μ L \pm 5% Plasma Output
- Independent of hematocrit
- < 5 min. to completion (< 4 min. typical.)



Links to video on YouTube website:
<https://youtu.be/Emt4sY7ab9Y> or
http://v.youku.com/v_show/id_XMjc4NTc3MTg2OA==.html



Links to video on YouTube website:
<https://youtu.be/0BdviQjKY0o> or
http://v.youku.com/v_show/id_XMjc4NTc3MzAzNg==.html



50 μ L SÍPON

- 250 μ L Whole Blood w/ anti-coagulant input
- 50 μ L \pm 5% Plasma Output
- Independent of hematocrit
- < 10 min. to completion (< 7 min. typical.)



https://youtu.be/hGaR_iVY64Y
or
http://v.youku.com/v_show/id_XMzE1OTAxOTgyMA==.html

Validation Testing

Ongoing validation testing* of the SÍPON is yielding very positive results to date, including...

- No to Low Hemolysis and No Cells seen in collected plasma
- Favorable comparison to centrifugation for blood chemistry testing
- Positive confirmation of improved hormonal testing results
- Confirmation of high efficiency passage of plasma proteins and cfDNA
- Dispensed volume repeatability +/- 5%

* validation testing performed by GattaCo partners, Archimej Technology and Sandhill Crane Diagnostics + others

Initial Specifications & Validation Testing, cont'd

- Improved design of the 15 μ L Sípon currently being manufactured by ISO 13485 certified partner, with final assembly done in-house
- Available in November 2018 for validation testing by potential collaboration partners
- Anticipated RUO sales launch 1Q19



SÍPON Application Areas

- Sample Preparation Tool to Replace Centrifugation
 - Quantitative Assay
 - High Sensitivity Qualitative, e.g. Ultra-Portable ELISA / MDx Platform
 - Resource Limited Settings, In-Field Deployable Dx Testing
 - Ideal for Quantitative Lateral Flow
- Technology Validation Tool
 - Preliminary Step to an Integrated Co-Development Project
 - CPR Technology can lead to a Low / No Pressure System, simplifying both the disposable and support equipment
 - 4:1 to 5:1 whole blood to plasma volume ratios, independent of hematocrit
- Current and pipeline products designed for 5 μ L to 2mL plasma volumes



Michael McNeely, Ph.D.
President/CEO

20+ years experience in Technology
and Business Management

Ph.D. in Bioengineering from the
University of Utah



Mahmoud Zubaidi
Chief Science Officer

14+ Years experience in Technology
Innovation at Millipore Sigma

M.S. in Microbiology from the
University of Memphis