

Home Potassium Monitoring Pitch Deck EC-Horizon





Chronic diseases - increasing numbers

Electrolyte monitoring to save lives



Chronic Kidney Disease (CKD)
840M affected globally



Diabetes (DM)
540M affected globally



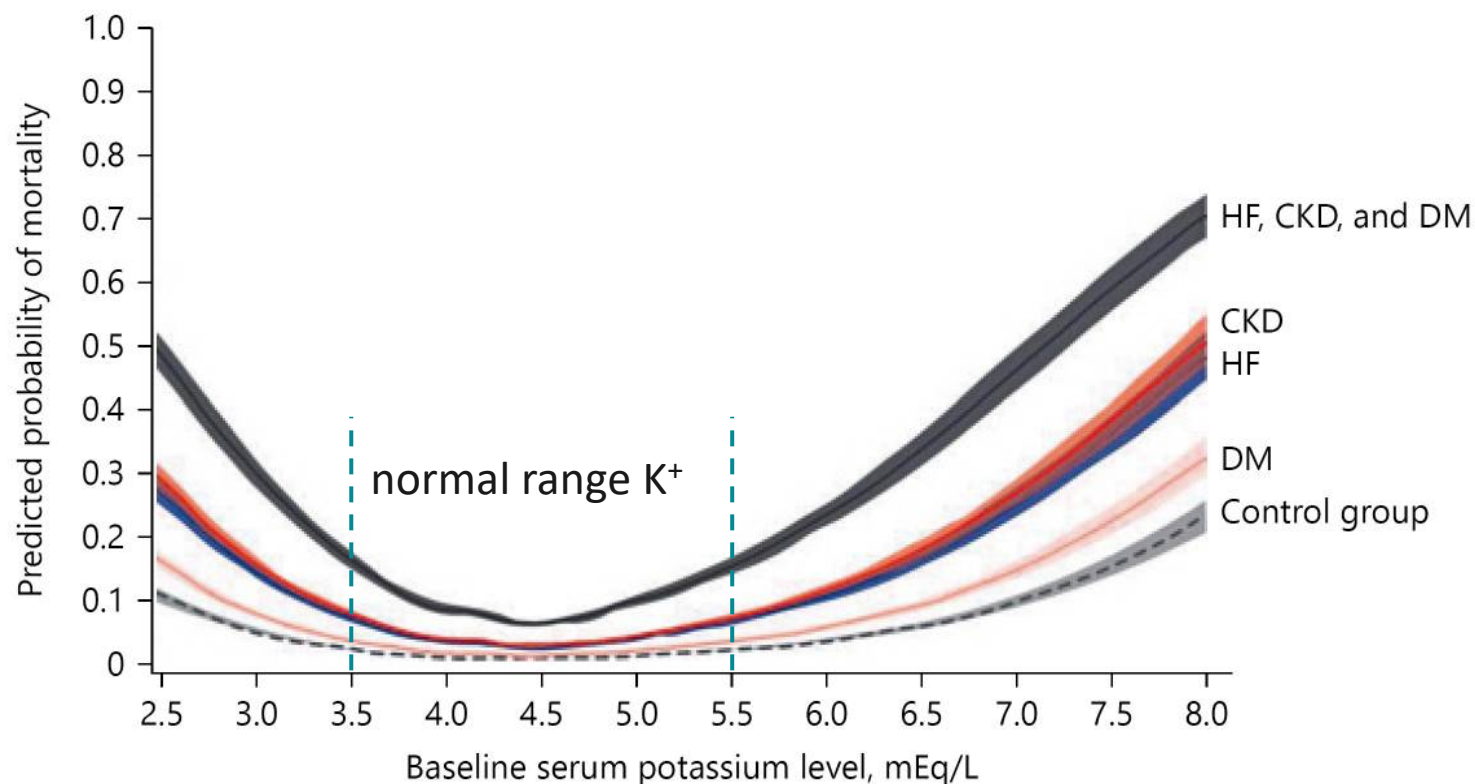
Heart Failure (HF)
68M affected globally



300M patients with potassium imbalances are at risk of arrhythmia and cardiac arrest!



Potassium imbalances result in life-threatening situations



Mortality risk progressively increased with K^+ imbalances and was differentially greater in those with HF, CKD, or DM

Based on: Allan J. Collins et al. Am J Nephrol. 2017; 46(3)



Standard of care today

venous blood analysis



Physician visit

Venous blood draw



Lab analysis





Our Solution

An easy-to-use self-testing device for home use



Monitor potassium **by simple means, routinely, self-reliant** and **at home**

Capillary blood

minimally invasive measurement

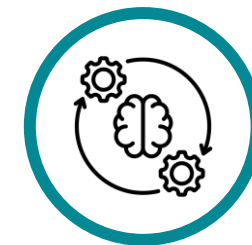
Connected to **digital health** and **telemedicine** platforms





Transforming patient pathways

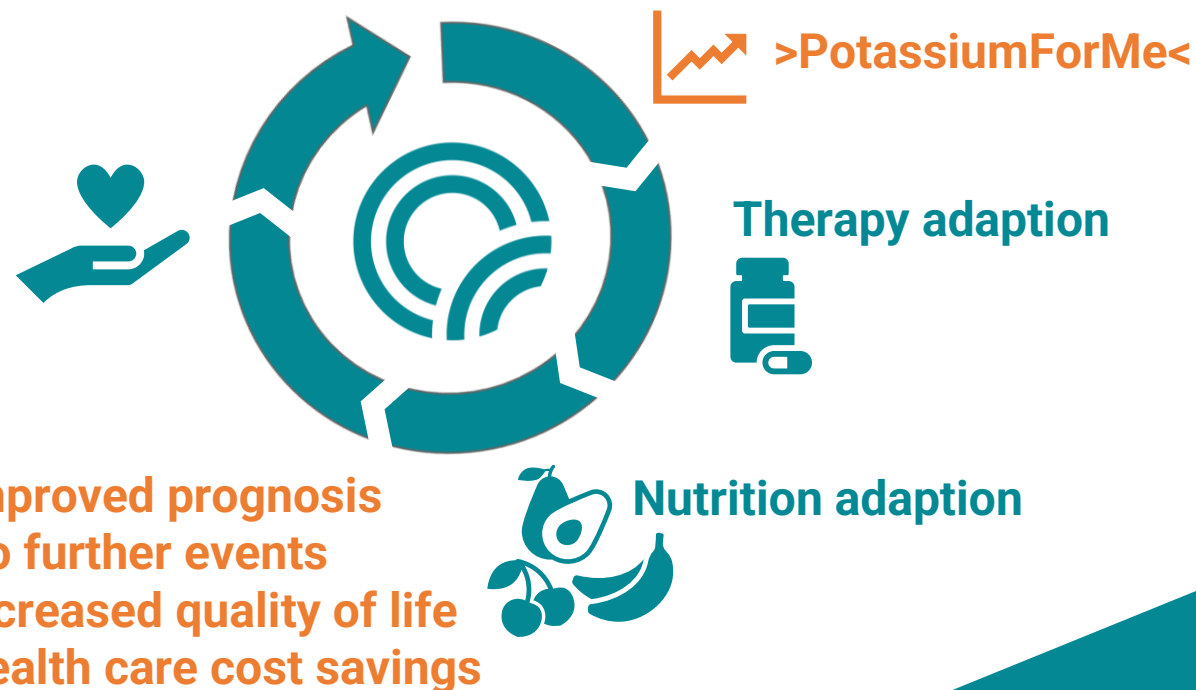
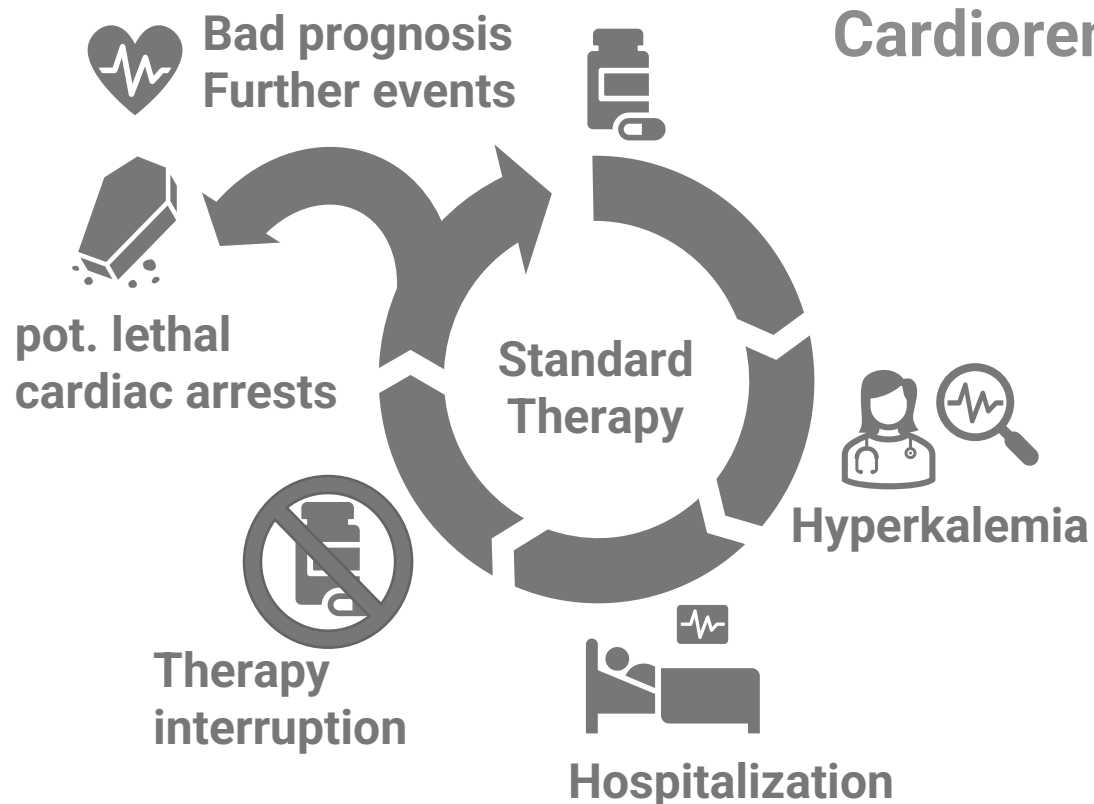
Therapy adaption by potassium home monitoring



Heart failure or CKD



Cardiorenal Therapy





The Magic

high accuracy, calibration free measurement

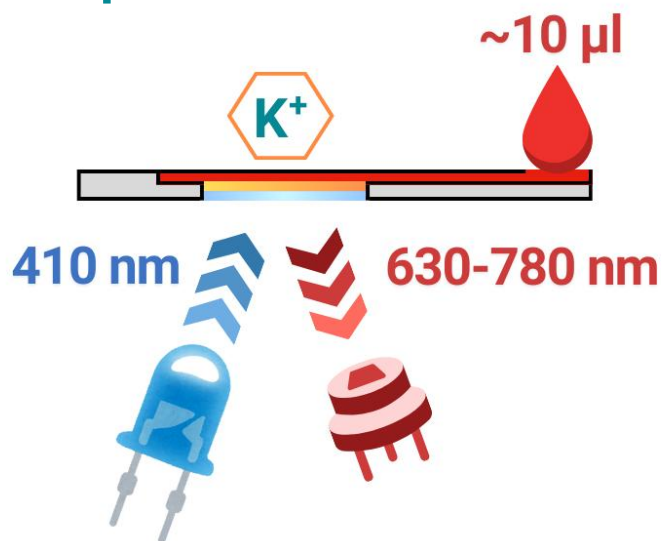


Prototypes available



Industrialization

Optical measurement



IP protected

AT Patent granted
US, EP, CA, CN, IN
applications filed

Further patents in
preparation




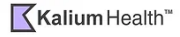




Technology Platform: pH, Na⁺, Gluc, Lac, O₂, CO₂, etc.



Competitive Landscape

devices in development, none on the market yet!



Feature		Optical sensor cartridge 	Electrochem. sensors   	Urine test strips 	Wearables sweat, ISF  	Standard today Blood gas analyser / Lab
Home testing/ capillary blood	✓	✓	✓	✓	✓	X
Lab quality results	✓	✓	✓	X	X	✓
Measurement time < 1min	✓	✓	X	✓	✓	X
Self-referenced/ calibration free	✓	X	X	X	X	✓
Cost efficient consumable	✓	X	X	✓	X	X

The **technological** challenge is our **advantage**!



1st Clinical Trial in progress

Medical University Graz in cooperation with elyte



Three subject groups

- Nephrology (hemodialysis) patients
- Cardiology patients
- Healthy individuals

Primary study endpoint

- comparison of capillary blood and venous blood potassium
- optimization of sampling protocol

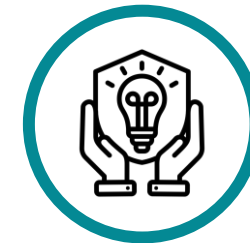
Exploratory study endpoint

- evaluate novel optical K⁺ assay with residual samples
- first usability evaluation of the K⁺ assay



IP –protection

optical measurement, hemolysis detection



Patent protection

AT patent for elyte **optical measurement** technology **granted**

US, EP, CA, CN, IN applications filed

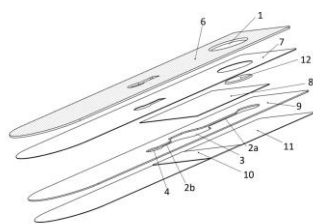
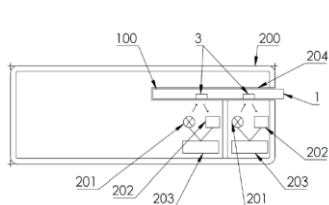


Fig. 4

Preemptive rights of granted patent family for **haemolysis detection** secured

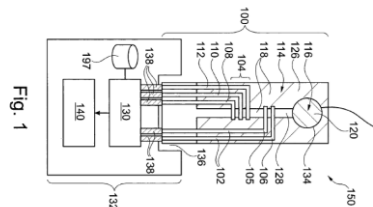
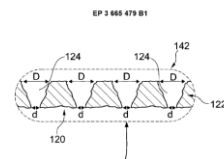


Fig. 1

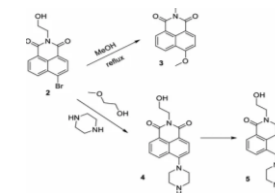


Further applications in preparation

Trade secrets & Know-How

detailed **synthesis procedures** and composition of **sensor materials & formulations**

process know-how
for reliable & consistent
sensor manufacturing



Electronics, optics & algorithms

Established partnership and
verified miniaturized optical module



based on **decades of experience**
of the **elyte team** in **optical sensing** –
extremely difficult to copy





The elyte team

builds upon >15 years of pre-development



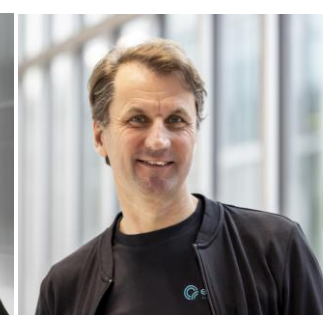
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Strong & active network of long-term collaboration partners & advisors



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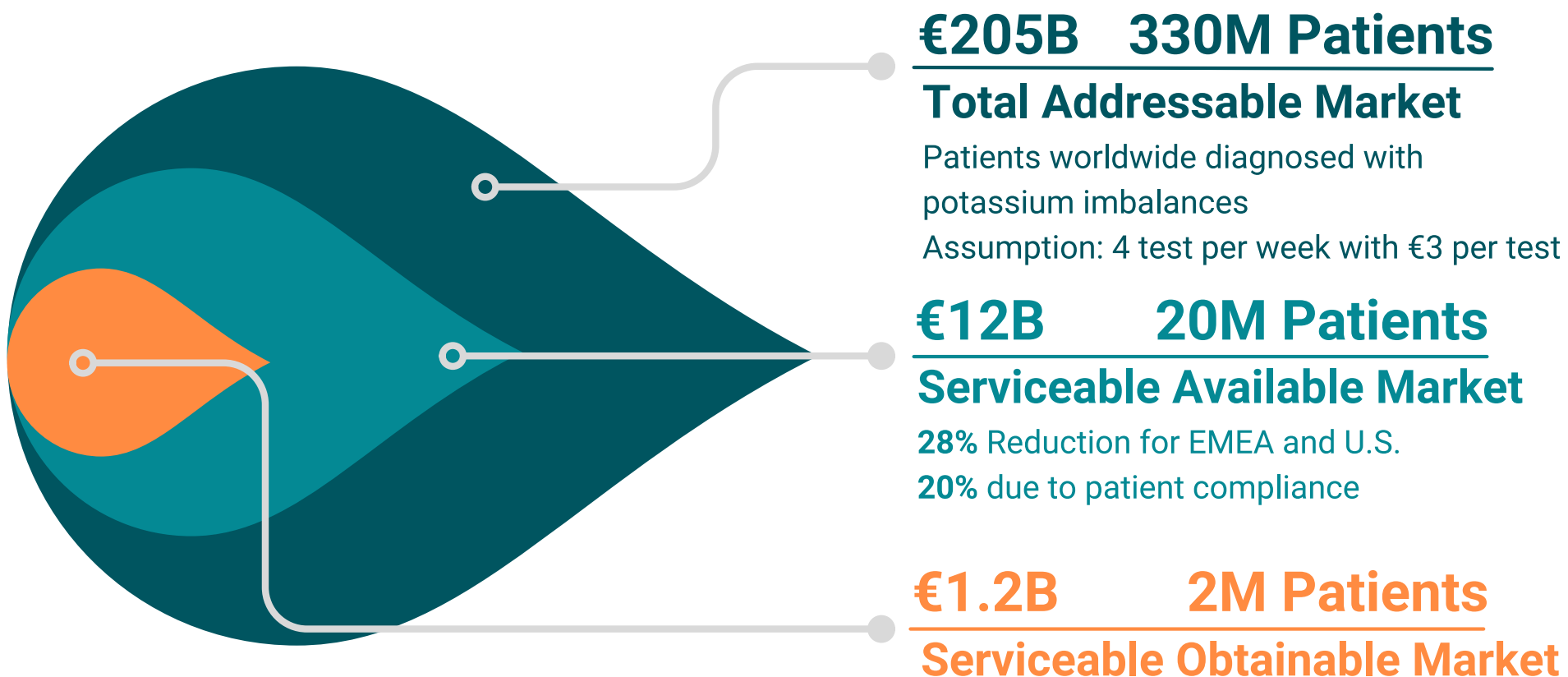
CEO TelBioMed





The Market

recurring sales of disposables





Be part of our mission!

empower patients to self-monitor their blood potassium at home

