

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



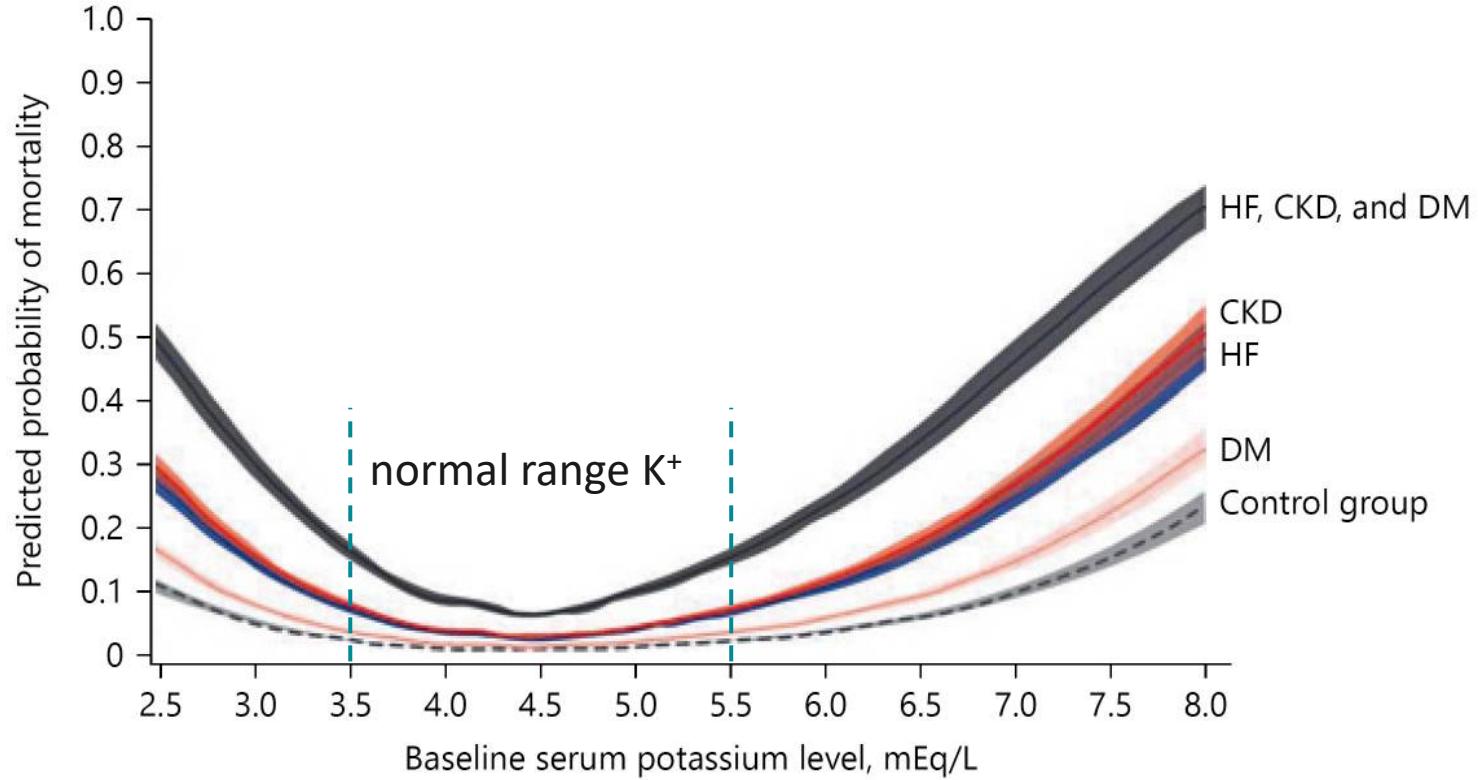
Heart Failure (HF)
68M affected globally



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

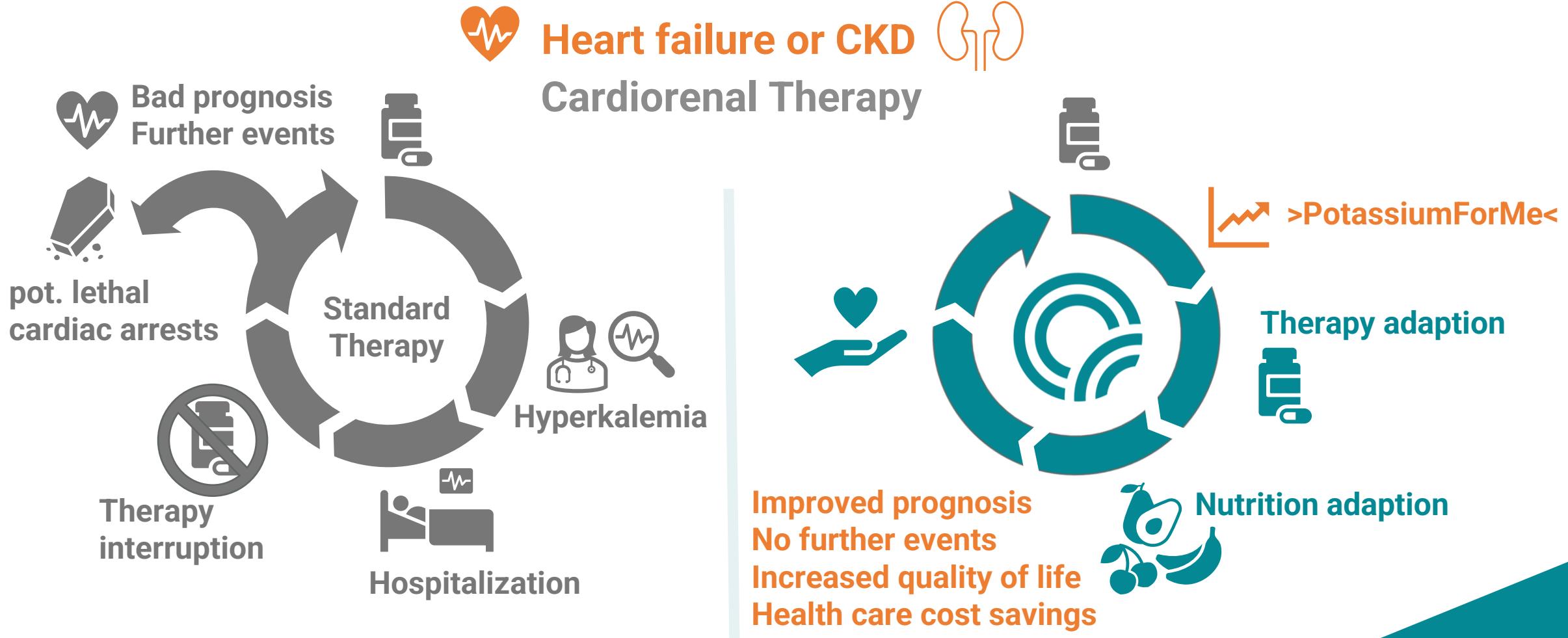
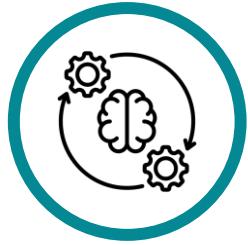
Connected to **digital health** and **telemedicine** platforms





Transforming patient pathways

Therapy adaption by potassium home monitoring





The Magic

high accuracy, calibration free measurement

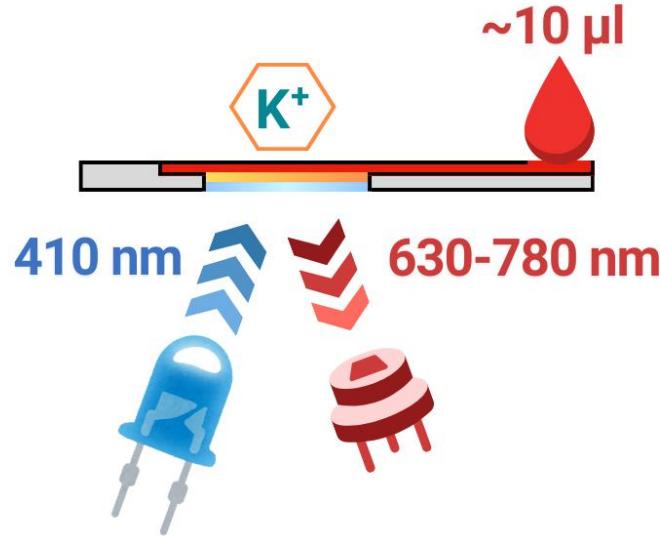


Prototypes available



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, O_2 , CO_2 , etc.



Competitive Landscape

devices in development, none on the market yet!



Feature	elyte diagnostics	Optical sensor cartridge HylID	Electrochem. sensors renalyse Kalium Health™ (cardio renal)	Urine test strips ION SENT	Wearables sweat, ISF pheal Proton intelligence	Standard today Blood gas analyser / Lab
Home testing/ capillary blood	✓	✓	✓	✓	✓	✗
Lab quality results	✓	✓	✓	✗	✗	✓
Measurement time < 1min	✓	✓	✗	✓	✓	✗
Self-referenced/ calibration free	✓	✗	✗	✗	✗	✓
Cost efficient consumable	✓	✗	✗	✓	✗	✗

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

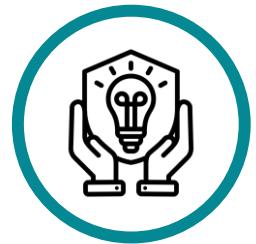
- comparison of capillary blood and venous blood potassium
- optimization of sampling protocol

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

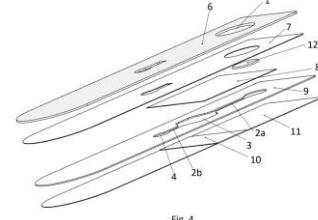
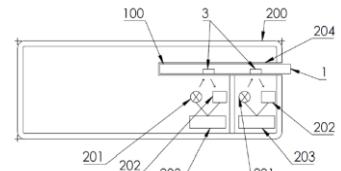
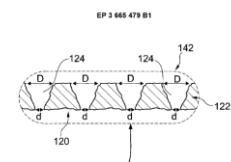
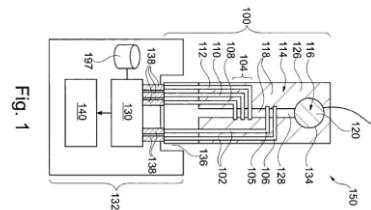


Fig. 4

Preemptive rights of granted patent family for haemolysis detection secured



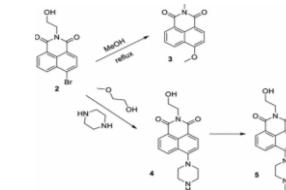
EP 3 665 479 B1

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

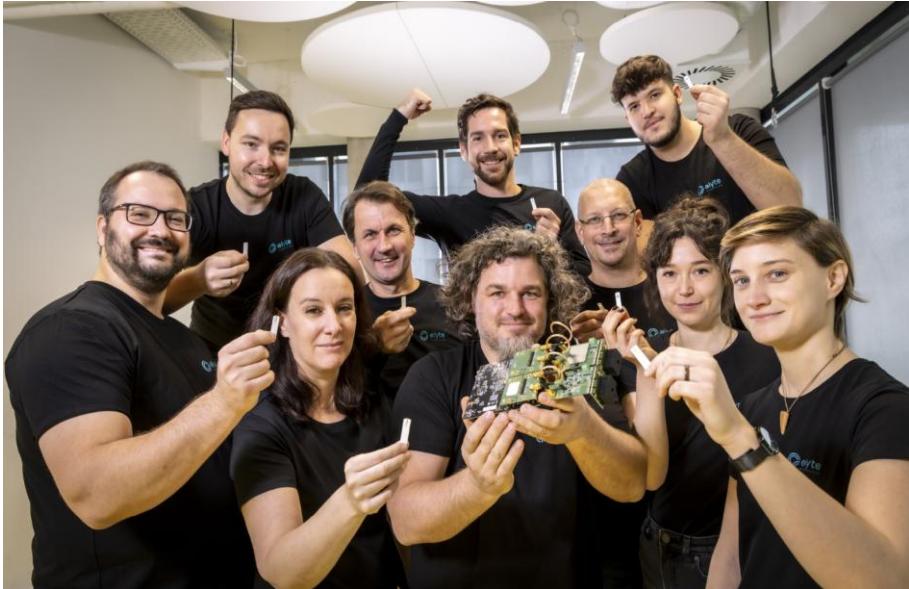
pyroscience
sensor technology



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



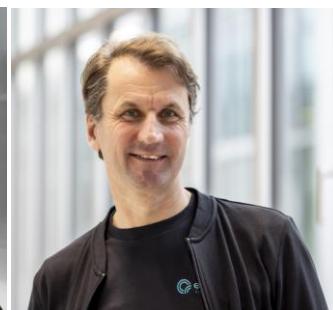
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Chief Medical Officer

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Deputy Head Diabetes
Outpatient Clinic
> 15y clinical practice





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



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Pyroscience GmbH &
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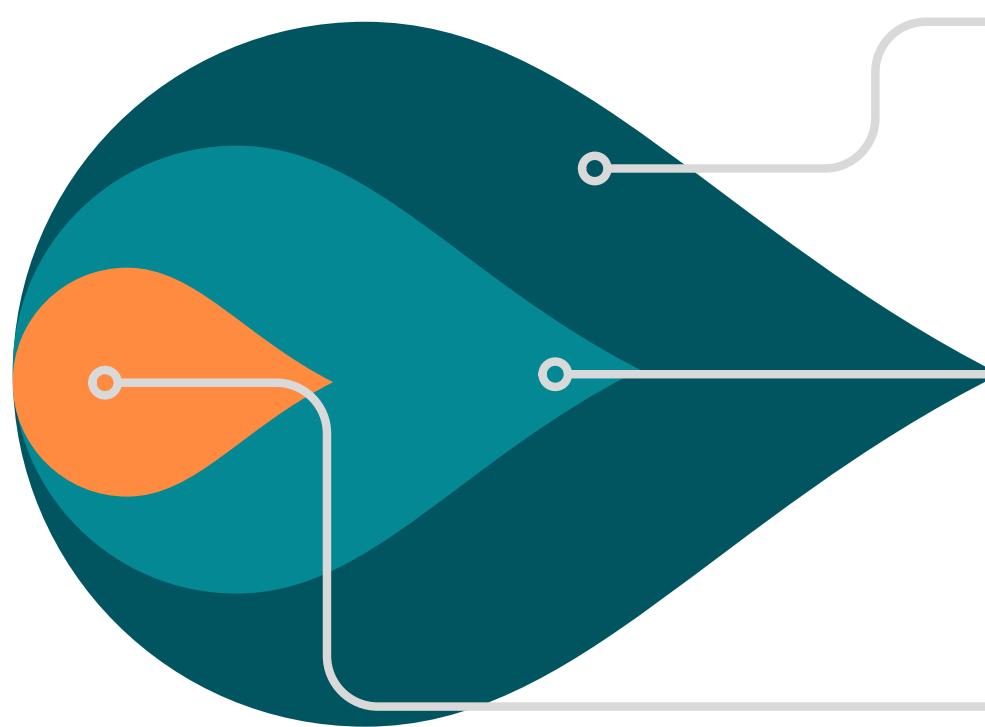
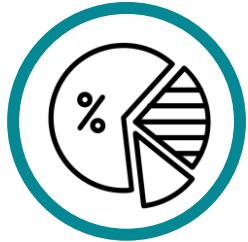
Digital Health/Telemedicine
Collaboration Partner

CEO TelBioMed

**TEL ·
· BIO
MED ·**



The Market recurring sales of disposables



€205B 330M Patients

Total Addressable Market

Patients worldwide diagnosed with potassium imbalances

Assumption: 4 test per week with €3 per test

€12B 20M Patients

Serviceable Available Market

28% Reduction for EMEA and U.S.

20% due to patient compliance

€1.2B 2M Patients

Serviceable Obtainable Market



Be part of our mission!

empower patients to self-monitor their blood potassium at home