

Living healthier lives Personalizing care with AI





Surgery

- 8-10% of all people annually
- 40% of health care budget







Impact of post-op infections

- 5th cause of death globally
- 17 to 25% of all patients
- Antibiotic resistance major challenge

Diagnosis
on average on day

5

+\$11,500

10-35+M
Hospital cost

+60% elderly
loose independence

+2-2.5x
Hospital stay

+60%
Readmissions

Liabilities?

Current standard

- Pre-op scores
 - <70% accurate
 - Static
 - Limited and laborious
- Biomarkers
 - <70% accurate
 - Do not predict and invasive
 - Expensive (>\$20 / measurement)

**Reactive
&
non-personalized care**



Solution

NO NEW HARDWARE
NO NEW MEASUREMENTS



A machine-learning-based
plugin
that predicts **post-operative
infections** by re-using existing
EHR data to **prevent or treat
infections early**

Solution



PERISCOPE TM



%



5 days prior to diagnosis

88.5%

Accuracy

77.5%

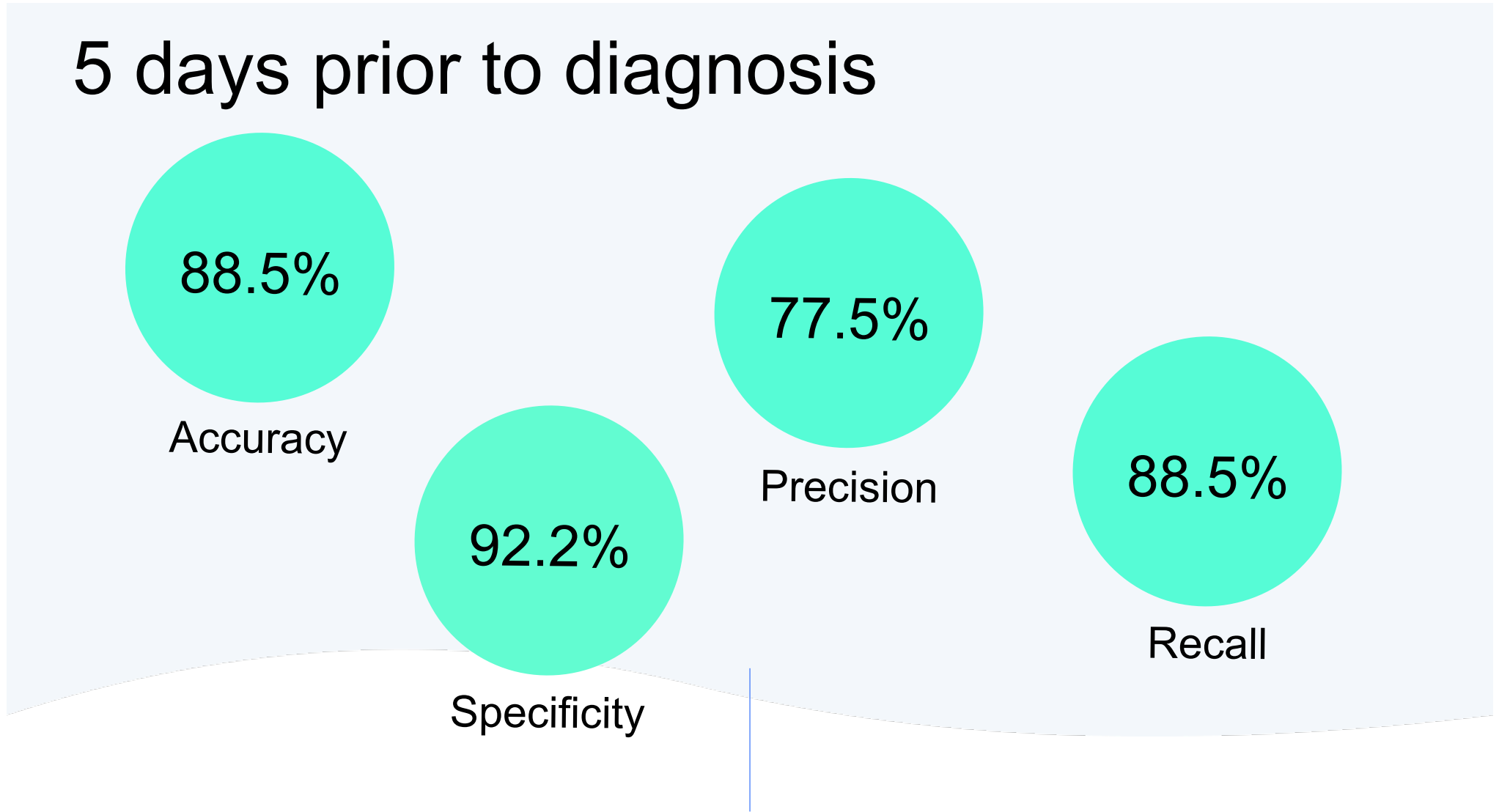
Precision

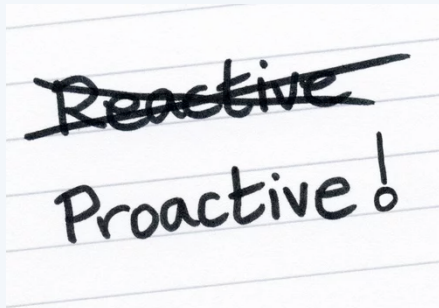
92.2%

Specificity

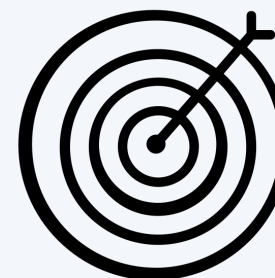
88.5%

Recall





Links risk to action
based on local protocols



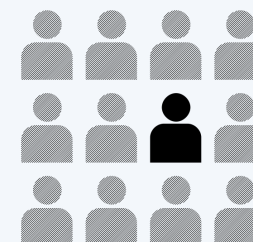
~90% accuracy
5 days prior to diagnosis



Affordable
& value-based price model



Real-time
risk assessments



Personalized treatment

Goals

- Preemptive and personal risks assessment
- Appropriate monitoring & ABx
- Used with existing sepsis workflow:
 - **Reduce infections & sepsis**
 - **Reduce hospital cost by >\$10M**



A Sizeable Problem



320M

Operations worldwide



~80M

Complicated operations



\$460B

Added cost

Current status

- First paying hospital partners
 - 40+ international hospital partners
 - Partnership Cerner: 7,543 hospitals
 - Partnership talks started with Chipsoft, EPIC, Allscripts and others: 9,000+ hospitals
 - 1.2M EUR funding raised
- Adding data (1.5M patient files)
 - Adding functionalities
 - Type and source of infection?
 - Resistance?
 - Time to onset?
 - Best intervention

Roadmap

- Multicenter trial(s) with Cerner & other EHR providers (2019 Q3/4)
- CE mark (2020 Q1/2)
- A Round (2020 Q2)
- FDA process start (2020 Q1/2)
- Grow to 50 paying customers (2020 Q4)
- New products?

40+ Partners



Maastricht
UMC+



VUmc



ST. JAMES'S
HOSPITAL
DUBLIN, IRELAND



olvg



Rigshospitalet

Ziekenhuis
Oost-Limburg



UNIVERSITETSSYKEHUSET NORD-NORGE
DAVVI-NOROGGA UNIVERSITEHTABUOHCEVISSU

Validation



Cerner Millennium®
Cerner Soarian®
Cerner i.s.h.med®
Cerner medico®

Non-Cerner EHRs:
Epic
Meditech
Cerner
iMDsoft



Certification

Partners



ChipSoft

Google
for Entrepreneurs

sas

Key opinion leaders



and still
adding..

Challenges to EHR-based AI tools that we overcome:

1. Transportability
2. Operationalisation:
 - a. Standardisation -> CareAware
 - b. Connection & security
 - c. Work-flow integration
 - d. Implementation, action & behavior change
3. Governance
4. Transparency

Our team



Bart
Chief Executive Officer



Adrian
Head of Technology



Lukas
Head of Development



Olivier
Head of Operations



Our experience

- 25 years in machine learning
- 15 years in front- & back-end design
- 15 years in clinic and research
- 10 years in major & award-winning IT projects



Let's start delivering proactive care



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