

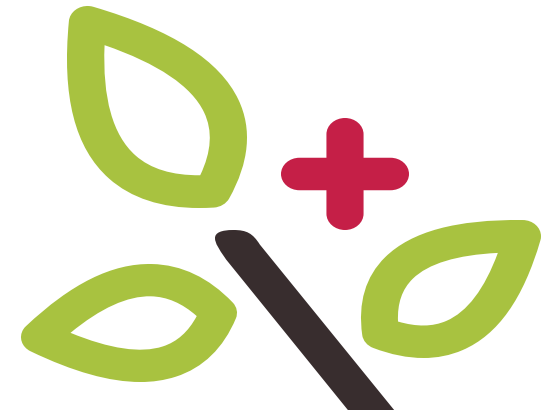
WHYZE Health



Can we transform RWE into actionable health **outcomes?**
(...in Ireland)

Prof Frank Sullivan - CMO Co-Founder

6th February 2025



What is Real World Evidence

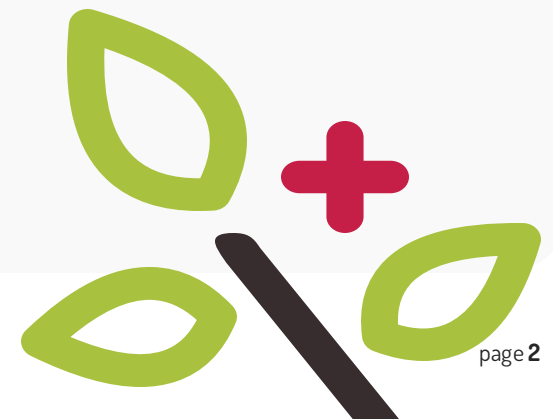
- Central role of clinical trials in healthcare improvement
- Real world data: Health information collated outside of clinical trials

What is an Actionable Health Outcome?

- Results that provide clear medical/personal decision-making utility.
- Providing specific actions for prevention/dx/tx

Central role of data management

- E.G. PSA, HbA1c leading to changes in lifestyle/testing etc



Clinical Trial Results



Real World Outcomes

Handpicked patients

Controlled Environment

Narrow timeframe

Bridging the Gap Between Clinical Trials and Real- World Outcomes

Clinical Trials

Highly structured

Actionable

Selected cohort

Sample

Small patient numbers

Short-Term observations

Error-prone, bias

Expensive

Real World Evidence

Less structured?

High patient numbers

Less reliant on scientific
tools for interpretation -
Biostatistics

Variability in Administration

Long-Term Effectiveness

Reliant on data/Searching

Data siloing and fragmentation

EHR regulations and existing
deployment focus



The WHYZE Approach

WHYZE unifies data from patients, providers, and Life Science companies to transform **Real-World Evidence (RWE)** into **real-world outcomes**.

- + Condition-specific
- + Efficient
- + Affordable



Use Case Prostate Cancer



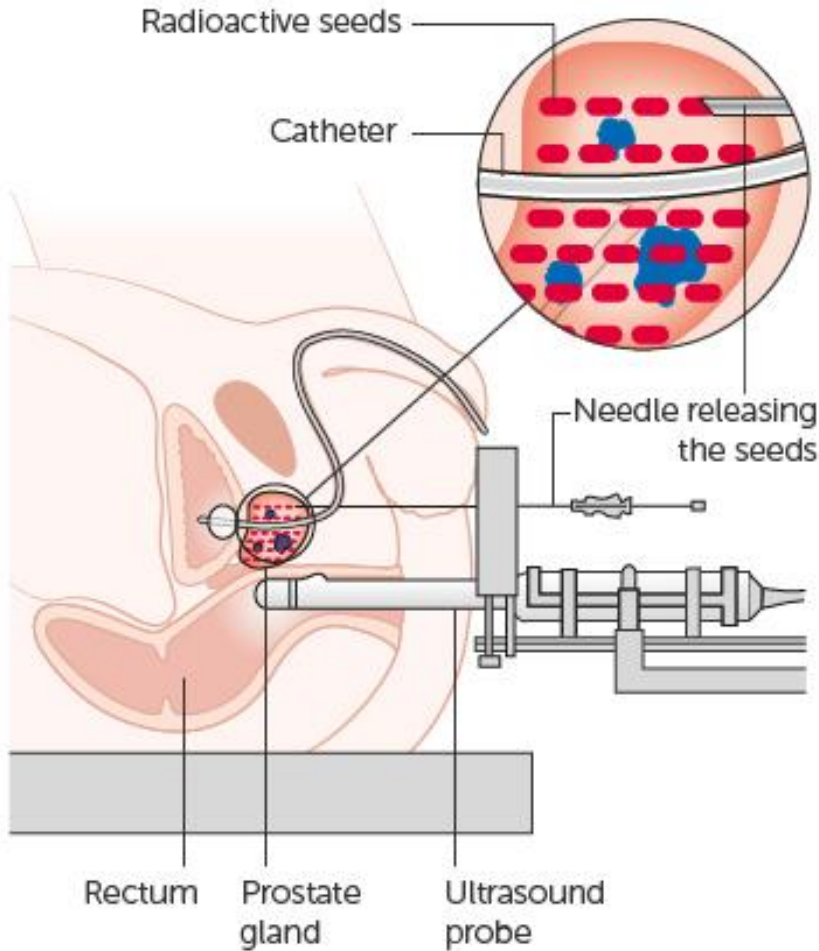
- + Can we help patients make better healthcare choices when faced with difficult choices?
- + Can we help patients/clinics access Clinical Trials when standard of care not working?

Prostate Cancer In Ireland

- + 3984 new cases in 2024 (30% of all cancers in Ireland), with 35,135 Irish men living with PC
- + Irish Cancer Registry data but not real-time or specific IPCOR data on outcomes is early, patchy and incomplete.
- + Legacy data gathering is expensive and inefficient
Multiple chronic medical conditions, fragmented care.
- + At least 30% will fail conventional therapy, with sufficient follow-up.
- + Need for “research as a therapy” option.



Prostate brachytherapy outcomes study [@Blackrock Health]



Cancer Research UK

Methods:

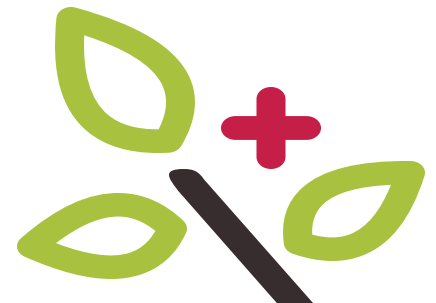
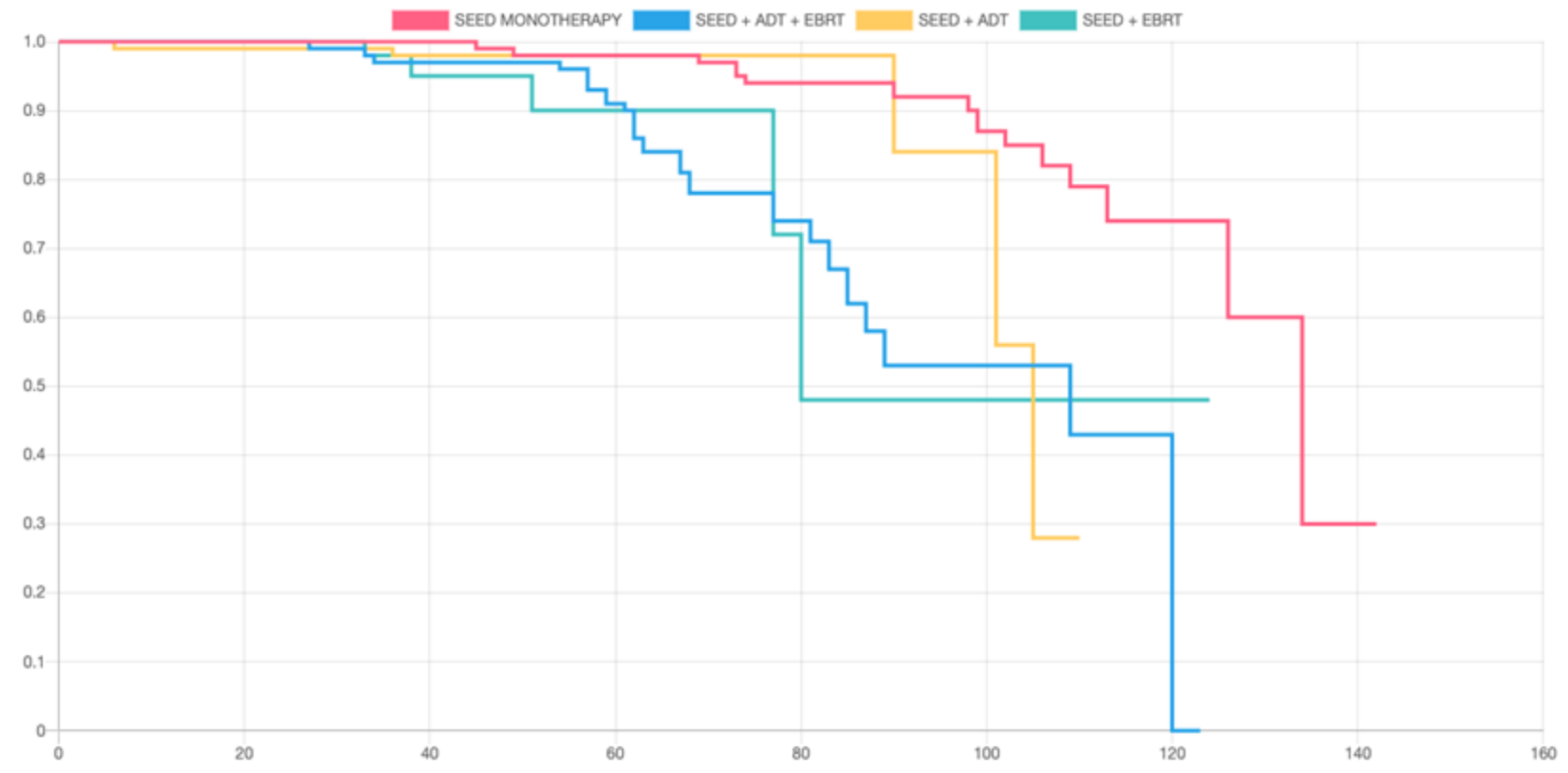
- + Retrospective cohort study, prostate cancer patients
- + N=1500 (2006-2018) of which a Blackrock Health sample (n=1000)
- + Ethics approval obtained
- + All patients with localized disease, who received LDR brachytherapy (with or without EBRT/ADT)
- + Single clinician results, so stakeholders can judge quality n=1
- + Patient followed with respect to the effect of known prognostic factors
- + Predictive variables (age, PSA, Gleason Score, % positive diagnostic biopsy)
- + Stratified by published criteria (D'Amico, CAPRA, NSABP etc)
- + Outcome variables (survival, disease free survival, toxicity (CTCAE) and PROMS (EPIC-CP)
- + All metrics validated by instrument (e.g. EPIC-CP), and ICHOM/compatible (international best practice)?

Survival Curve

Doctors Charts **Survival** Side Effects PROMs [Open risk factors >](#)

Survival Curve

ESTIMATE OF RELAPSE FREE SURVIVAL PROBABILITY (RFSP)



Risk Factors

Patient Charts

Survival Side Eff

Risk factors

These will be applied for all patients charts.

Risk Factors

Gleason Grade
1 2 5

Age
20 76 100

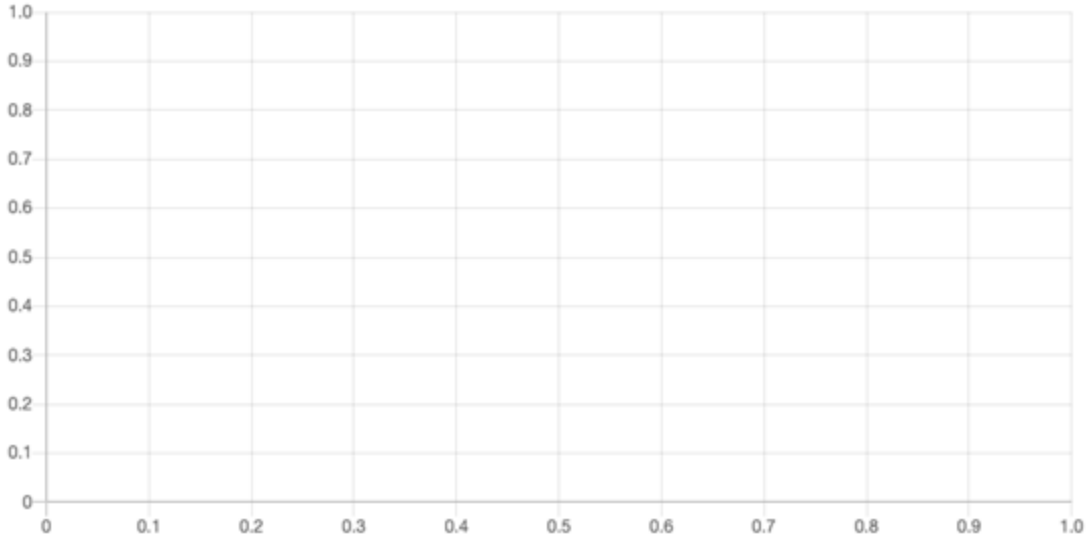
PSA
0 11 100

P.biopsis
0 28 100

Predict

Survival Curve

ESTIMATE OF RELAPSE FREE SURVIVAL PROBABILITY (RFSP)



95% confidence interval for survival probability

ESTIMATE OF RELAPSE FREE SURVIVAL PROBABILITY (RFSP)

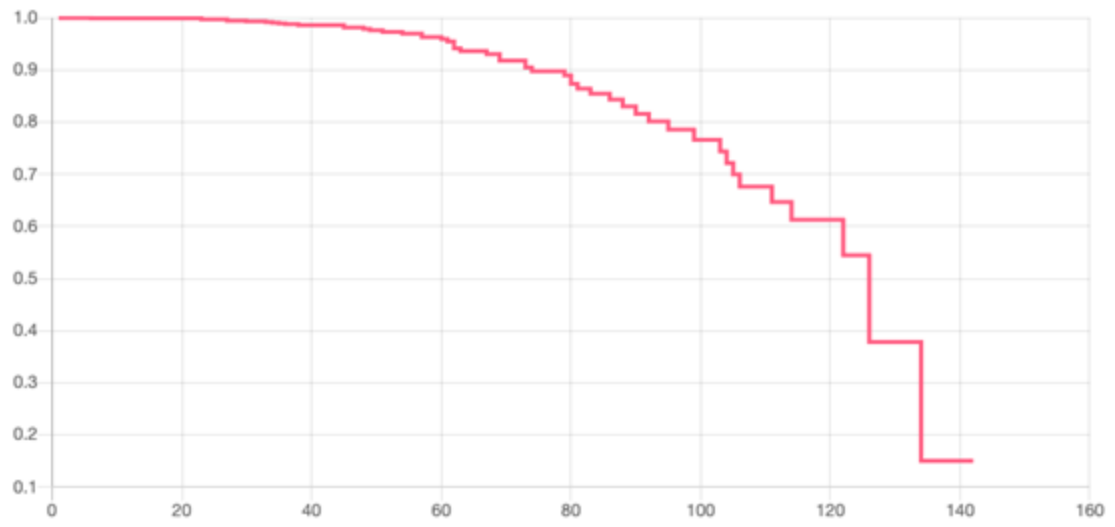


Similarity Grade

Patient Charts **Survival** Side Effects PROMs [Open risk factors >](#)

Survival Curve

ESTIMATE OF RELAPSE FREE SURVIVAL PROBABILITY (RFSP)



95% confidence interval for survival probability

ESTIMATE OF RELAPSE FREE SURVIVAL PROBABILITY (RFSP)

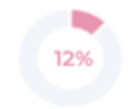


Similarity Grade



Patients almost like me

154 of total 1317



Relapse free survival probability at specific time:



Patient Charts – Toxicities Trend

Patient Charts Survival **Side Effects** PROMs Open risk factors >

Toxicities trend over follow up time

SEED + ADT SEED + ADT + EBRT SEED + EBRT SEED MONOTHERAPY



Followup times

All follow up times

1.5 years

Similarity Grade

0% 25% 50% 75% 100%

Patients like me

150 of total 1317



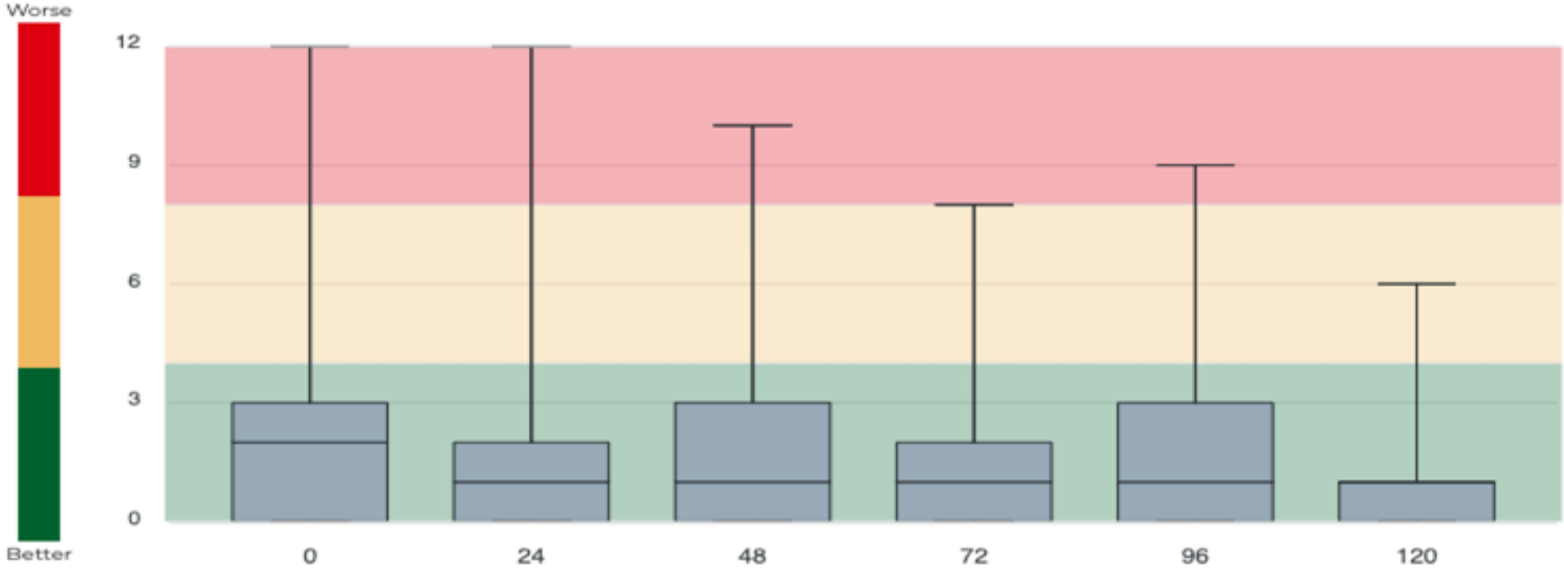
Patient Reported Outcome Measures

Patient Reported Outcome Measures (PROMs)

Bowel Symptom Score x v

BOWEL SYMPTOM SCORE

QOL



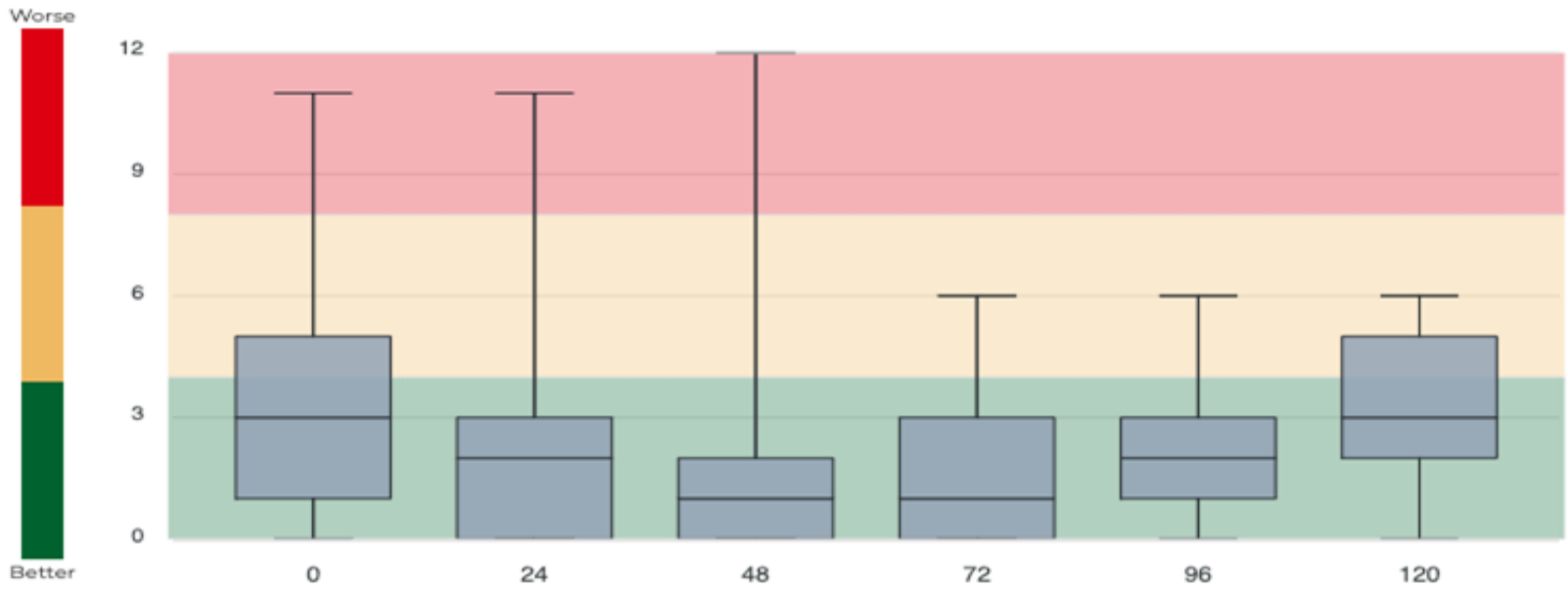
Patient Reported Outcome Measures

Patient Reported Outcome Measures (PROMs)

Urinary Irritative Obstructive... x v

URINARY IRRITATIVE OBSTRUCTIVE SYMPTOM SCORE

QOL



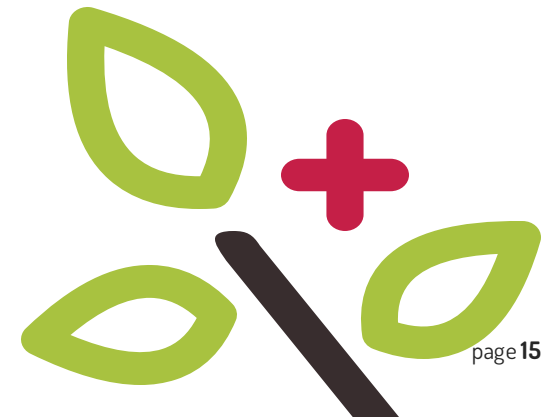
WHYZE collaborates with a large US Multicentre Clinic and US Clinical Trial Accelerator

Building and validating our AI

- 3 million patient structured dataset (RWD)
- WHYZE Health focuses on prostate cancer and breast cancer,
- Anonymised, de-identified data

WHYZE AI Platform

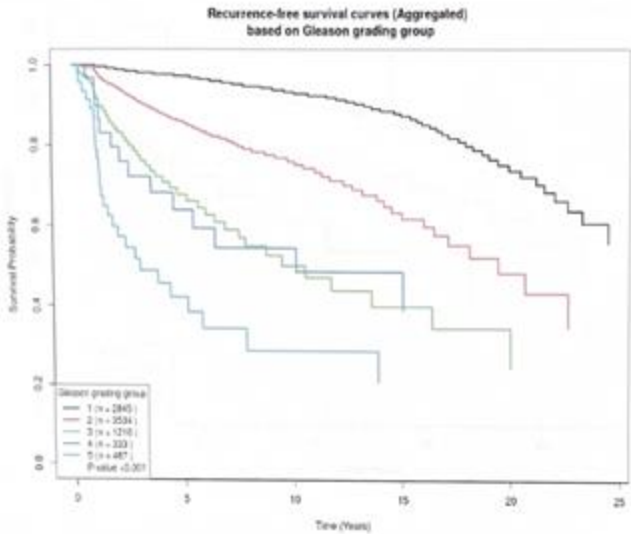
- Identified approx. 66,000 patients with prostate cancer over 25 years
- Applied our AI/ML tools to answer very specific questions:
 - Primary treatment
 - Risk factor stratification
 - Tx success or failure
 - Suitability for selected clinical trials



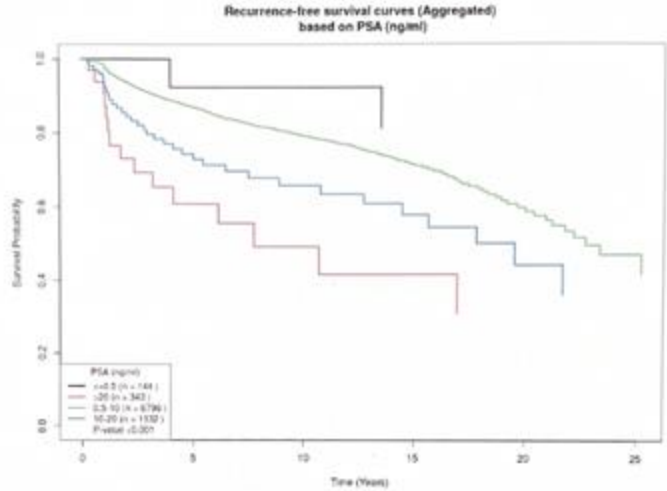
WHYZE AI Platform as part of the collaboration



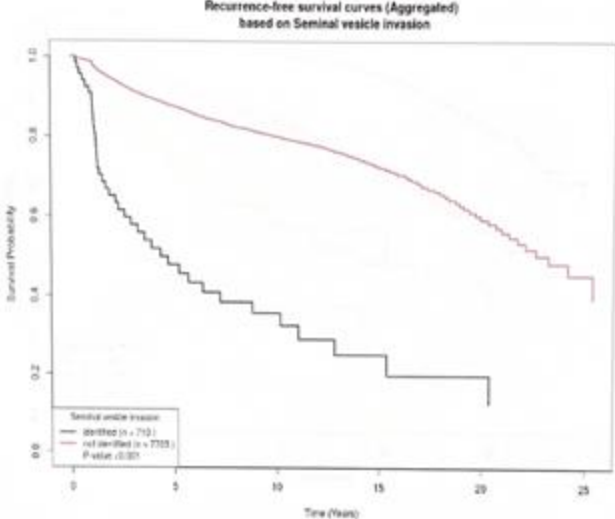
2) Chart: Prostate - Recurrence free survival (Gleason grade group)



1) Prostate - Recurrence free survival (PSA)



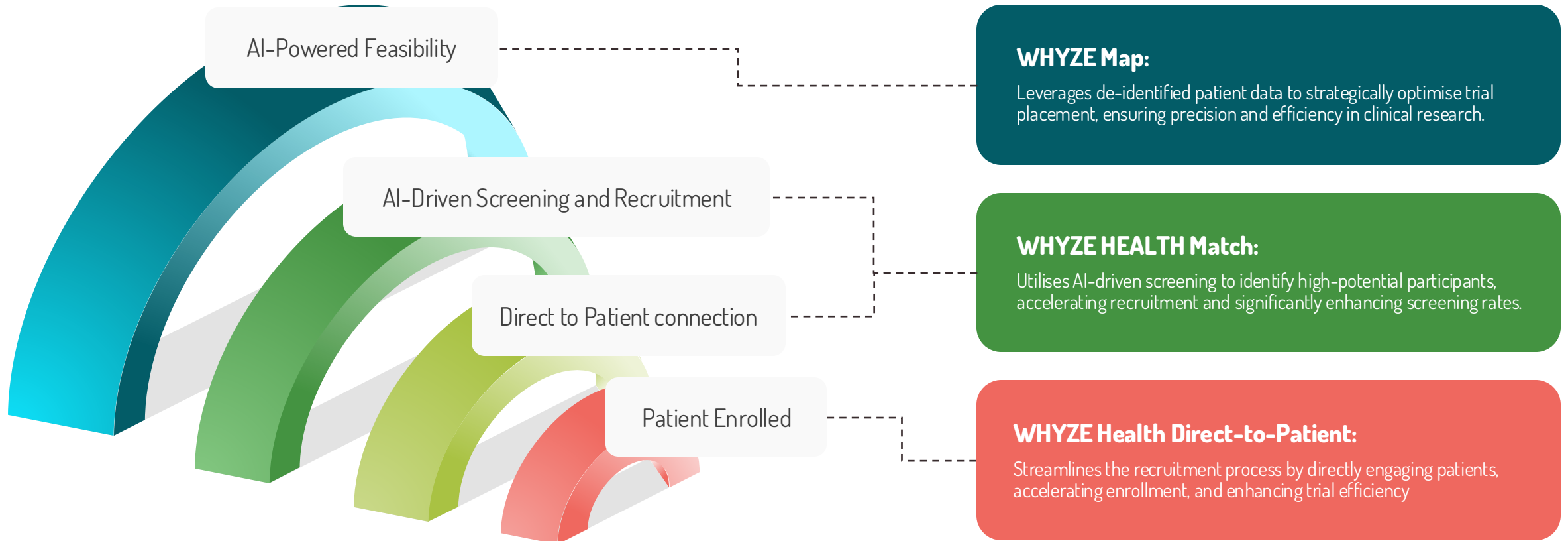
3) Chart: Prostate - Recurrence free survival (Seminal vesicle invasion)





The Solution: Democratising Research with AI-driven Trial Accelerants
The WHYZE Health Platform: Digital Solutions for Unmatched Speed and Support

WHYZE Health AI - Powered Platform Optimising Patient Screening Recruitment



Use Case Prostate Cancer




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Contact Us



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Website

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Patient Perspective

 www.youtube.com/watch?v=d2F0ZyXg3ss



LinkedIn

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