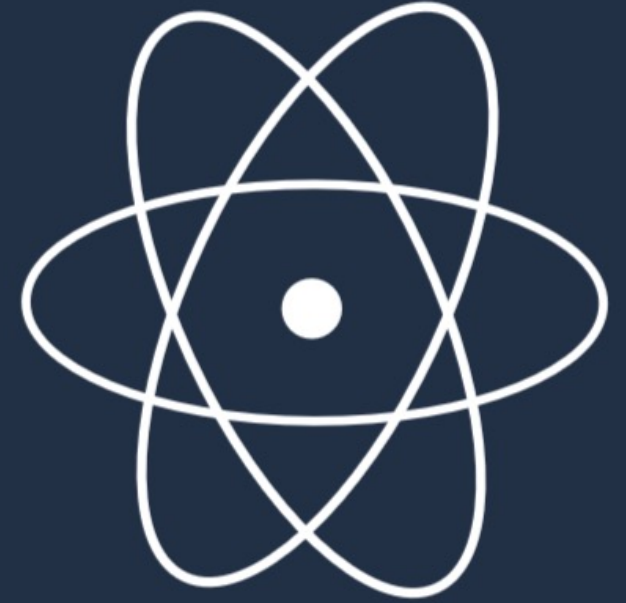


| DECISIVE

**Dutch consortium preparing a
growth fund application**



Dutch mEdiCal Isotopes Save liVes

Intro DECISIVE

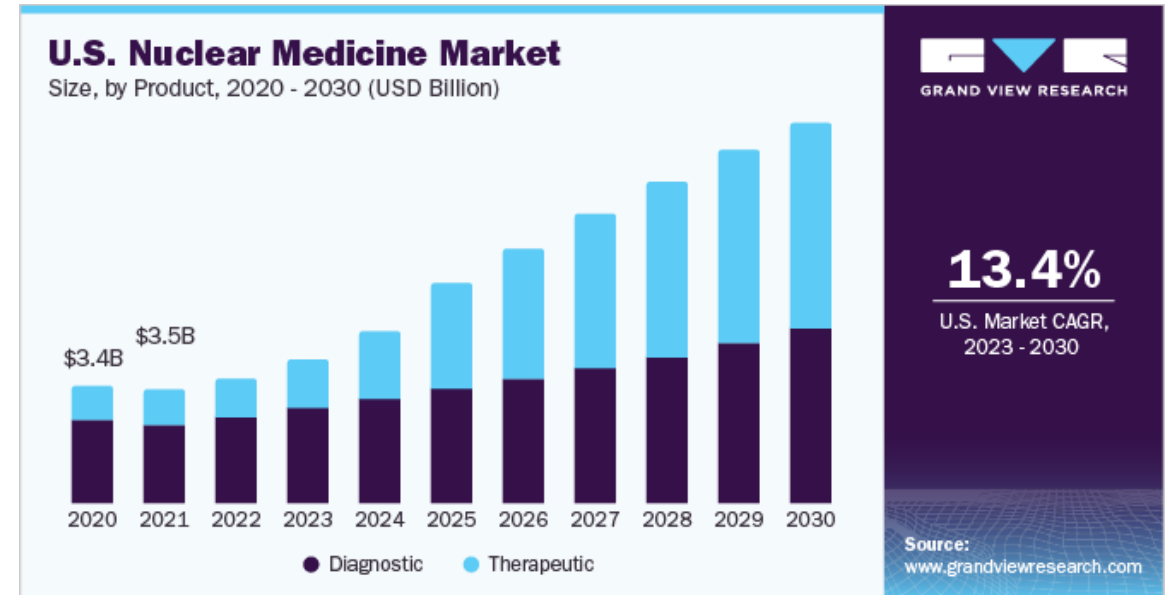
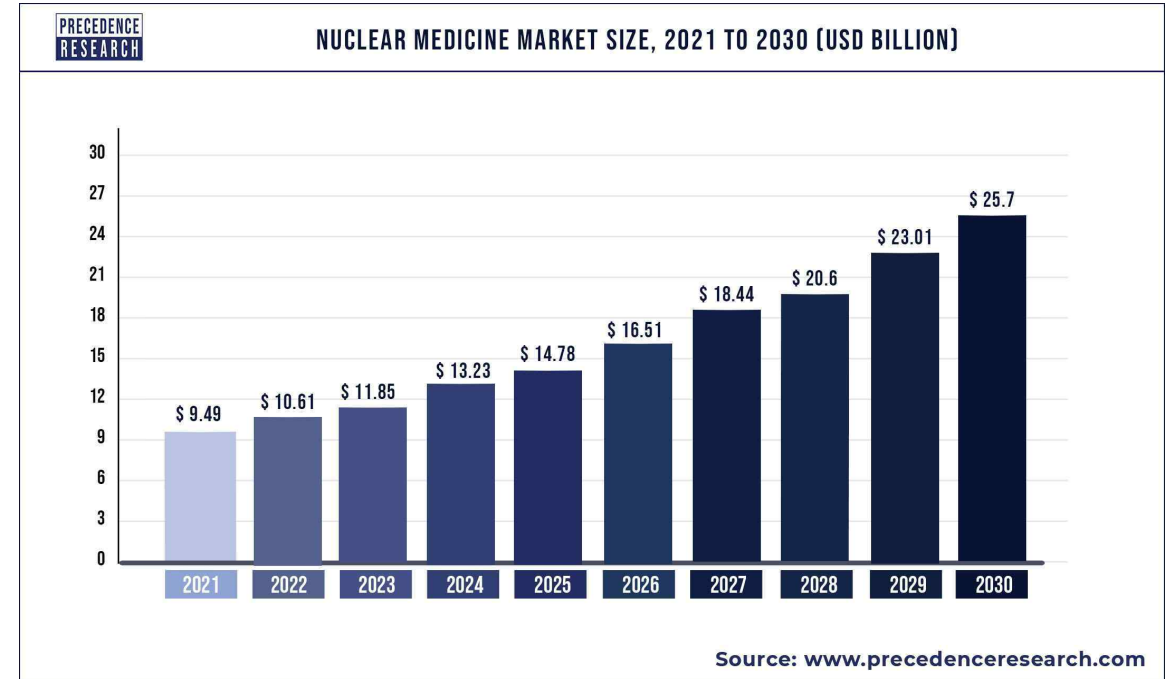
- New wave of Nuclear Medicine technology, investment
- Necessity for sustainable radionuclide availability
- The Netherlands is a market leader in provision of radionuclides
- Dutch innovation and industry is strong, including in Nuclear Medicine
- Nearly the full pipeline exists in the Netherlands
- New high-flux PALLAS reactor is being built (NL government €1.8Bn investment)



Market

Global Nuclear Medicine Market Insights Forecasts to 2030

- Nuclear Medicine Market valued \$9Bn in 2021.
- Market is growing at a CAGR of 13% from 2022 to 2030
- Worldwide Market is expected to reach \$25Bn by 2030






Growth fund NL

- Initiative from Dutch Ministry of Economic Affairs
- Aim: boost Dutch economy, GDP
- Last funding round: €4Bn budget
- Departmental (via ministries) vs subsidy route: 96% vs. 4% (round 3)
 - DECISIVE is taking the departmental route. Submission deadline TBD
- Ministry of Health (VWS) supports DECISIVE:
via programme directorate Medical Isotopes
- Catalyze selected as consultant & co-writers





DECISIVE: our MISSION



**Increase Dutch economy, GDP by
INNOVATION in the nuclear medicine chain
PATIENT DRIVEN, SUSTAINABLE, AFFORDABLE**

Initiative

who is who



Prof. Andor Glaudemans
UMCG / NVNG



Prof. Sandra Heskamp
Radboudumc



Prof. Erik Verburg
Erasmus MC



Dr. Frank Nijsen
Radboudumc



Marlous Kooijman
FAST



Prof. Riemer Slart
UMCG



Dr. Julie Nonnekens
Erasmus MC



Dr. Erik de Blois
Erasmus MC / NKRV



Dr. Bart Cornelissen
UMCG

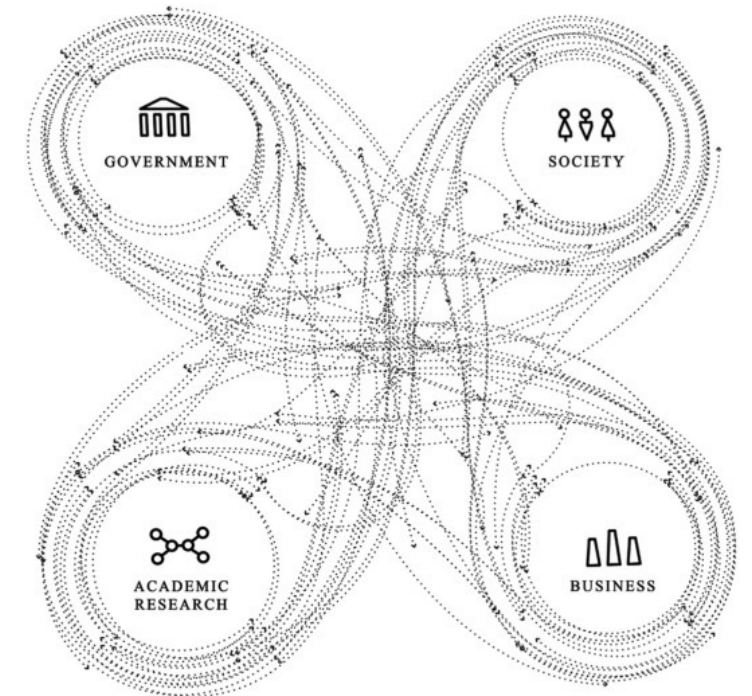
+ Catalyze



GOALS

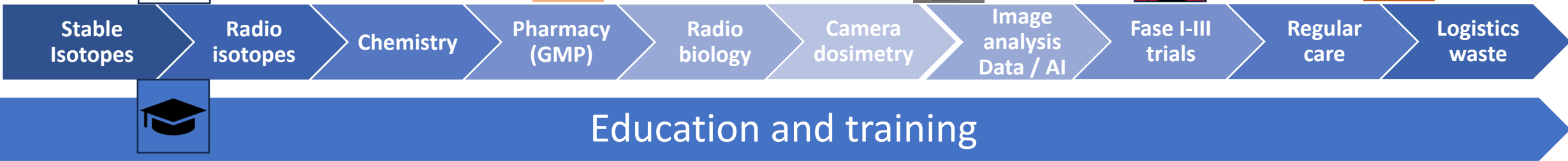
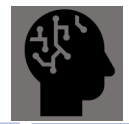
- LINK ALL PARTNERS
- LINK ALL STAKEHOLDERS
- LINK ALL STAGES

- BOOST NUCLEAR NETHERLANDS
- BOOST CRITICAL INFRASTRUCTURE
- BOOST EXPERTISE, EDUCATION and TRAINING



Quadruple helix

FULL CHAIN



- E.g.
- Infrastructure for the development of radiopharmaceuticals
 - Research and Innovation
 - Product development
 - Translational (from molecule to patient)
 - Valorisation, spin-off, regulation
 - Central image analysis centre
 - Harmonisation, standardisation, dosimetry
 - Artificial Intelligence (AI)
 - Production facilities for (starting products for) radionuclides
 - Availability, sustainability, independence from outside factors
 - National education (MBO/HBO/BSc/MSc): More and better trained personnel

PROPOSALS SUMMARY *confirmed or in talks*

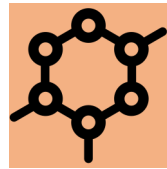
Radionuclide production

UMCG , TU Delft, NRG/Pallas
 4 industry partners



Radiopharmacy/chemistry /biology/ valorisation /trials

UMCU, UMCG, Erasmus
 5 industry partners



Physics / Dosimetry / Data / Image analysis / AI

UTwente, MUMC, LUMC, PSMA forum
 7 industry partners



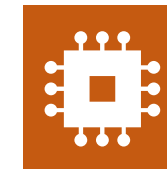
Education

TU Delft
 1 industry partner



Patient Care

NKI
 regional centres



Logistics / Waste

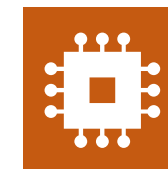
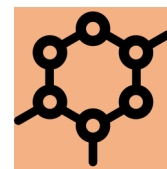
ANVS
 2 industry partners

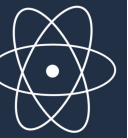
Proposal Support: FAST / NKRV/NVNG, Grant writer, Solicitors, VWS, KWF, Oncode, ANVS, UMCs valorisation support, patient groups, Catsalyze

PROPOSAL SUMMARY

We welcome additional proposals especially in

- Valorisation
- Clinical trials infrastructure
- Logistics
- Waste disposal
- Regulation





Partners: next steps

- Proposal expansion -> (Quicksan), with CATALYZE
 - 4 workshops (Sep - Nov)
 - Participants:
 - UMCG/RadboudUMC/Erasmus MC
 - Selected companies
 - Education : TU Delft
 - Valorisation : Oncode Institute
 - FAST, KWF
 - Government: Ministry VWS



Next steps

- Theory of change
 - 4 workshops (sep - nov)
 - Inform and network with all partners (EANM Vienna)
 - With FAST and VWS
 - Market research
- “Inventory of efforts at challenges in the Dutch ecosystem, to shape a European hotspot for Nuclear Medicine in the Netherlands”

Timeline

2023

Sep (EANM):

Between Sep - Nov:

Dec:

Inform partners strengthen network

Workshops theory of change + strengthen network

Quickscan

2024

Between Jan - Mar

Between Mar - Apr

Between Jul - Oct

1st version work packages

2nd version work packages

Submission deadline

More info: <https://www.ngfdecisive.nl>