EUCOPE
European Confederation of Pharmaceutical Entrepreneurs AISBL

EUCOPE

Members Meeting

Hybrid, 19 June 2024

Competition Law Compliance Policy

EUCOPE brings together representatives innovative companies to discuss common issues, challenges and trends affecting the pharmaceutical industry. This activity can be perfectly legitimate. However, certain competition law risks may arise in relation to EUCOPE's activities.

EUCOPE's European Union ("EU") compliance policy ("Policy") explains these competition law risks and aims to ensure compliance by all members and EUCOPE staff with the rules applicable in the EU. EUCOPE itself and its members are subject to these rules when engaging in any EUCOPE related activities. Any anticompetitive behavior adopted by a member can result in serious financial, criminal and/or disciplinary penalties, as well as other harm (e.g., reputational harm) for EUCOPE, represented companies and for meeting participants personally.

Competition Law Compliance Policy

There are certain matters which **should not** be discussed with competitors before, during or after any such meetings. These include:

- Territorial restrictions, allocation of customers, restrictions on types of services, or any other kind of market division;
- Prices, price changes, conditions of sale (including payment terms and guarantees), price differentials, discounts;
- Current market conditions and issues, including industry pricing policies or patterns, price levels; capacity (including planned or anticipated changes regarding those matters), except where limited to the discussion of historical or public information;

[cont'd]

Competition Law Compliance Policy

- Individual costs, cost accounting formulas, methods of calculating costs;
- Individual company figures on market shares, sources of supply, capacity;
- Information as to future plans of individual companies concerning technology, capacity, marketing or sales; and
- Matters relating to individual suppliers or customers.

Attention: these rules equally apply to informal discussions before, after, or during each meeting. If any sensitive information is discussed or disseminated, insist that the discussion be terminated immediately and make sure that your objection is recorded in the minutes. If necessary, leave the meeting and immediately inform EUCOPE's General Counsel.

Agenda (1/3)

I. **Welcome / New Members / Next Events**

Chairs

II. **The Outcome of the European Parliament Elections – What does it mean for the pharmaceutical sector?**

Hans Martens, Incisive Health

III. **The Revision of the EU General Pharmaceutical Legislation**

Victor Maertens and Stefano Romanelli, EUCOPE

Agenda (2/3)

IV. **Misfolding biomarkers: a new approach for early stage classification of neurodegeneration**

Prof. Dr. Klaus Gerwert, betaSENSE GmbH

V. **The Healthcare Chain Institute´s (HCI) Role in Sustainability, Digitalization, and Value Creation from Production to Patient**

Monika Derecque-Pois, HCI

Agenda (3/3)

VI. The European Commission´s Initiative´s to support the Pharmaceutical Sector

Thomas Heynisch, European Commission

VII. EUCOPE's Regulatory Working Group - Overview of Regulatory Activities

Seán Byrne, EUCOPE

VIII. AOB

Chairs

I.
Welcome / New Members / Next Events

Chairs

Upcoming Events

https://www.eucope.org/events/

- **25 June:** Cell and Gene Therapy Working Group Meeting
- **27 June:** Medical Technologies Focus Group (MDR, IVDR & DDC)
- **01 July:** Paediatric Focus Group Meeting
- **09 July:** OMP Working Group Meeting
- **10 July:** Regulatory Working Group Meeting

New Members June 2024

- Acadia Pharmaceuticals
- Elevate Bio
- GE Healtcare
- SERB Pharmaceuticals

Already accepted via email in March:

- EGA
- Rhythm
- Regeneron

II.

The Outcome of the European Parliament Elections – What does it mean for the pharmaceutical sector?

Hans Martens, Incisive Health

Incisive Health
Inizio Evoke

EUCOPE

The outcomes of the European Parliament Elections – What does it mean for the pharmaceutical sector?

Agenda

01 The European Elections

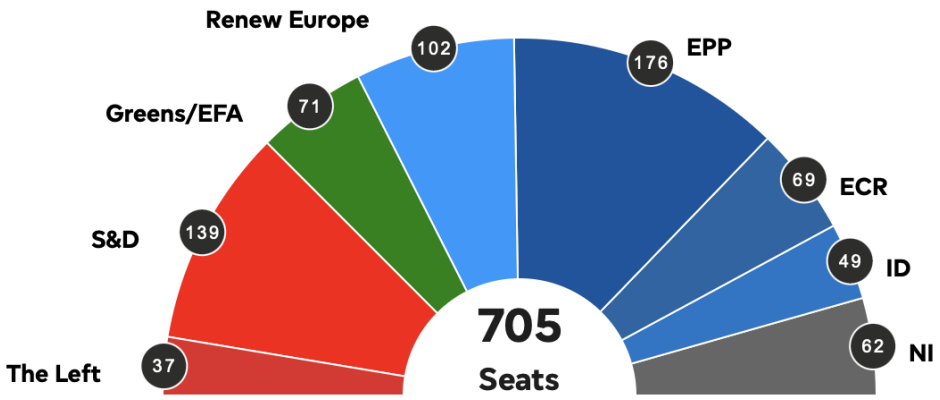
02 What does it mean for the pharmaceutical sector?

03 What to expect next

04 Q&A

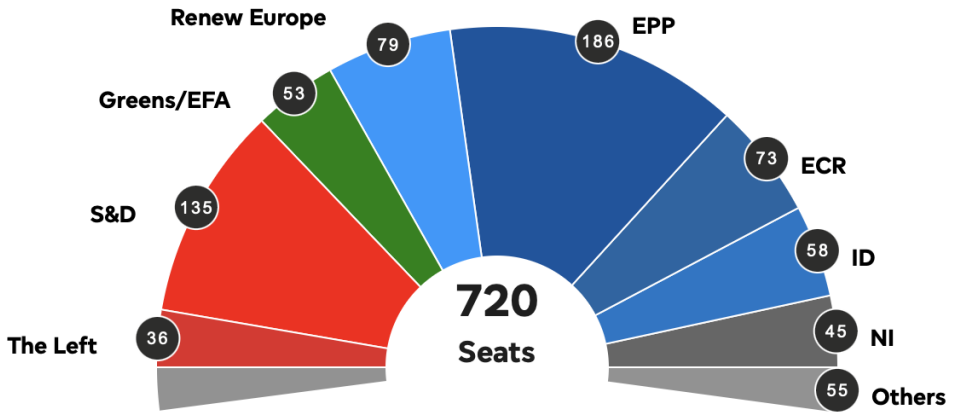
The European Elections

The European Parliament shifts right, but the center remains steady



15 seats more

Majority: 361 seats



__The EPP__ will be involved in every possible coalition

***ECR and ID will advocate for a new health approach**. Less European intervention and More Member States' independecy.*

A __more right-leaning Parliament__ would lead to less focus on EU health policy..

In 2019, __von der Leyen received votes from the EPP, S&D and Renew__. This will mean continuity of last healthcare agenda/ EU status quo between the S&D and EPP

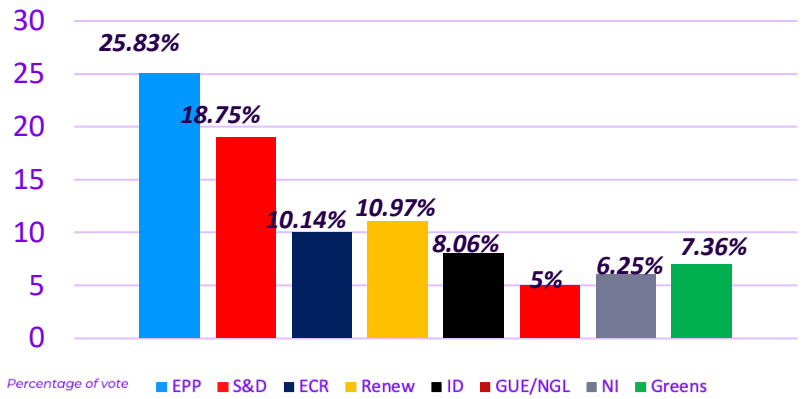
Centre hold in European Parliament elections, but will it be enough?

European vs National level

*Far-right forces **(ECR, ID)** made major gains across the bloc*

*The center-right **EPP force** is the only centrist party to have grown in this election*

*Liberal **Renew Europe** group was decimated*



*The center-left **Socialists and Democrats (S&D)** remained stable*

***Greens** suffer major losses, losing 1/3 of their previous votes*

*There are **new non-affiliated political parties**, and it is not clear where they stand*

Macron dissolved the Assembly calling for new elections

Germany's CDU asked for a vote of confidence for Chancellor Scholz

Another far-right win in Austria

Center-right won in Bulgaria (and dominated the Balkans)

Key MEPs acting on health files are staying – but some are gone

renew europe. | S&D | THE GREENS/EFA in the European Parliament | epp european people's party | IDENTITY AND DEMOCRACY PARTY

IN

Susana Solis Perez
Legislator on Pharma competitiviness

Tiemo Wölken
Rapporteur on Pharma Regulation

Tilly Metz
Shadow on SoHO, EHDS and Pharma regulation

Dolors Montserrat
Rapporteur on COVID-19 Report

Peter Liese
Rapporteur Report fight against cancer

OUT

Frédérique Ries
Shadow rapporteur on Pharma Regulation

Sara Cerdas
Shadow rapporteur on EHDS

S. Kympouropoulos
Co-rapporteur Mental Health Report

Tomislav Sokol
Co-rapporteur on the EHDS

Pernile Weiss
Rapporteur Pharma Directive

Annalisa Tardino
Co-rapporteur on the EHDS

European elections also impact EU tob jobs discussions

European Parliament

- **New President**
- 720 MEPs (+15 COMPARED TO 2019)
- Possible new Committees
- President elected on July 16-19

Roberta Metsola
European Parliament President

Can still be re-appointed

European Council

- **New President**
- President elected on December 1 by EU leaders

Charles Michel
European Council President

Will NOT be re-elected

Lead Candidates:
- **António Costa** (Portugal)
- **Mette Frederiksen** (Denmark)

European Commission

- **New President**
- New college of Commissioners
- Hearings of candidates will start in November 2024

Ursula Von der Leyen
European Commission President

Can still be re-appointed

The election of the Commission President could reserve surprises

Lead Candidates

Ursula
Von der Leyen

Nicolas Schmit

Sandro Gozi

Marie-Agnes Strack-Zimmermann

Valérie Hayer

Terry Reintke

Bas Eickhout

Walter Baier

Impact of **Spitzenkandidaten** and EU top jobs = Commission's Presidency lead candidates

01 Formation of Coalitions

*Success of a Spitzkandidat depends also on their **ability to build alliances with other political groups***

02 Policy Agenda and Priorities

*Spitzkandidat's success can **shape the policy agenda** of the incoming EC and other EU institutions.*

03 Mandate and Legitimacy

*Strong showing at the polls/elections can **strengthen their position in negotiations among EU leaders***

04 Influence on Top Job Allocation

***Influence allocation of other top EU jobs** whose distribution is part of broader negotiations among EU leaders.*

Incisive Health
Inizio Evoke

What does it mean for the pharmaceutical sector?

The new Parliament will shape the European Health landscape

Sustainability

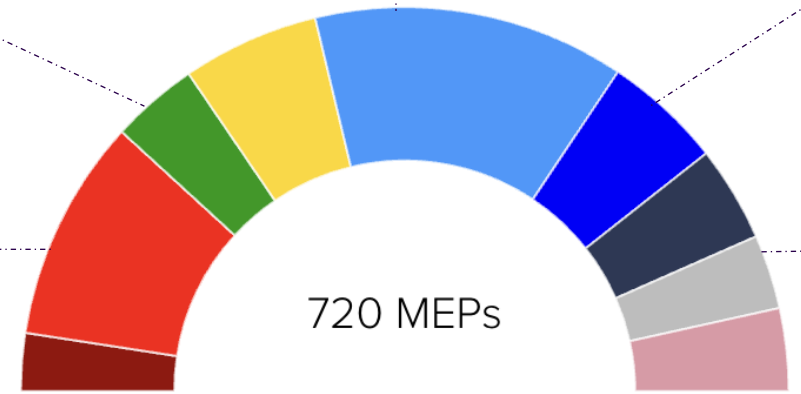
The **Greens** have lost almost a fifth of their seats, and this could move sustainability down in the priority list

Non Communicable Diseases

The **Greens** and the **EPP** address NCDs, with the latter proposing a European Cardiovascular Health Plan

European Health Union

With more conservatives and nationalist MEPs (**EPP, ECR, ID**), strategic health sovereignty will be defended strongly by the MS



Research and Innovation

The **EPP, S&D** and **Renew** agree on the importance of investing in R&I

Far right

The election saw a surge in the far right (mostly **non-affiliated**, **ECR** and **ID**), a political family traditionally critical of the pharmaceutical industry

The new Parliament will shape the European Health landscape

What have the political parties been saying about health in their manifestos?

	HEALTH PROMOTION AND INEQUALITIES	EQUAL ACCESS TO HEALTHCARE	NCDS	R&I and DIGITALISATION	HEALTH SYSTEMS
GUE/NGL THE LEFT IN THE EUROPEAN PARLIAMENT	✓	✓	●	●	✓
THE GREENS/EFA in the European Parliament	✓	✓	✓	●	●
S&D	✓	✓	●	✓	●
renew europe.	●	●	●	✓	✓
epp european people's party	✓	●	✓	✓	✓
ECR GROUP EUROPEAN CONSERVATIVES AND REFORMISTS	●	●	●	●	●
ID IDENTITY AND DEMOCRACY PARTY	?	?	?	?	?

The new Commission is expected to deliver on five priorities

From the COVID 19 pandemic, health has been a central policy topic in Brussels, with important results achieved in this area:

- Europe's Beating Cancer Plan
- HERA
- Revision of the General Pharmaceutical Legislation
- European Health Data Space
- Critical Medicines Alliance

"We need to continue the momentum.
We need to keep health at the top of our political agenda"

Stella Kyriakides
Health commissioner

"The EU4Health Budget has no real continuity in the future"

Sandra Gallina,
Director General DG SANTE

The Commission priorities for the next five years according to Commissioner Stella Kyriakides should be:

1. EUROPEAN CARDIOVASCULAR HEALTH PLAN
2. POLICIES TO TACKLE ANTIMICROBIAL RESISTANCE (AMR)
3. PREVENTION AND RESPONSE AGAINST MEDICINE SHORTAGES
4. EU BIOTECH INITIATIVE

What to expect next

Upcoming EU timeline

Q2 2024

MAY

JUNE

6- 9 June
EU elections

17 June
Informal European Council

27-28 June
European Council

Q3 2024

JULY

15 July
Deadline for constituting the political groups

16-19 July
EP President and Vice-Presidents elections

Composition of EP Committees'

Schedule date for EC President election

AUGUST

TBC
MS nomination of Commissioner's designates

SEPTEMBER

16-19 September
EP debate on EC's priorities

Q4 2024

OCTOBER

NOVEMBER

TBC
Hearings of Commissioners' designate

DECEMBER

1 December
European Council president election by EU leaders

TBC
New College of Commissioners

16-18 July or 16-19 September
European Commission president election
Adoption of corrigenda and unfinished business

The new Parliament will resume the work on the unfinished business

First Plenaries in Strasbourg:
16-18 July and 16-19 September

Scenario 1: Parliament has not adopted its position at first reading on a legislative proposal

Scenario 2: The file is still in trilogues at the time of the elections

What happens next?
After the elections, the new EP can:

Continue with the work done previously
if new rapporteur are appointed, proposals will remain in the hands of the same political group(s)

Consider the work to have lapsed and start again from scratch

The decision will be taken by the Conference of Presidents following a recommendation from the responsible Committee(s)

Key legislative EU health policy files and expected next steps

EUROPEAN HEALTH DATA SPACE (EHDS)

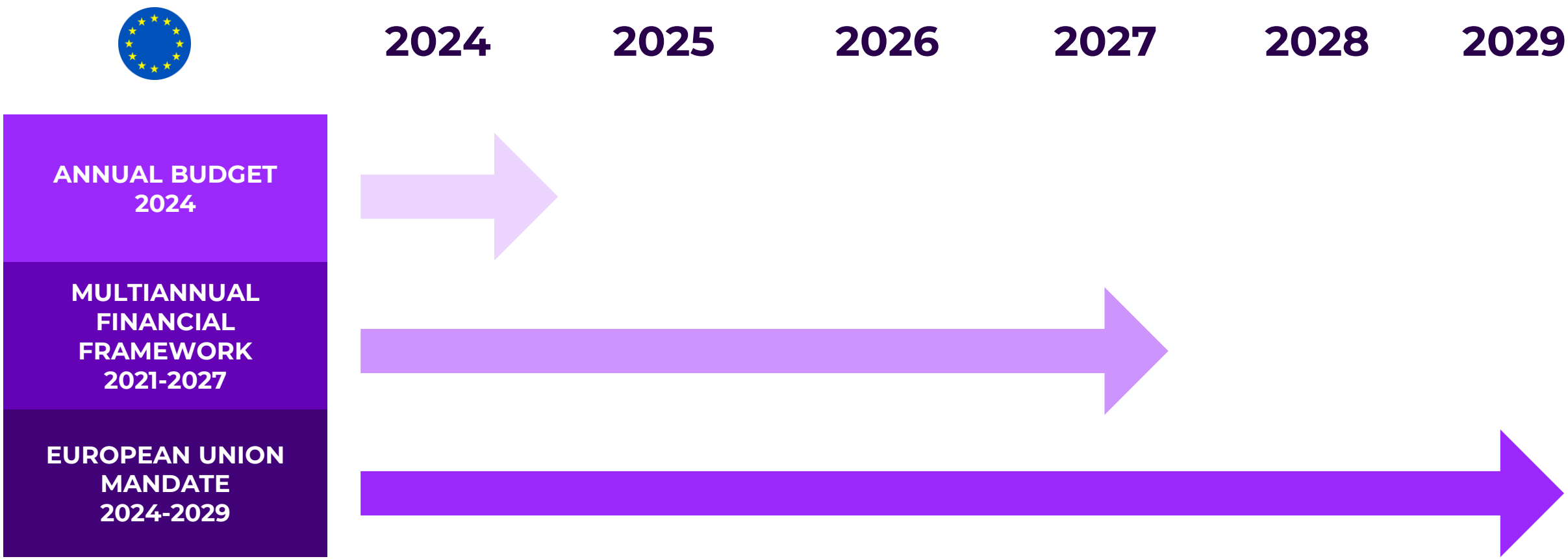
1. Reach agreement in **trilogues**
2. **EP ENVI** to endorse the agreement
3. **EP Plenary** to vote on the agreement
4. **Council** to vote on the agreement

GENERAL PHARMACEUTICAL LEGISLATION (GPL)

1. **MS** to reach an agreement on their position
2. Trilogues between **Commission, Parliament and Council**
3. **EP ENVI** to endorse the agreement
4. **EP Plenary** to vote on the agreement
5. **Council** to vote on the agreement

Incisive Health
Inizio Evoke

The new European term is not aligned with its budget



Q&A

Incisive Health
Inizio Evoke

Thank you!

III.

The Revision of the EU General Pharmaceutical Legislation

Victor Maertens and Stefano Romanelli, EUCOPE

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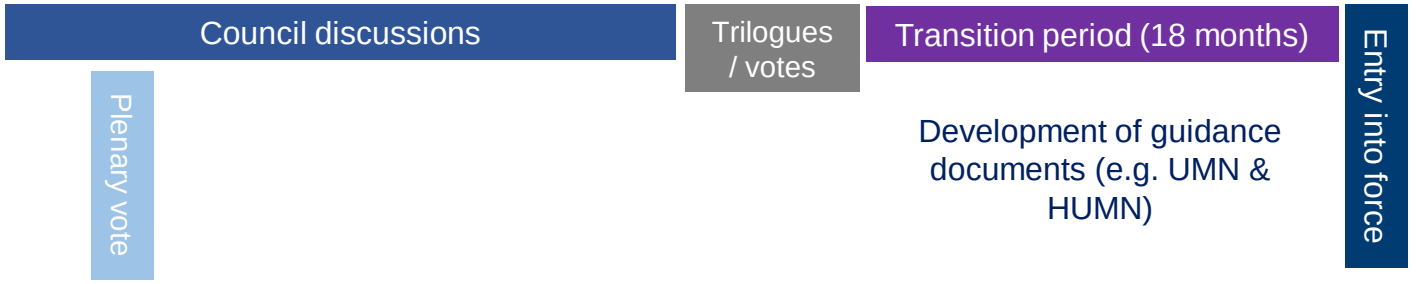
European Confederation of Pharmaceutical Entrepreneurs AISBL

Potential implementation scenarios

These are all estimates – biggest factor will be length of Council discussions

Likely timeline – Plenary vote 10 April, and long discussions in Council



Long process – Significant delays in Council discussion and long trilogue

The reports adopted by the European Parliament

European Parliament Reports

Key takeaways

- Overall, the **European Parliament** (EP) **reports broadly reflect the Commission's initial proposal**

- Several important changes have been made that **improve the Commission's initial proposal:**
  - Additional predictability to the incentives framework
  - Removal of launch conditionality, replaced by a new access proposal
  - Clarifications on regulatory provisions

- Other changes have **maintained or reinforced the negative proposals** made initially by the European Commission
  - Implementation of the access proposal
  - Definition of (high) unmet medical needs (H-UMN)
    - With minor improvements or clarifications adopted
  - Stronger environmental requirements

Revision of the GPL

Next Steps

- This is NOT the final legislative text
- **The Council is still working on their positions**
- **Trilogues** will need to take place when both EU Institutions have adopted their “first reading” positions
- We should not expect an agreed text before 2026, which would **go into effect in 2028** at the earliest

What will EUCOPE be doing:

- Actively engaging with Council and Member States
- Updating EUCOPE narrative on the proposal, taking into account the EP reports
- Planning to discuss with MEPs after elections and Commission, in preparation of trilogues

HUMN

Art. 70 Regulation

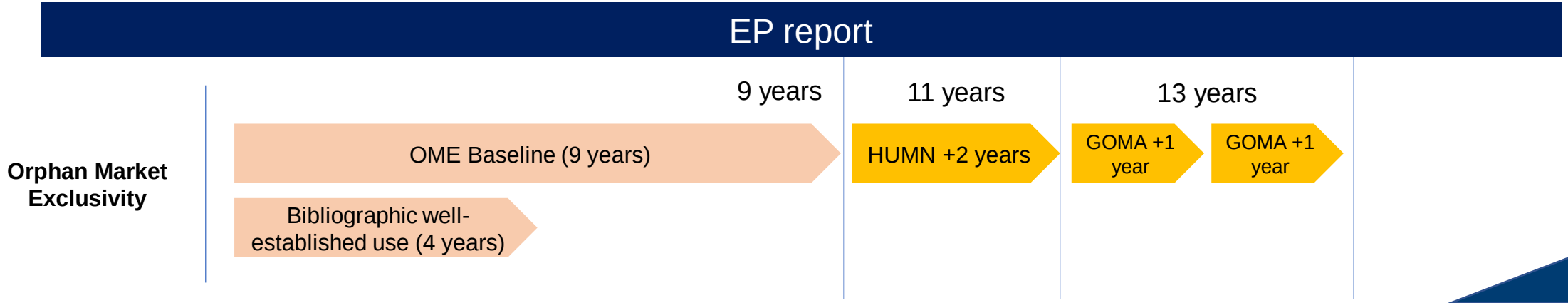
No significant change from Commission proposal, but addresses one of EUCOPE's initial concerns – what happens to first-in-disease therapies

Commission Proposal	EP Report
1. An orphan medicinal product shall be considered as addressing a high unmet medical need where it fulfils the following requirements: a. there is no medicinal product authorised in the Union for such condition or where, despite medicinal products being authorised for such condition in the Union, the applicant demonstrates that the orphan medicinal product, in addition to having a significant benefit, will bring exceptional therapeutic advancement; b. the use of the orphan medicinal product results in a meaningful reduction in disease morbidity or mortality for the relevant patient population	1. An orphan medicinal product shall be considered as addressing a high unmet medical need where it fulfils the following: a. there is no medicinal product authorised in the Union for such condition; or; b. where a medicinal product is authorised for such condition, addition to having a significant benefit, it will bring exceptional therapeutic advancement and the use of the orphan medicinal product results in a meaningful reduction in disease morbidity or mortality for the relevant patient population.

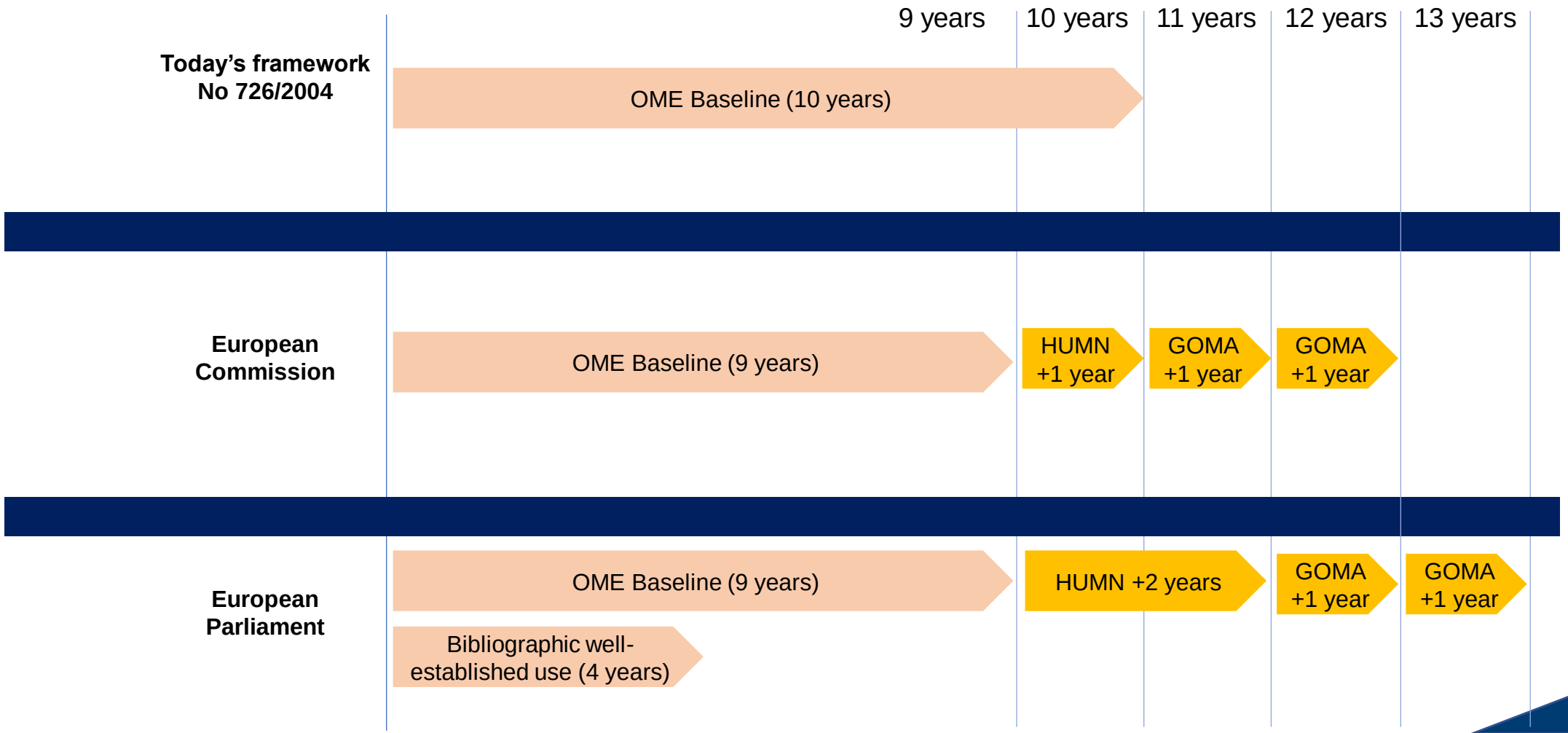
OME Modulation/ incentive framework

Art. 71 Regulation

- Modulation framework
  - 9-year baseline for all orphans
  - 11 years for HUMN (raised from the Commission proposal)
  - 4 years for bibliographic assessment
- GOMA (global orphan marketing authorization) – extension of baseline protection
  - Remains unchanged at +1 year per new orphan indication, capped at +2
  - Submissions for extension must come 2 years before the ORIGINAL OME would expire (e.g. at year 7)
- Maximum possible OME is 13 years & linked to the API
  - Non-HUMN can expect 9 to 11 years
- **Confusion regarding OME**
  - Article 71.6 – OME shall not prevent the GRANTING of a MA for a similar medicinal product, including generics or biosimilars



OME framework compared (simplified)



Unmet medical needs (UMN)

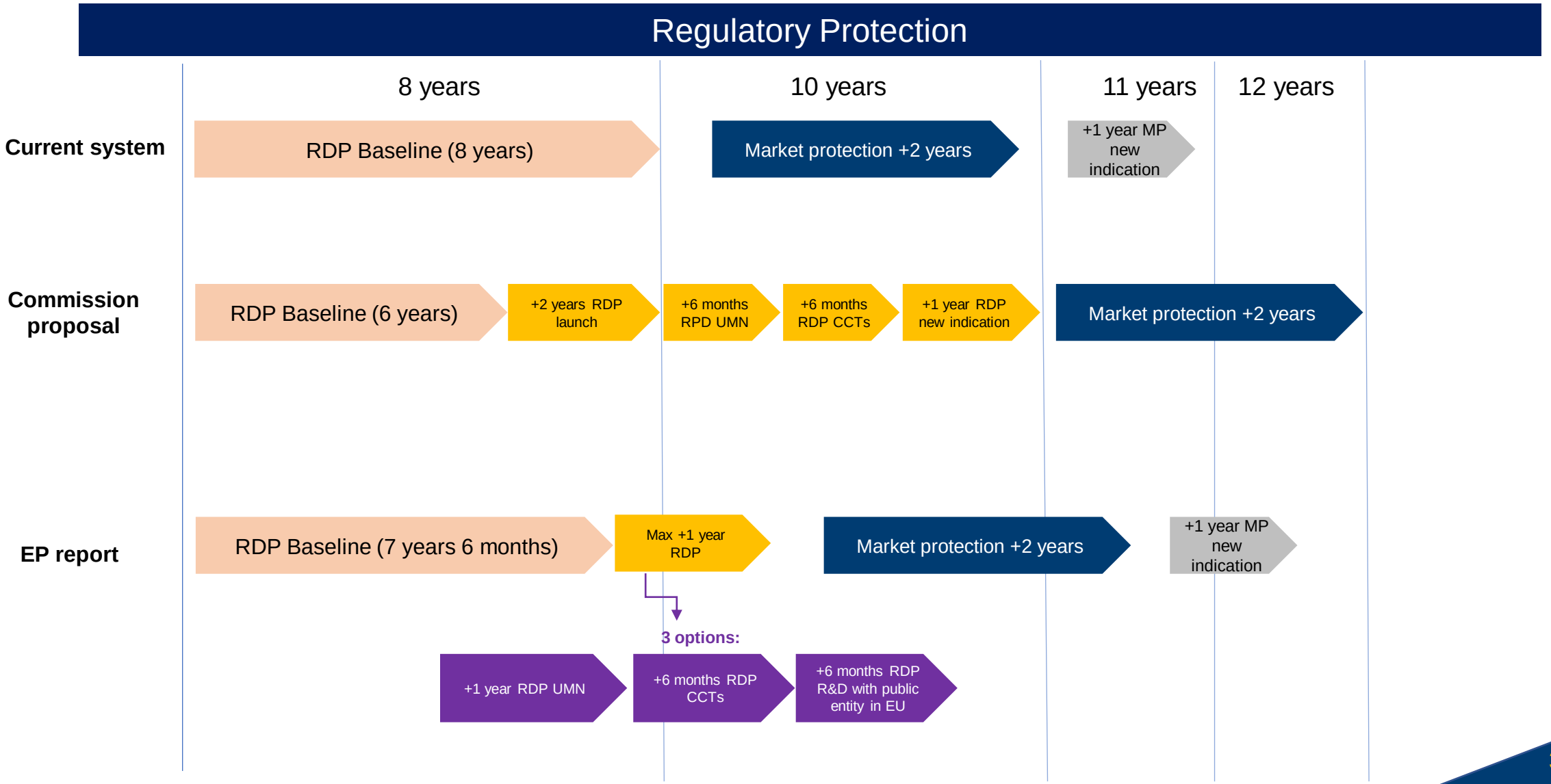
Art. 83 Directive

- **No changes to the criteria**, in comparison to the Commission's proposal

> A medicinal product shall be considered as addressing an unmet medical need if at least one of its therapeutic indications relates to a **life threatening or severely debilitating disease** and the following conditions are met:
>
> (a) there is **no medicinal product authorised** in the Union for such disease, or, where despite medicinal products being authorised for such disease in the Union, the disease is associated with a **remaining high morbidity or mortality**;
>
> (b) the use of the medicinal product results in a **meaningful reduction in disease morbidity or mortality** for the **relevant patient population**.

- However, the **reward for addressing UMN is increased to 12-month RDP** (6-month in the Commission's proposal)
- Moreover, the **EMA shall consult industry** and other stakeholders (as per art. 162 Regulation) in **adopting scientific guidelines** (a positive clarification to Commission's proposal)
- EP proposes positive clarifications in the recitals on UMN:
  - **UMN should not influence P&R decisions**
  - The concept of "morbidity" should include various factors, such as quality of life, burden of disease and treatment, and take into account Patient Experience Data (PED)
- **All orphan drugs will be considered as addressing UMN**

Regulatory Protection Modulation



Launch Conditionality/Access proposal

Art. 81-82 Directive / Art. 58new Directive

- **Member States must request** that a MAH file for P&R in their country **within 12 months** of receiving MA
  - In case of a **positive P&R**, **MAH must, to the best of their ability ensure appropriate and continued supply** to cover the needs of patients in that Member State in line with the obligations of the MAH under the Directive
- MAH must **file for P&R within 12 months of a request, or 24 months** if they are a SME, non-profit, or at time of granting MA has fewer than 5 centralised marketing authorisations
  - Separate timelines can be negotiated
- **OMPs and ATMPs may choose to only fulfil the P&R** filing requirement where a **relevant patient population is identified –** justify NOT filing in specific countries
- The EC will **establish list of products to be exempted** from this requirement
- A conciliation mechanism is established
- **Non-compliance with the obligations** shall be subject to the imposition of **effective, proportionate and dissuasive financial penalties**.

Significant changes expected in the Council discussions

Updates from the Council and next steps

Council discussions

Belgian Presidency

- Priorities of the Belgian Presidency
  - Finalise a deal on **medicine shortages and supply**
  - **‘Incentives cluster’** (including incentives and regulatory support)

- Progress moving slower than expected
  - Only preliminary agreement on medicine shortages reached
    - This was expected to be a less controversial topic
  - Limited discussions on incentives, (H)UMN and launch
    - This is seen as the most controversial topic, with very different positions from Member States on the various issues
    - Some progress on regulatory sandboxes, PRIME and other regulatory support

Council discussions

Upcoming Hungarian Presidency

- Priorities in the revision of the GPL:
  - Finalise agreement on medicine shortages
  - Incentives cluster
    - The approach will be adjusted after political discussions during June EPSCO
  - Cluster of more technical topics, related to marketing authorisation
    - This should be less controversial and proceed faster

- Approach is to consolidate debate on key topics, not expecting a general agreement

EUCOPE engagement

Wider policy environment

- GPL discussion will *appear* less visible in Brussels
- Discussions on healthcare focused on Biotechnology and Competitiveness themes
  - Important to understand health priorities of new MEPs and incoming Commissions
- 2024 will remain a ‘unconventional’ year for Brussels lobby work

Planned engagement

- EUCOPE priorities continues to reflect **existing positioning**
  - Thematic discussions ongoing in the ISG and PSTF
- Ongoing **Member States engagement**
  - Engagement in **national capitals** and **health attachés**
  - Taking place either individually or with companies / national trades
  - Detailed discussions in EUCOPE's relevant working groups
- **European Parliament** engagement
  - Leverage MEPs to keep healthcare on the political agenda

Planned activities

Broader outreach

High-level letter on EU competitiveness

- Short top-line document to be signed by EUCOPE's Members CEOs / Directors Europe on the **pharmaceutical ecosystem**
  - Touch on GPL, EU HTA, EHDS and beyond
- Targeting new MEPs and Commission (+ Member States)
  - Planned publication in September when new MEPs sit and Commissioner hearings begin
- Keep healthcare and competitiveness high on the agenda
- Signatures open until late August

Communication activities

- Members' quotes on revision GPL
- Kangaroo event in Q4 2024
- Parliament Magazine article series
  - Linked to the high-level letter, but also broadly on EUCOPE's priorities
- Webinars, podcasts and blogposts on key GPL themes

Thank you for your attention!

IV.
Misfolding biomarkers: a new approach for early stage classification of neurodegeneration

Prof. Dr. Klaus Gerwert, betaSENSE GmbH

THE MISFOLDING OF BIOMARKERS CLASSIFIES NEURODEGENERATIVE DISEASES

Prof. Dr. Klaus Gerwert

Founding & Managing Director of PRODI
CEO of betaSENSE

Members Meeting, EUCOPE, Brussels
19. 6. 2024

- Introduction
- Method
- Alzheimer´s disease (published)
- Parkinson´s disease (un-published)

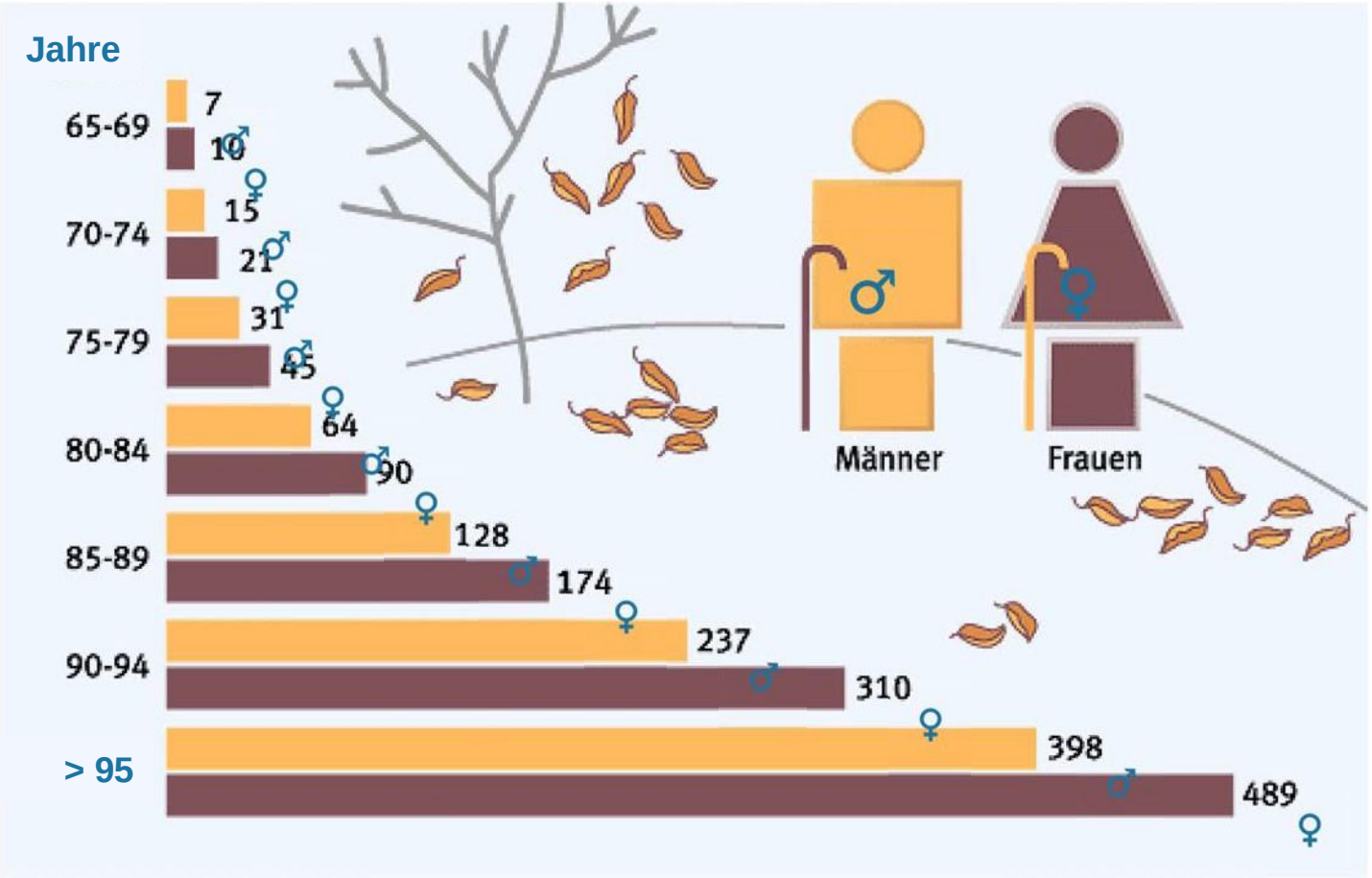
Morbus Alzheimer

- > 1.5 million cases/families in Germany / >40 million cases/families worldwide
- most common type of dementia ~70 %
- global costs ~ 1 trillion US$ (care staff etc.)
- cognitive disorder: memory, orientation, speech disorders, movement disorders, depression
- about 3 % genetic, rest sporadic

Greatest Risk – factor for Alzheimer: Aging

betaSENSE

of 1000 people in this age



⇨ Challenge for healthcare systems

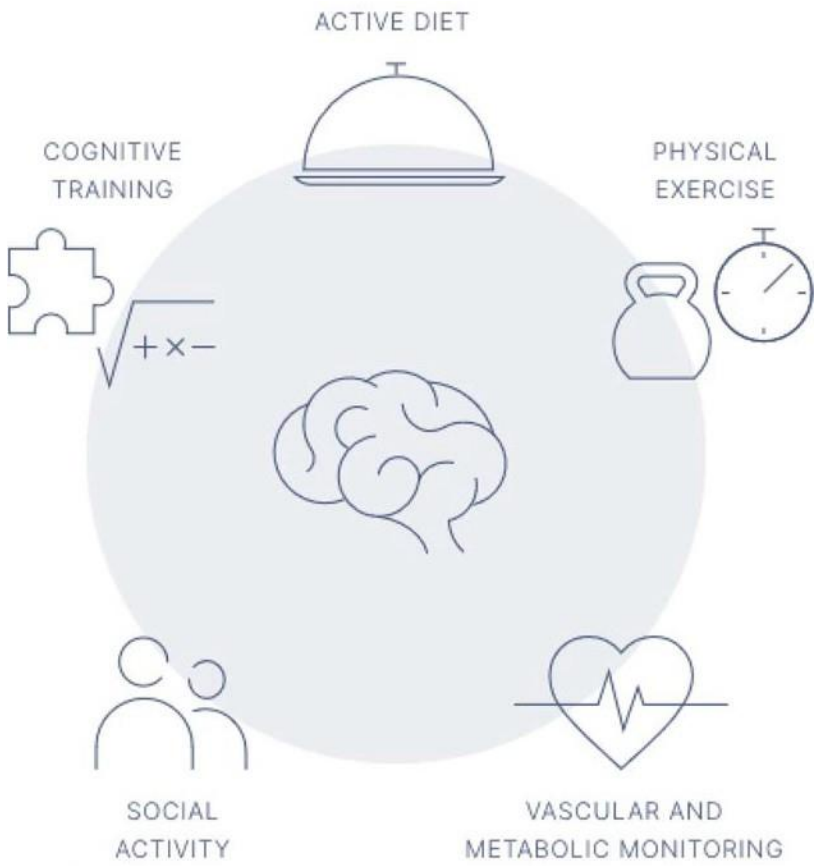
Source: Federal Statistical Office, Robert Koch Institute

Dementia Prevention

betaSENSE

Prevention is pivotal to reduce the occurrence of dementia worldwide

⇨ **Lifestile change**



FINGER Study started 2017

⇨ **beneficial effects on elderly population**

+25% Overall cognition	+150% Executive function
+40% Memory function	-60% Other chronic diseases
+83% Processing speed	

Results from 1260 participants, age 60-77.

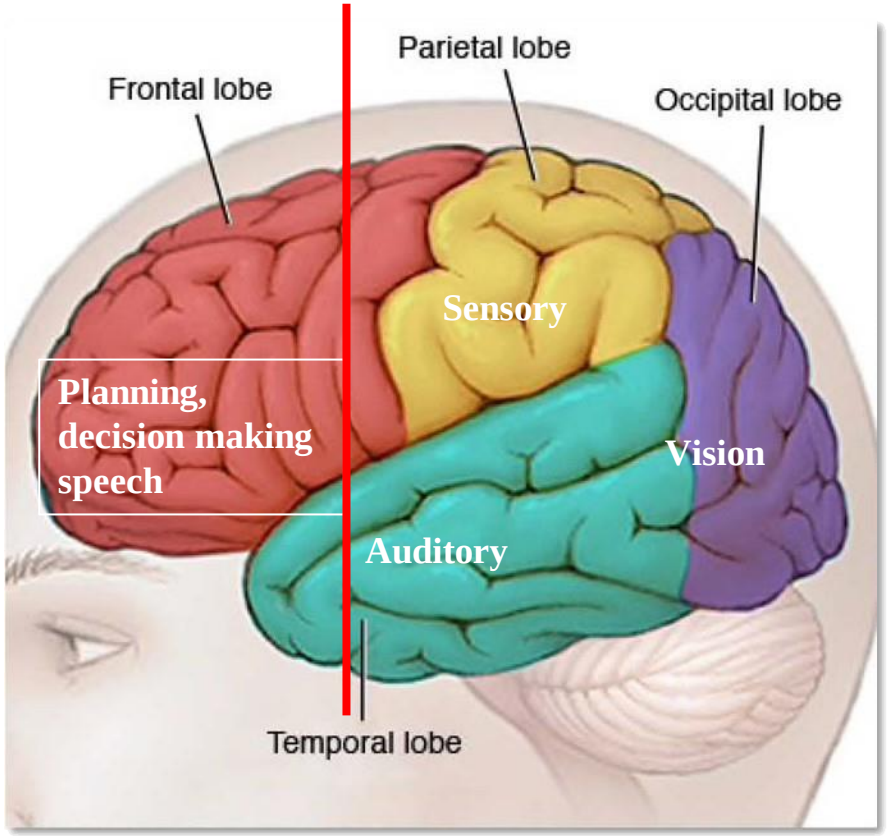
www.fingers.com

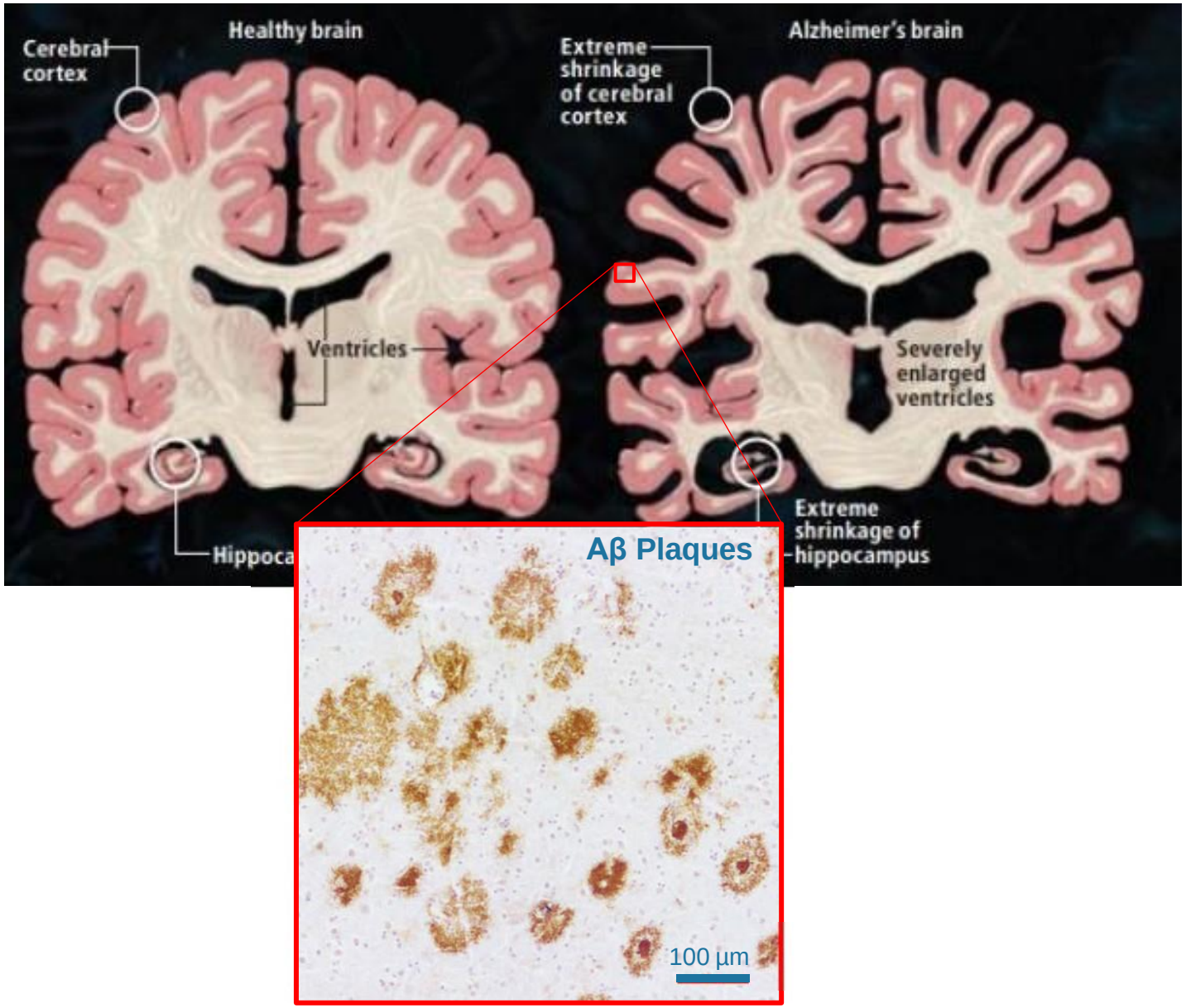
M. Kivipelto et al. 2019 Alzheimer's & Dementia

Diagnosis today relays mostly on symptoms classified by questionaries

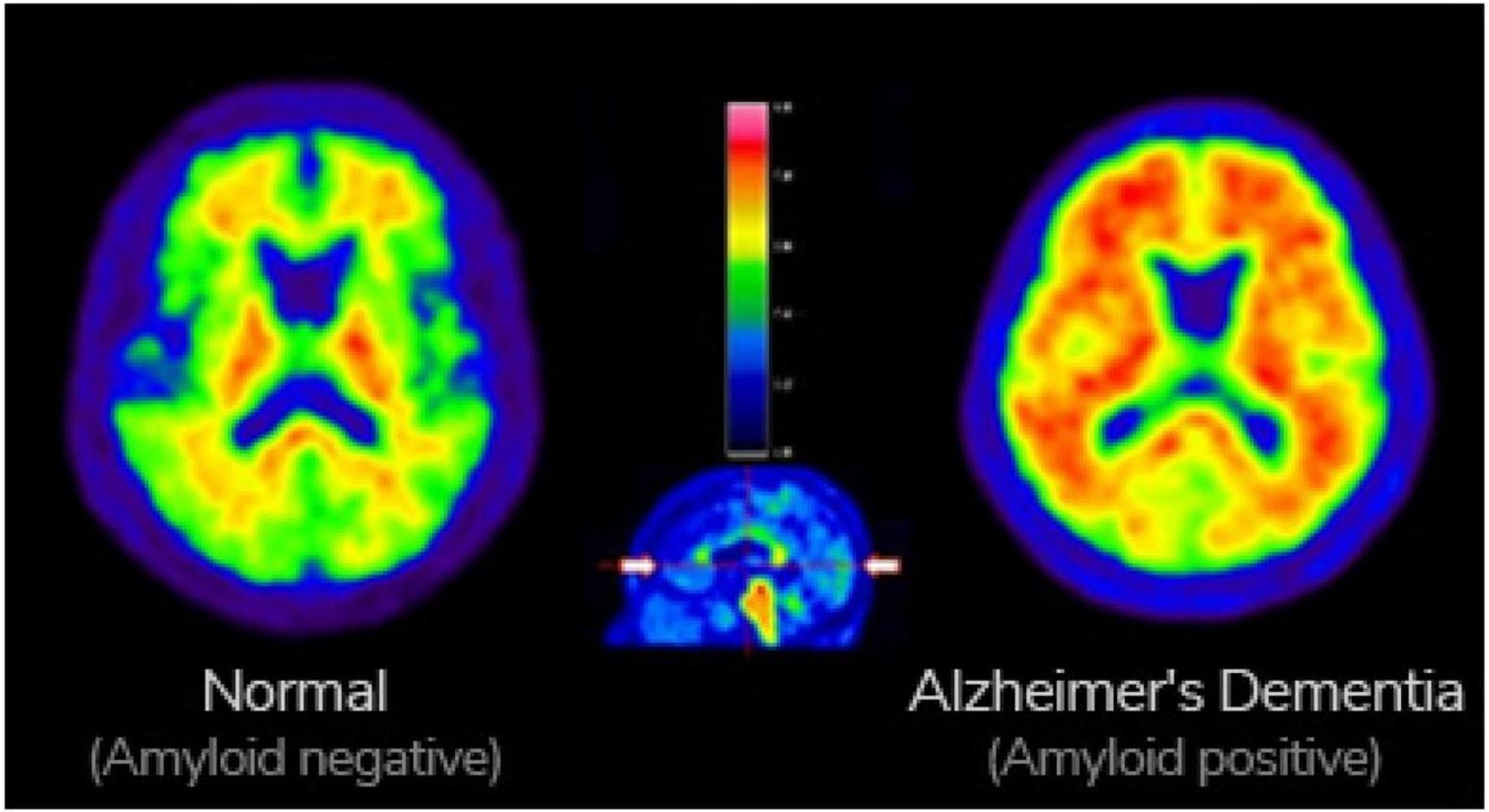
betaSENSE

Brain-Alterations in AD: aggregation of Aβ proteins





Clinical Alzheimer Diagnosis:
PET Scanning Visualizes Amyloid Plaques



Amyloid PET

- **Radiotracers are visualized which are bound to amyloid plaques**
- **SUV above a threshold**

New drugs resolve the amyloid plaques an delay progression!

But only in early stages: Aduhelm, Lecanemab, Donanemab

betaSENSE

PET scanning is the diagnostic test used in all current clinical studies to show Amyloid plaques.
But at this stage the brains seem already irreversible damaged.
Therefore, therapy response seems limited but might be largely improved by intervention in an earlier stage before plaques are formed.
Therefore we need an
very early fluid biomarker

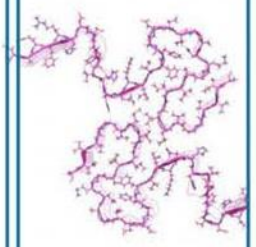
Alzheimer‘s is a Continuum Disease

betaSENSE

monomers

≈ 0.3 x 4 nm

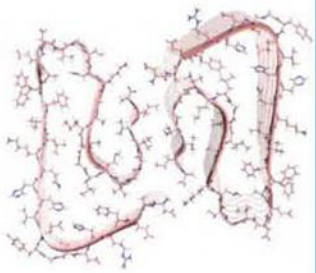
-17 yo



Oligomers

≈ 5 x 10 nm

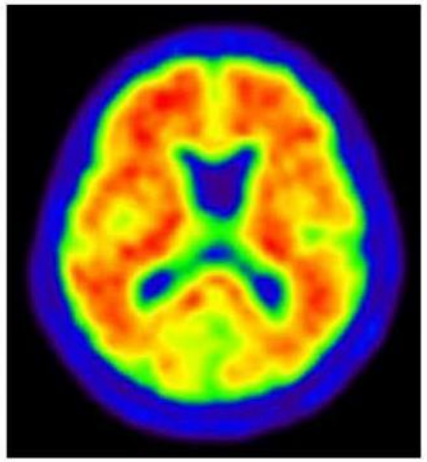
-10 yo



Fibrils

≈ 15 x 120 nm

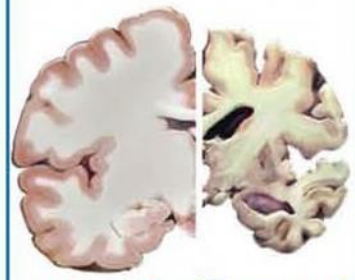
-8 yo



deposition / neuroinflammation

Ø 20 - 200 µm
resolution ~2mm

-4 yo

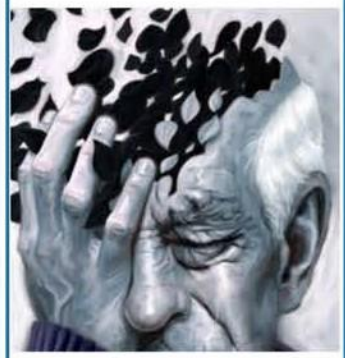


normal diseased

brain atrophy

changes 1 - 5 cm

-2 yo



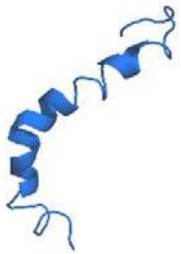
MCI	moderate	severe	DEATH
0	2	6	8

Infrared Absorbance Spectra of Different Abeta Conformations

betaSENSE

Aβ monomers, oligomers and fibrils show different absorbance maxima in the IR

Monomer
random coil,
alpha-helical



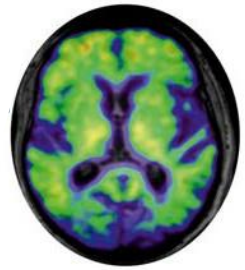
Misfolding

Oligomer
beta-sheet
anti-parallel

Aggregation

Fibrills
beta-sheet
parallel

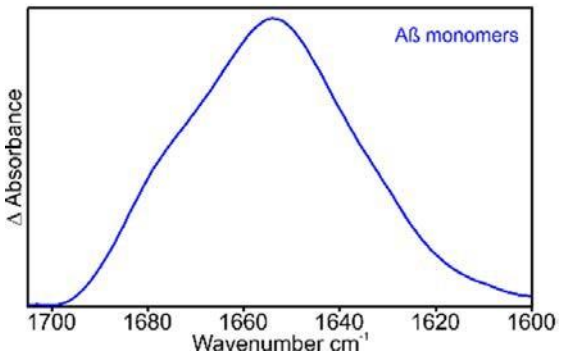
Deposition



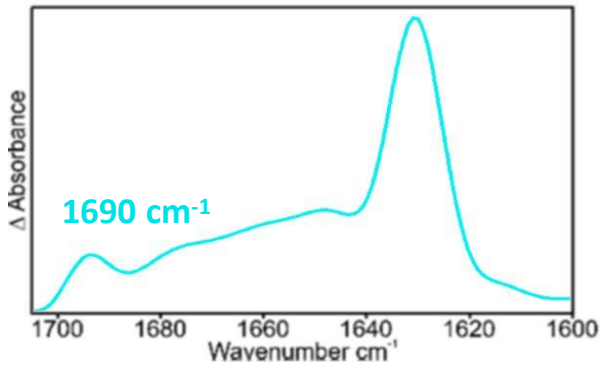
in Aß plaques

READ OUT: Absorbance max

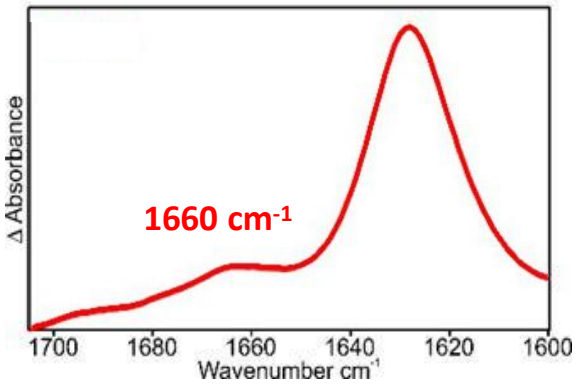
1652 cm^{-1}



1630 cm^{-1}

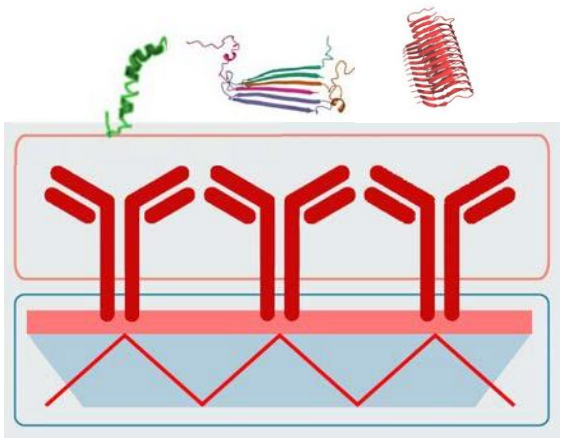


1624 cm^{-1}



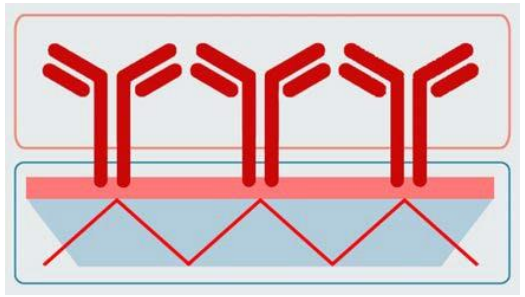
Shahmoradian, S.H., et al *Nature Neuroscience* (2019)

How is misfolding monitored in body fluids?



minus

background



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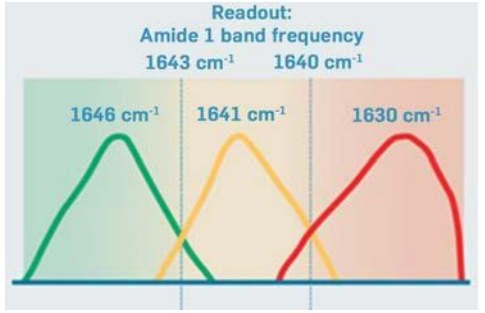
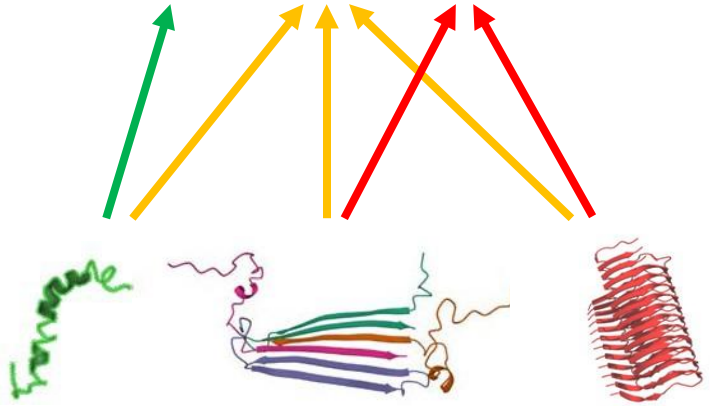
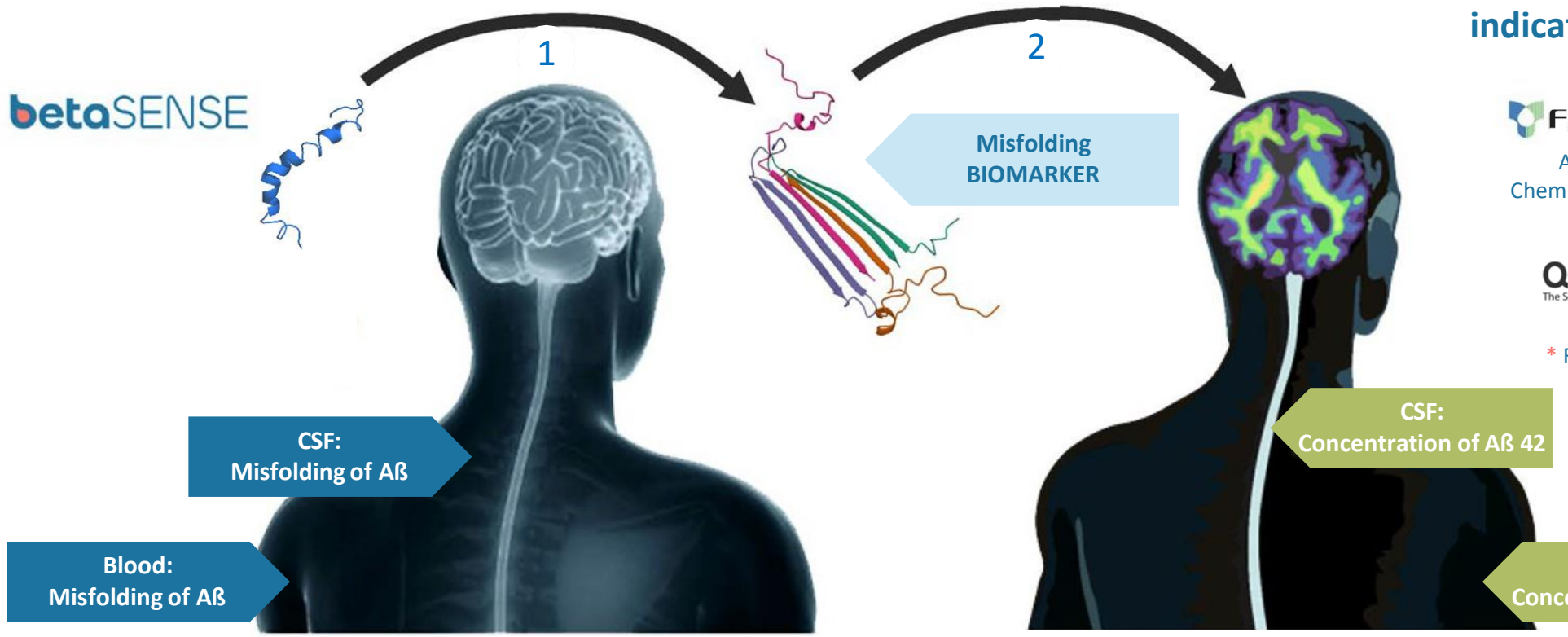




infrared spectroscopy

- **Antibody**
  - ATR surface functionalized with catcher molecule
  - All conformers are bound
- **Blocking layer**
  - Prevent unspecific binding
- **Difference spectroscopy**
  - Subtraction of large background absorbance

Misfolding as Biomarker Indicates AD-Risk Before Plaque Formation



Abeta-Concentration biomarkers indicate plaque formation

FUJIREBIO
Aβ42/40
Chemiluminscence

Roche
Aβ42/40
Electrochemiluminscence

Quanterix
The Science of Precision Health
Aβ42/40
* Fluorescence

C2N DIAGNOSTICS
Aβ42/40
*Massspectrometry

Later stage biomarkers:
P-tau 181 and 217
(AD and ND)

Improved therapeutic window

Clinical studies so far at

Symptom free stage

Mild symptoms

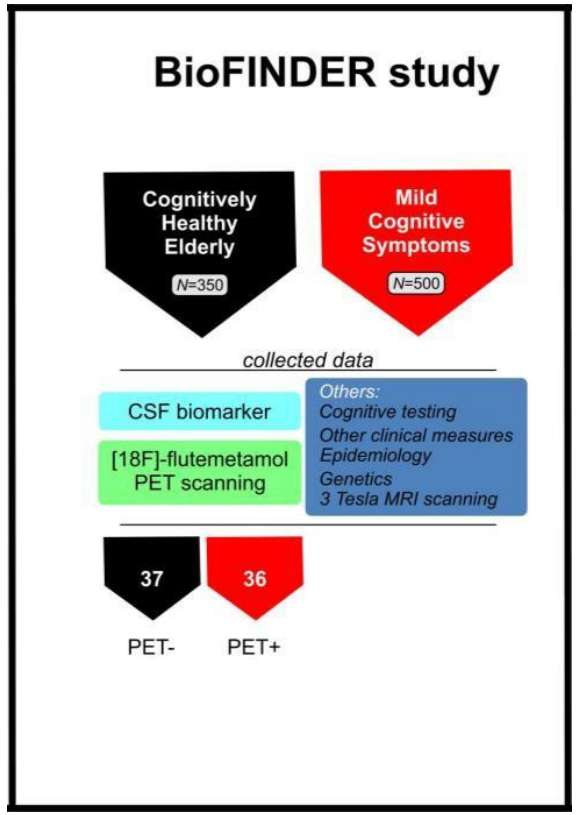
Healthy

Clinical Alzheimer

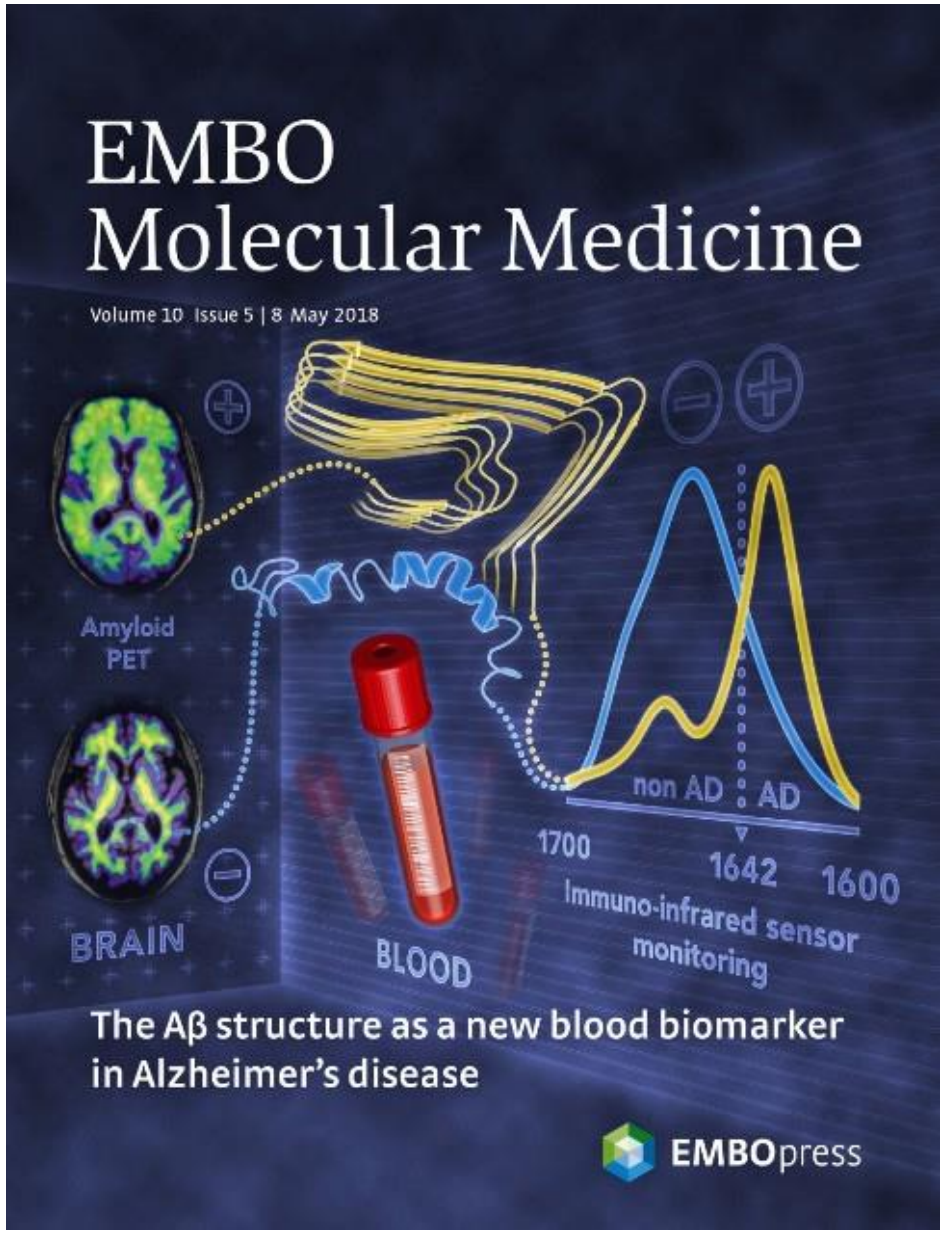
Prodromal stage

betaSENSE

Misfolding biomarker in comparison to PET-Scanning



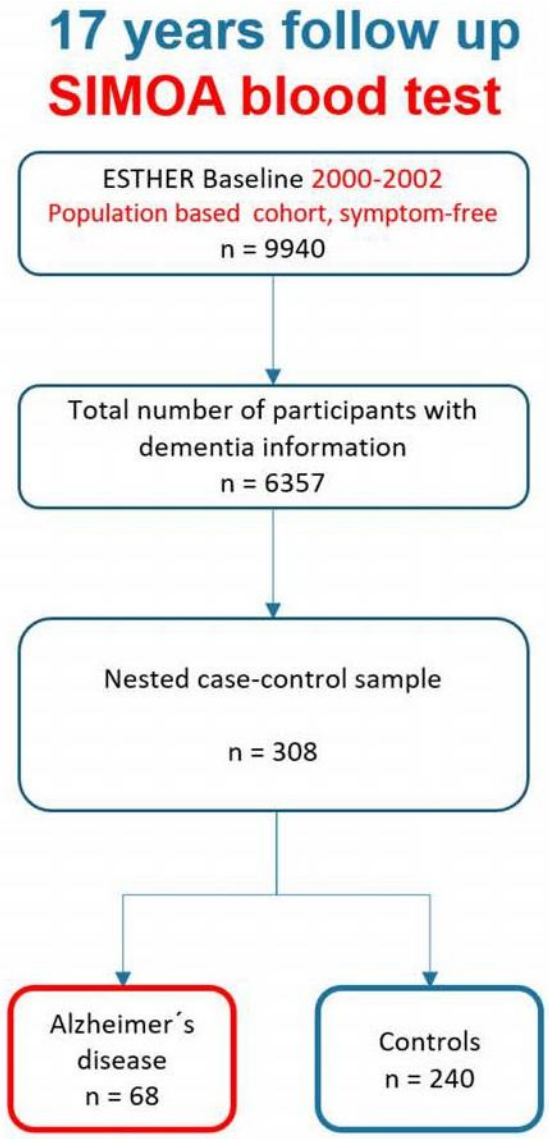
Oskar Hansson, Sweden



***p* value = 5 x 10^{-4}**

Symptom-free Participants in a Real World Cohort (H.Brenner, DKFZ)

betaSENSE



Predictor	AUC: 17 years	14 years	6 years
Aβ misfolding (AD)	0.79	0.84	0.94
GFAP (ND)	0.74		0.76 (9-0 years)
Aβ misfolding + GFAP	0.83		
Aβ misfolding + ApoE	0.80	0.87	0.99*
P-Tau 181 (AD,ND)	0.60		0.69 (9-0 years)

* + 42/40 ratio

6 years: Subjective Cognitive Declined

Stockmann, … Scheltens, van der Flier, Nabers, Teunissen, Gerwert. *Alzheimer's Research & Therapy* (2020)

14 years: symptom-free

Nabers, … Hansson, Gerwert, Brenner. *EMBO Mol Med.* (2018)

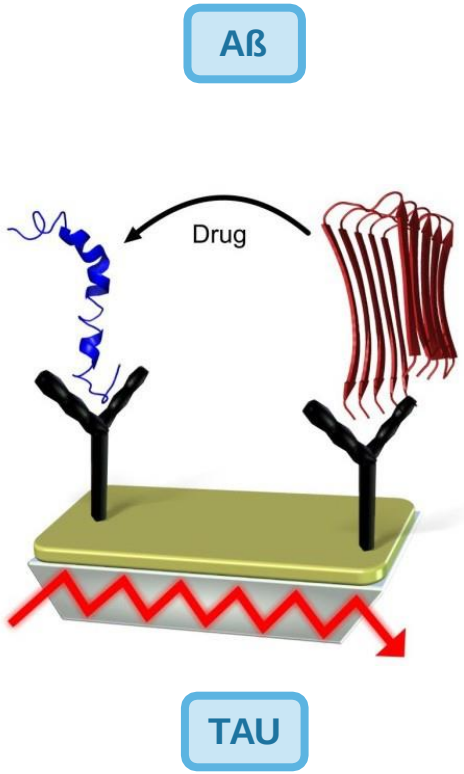
17 years: symptom-free

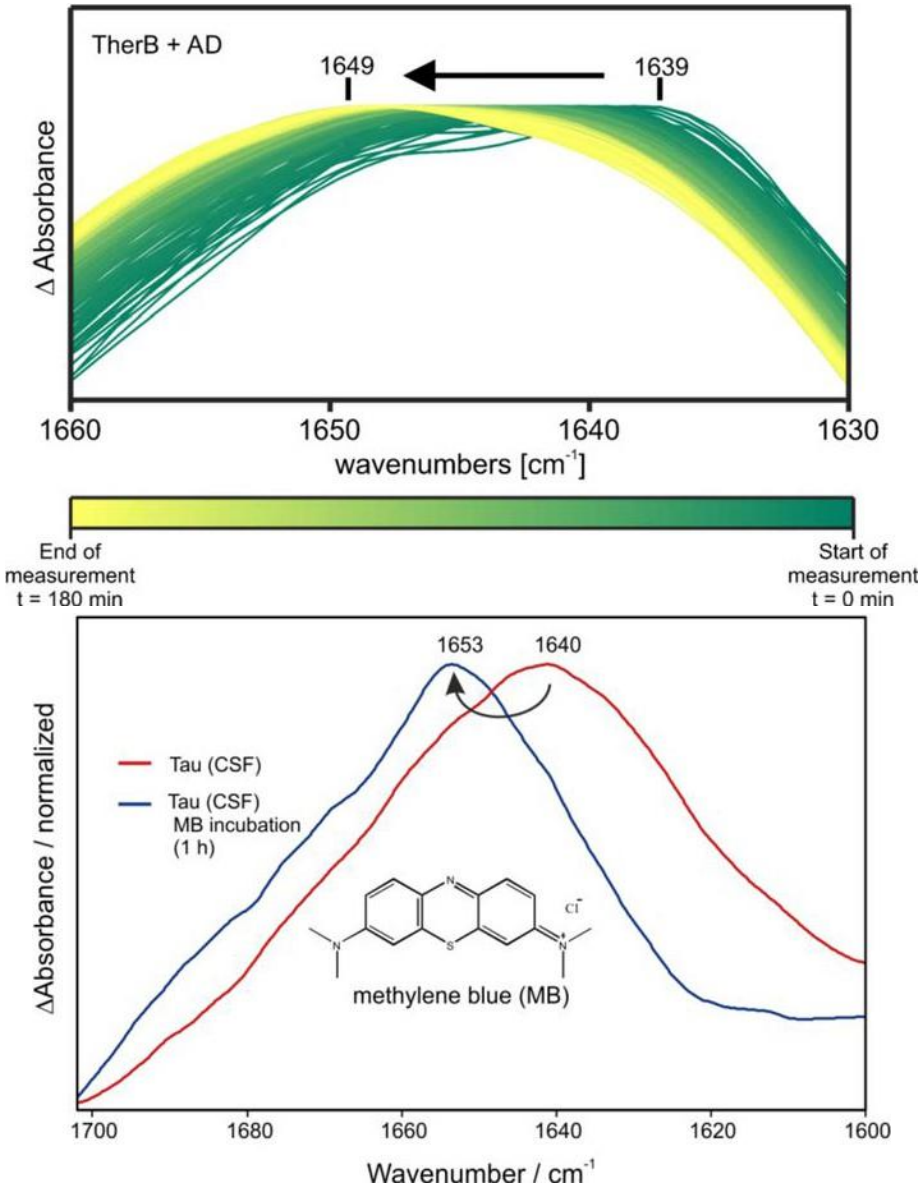
Stocker, Beyer, … Gerwert, Brenner. *Alzheimer´s & Dementia* (2022) Simoa
Beyer, Stocker, … Gerwert, Brenner. *Alzheimer´s & Dementia* (2022) iRS

Aß misfolding biomarker is discovered and validated in CSF and Blood in symptom-free stage of the Alzheimer´s continuum.

Therapy response

Therapy Response Due to Drugs





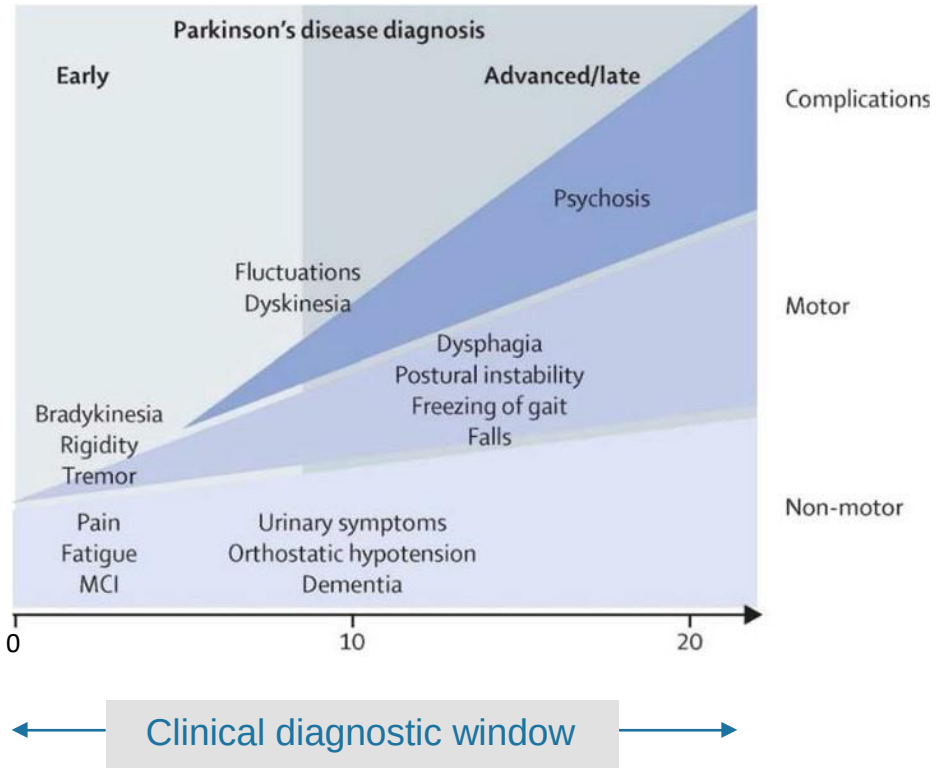
Patent EP16199805 Gerwert,
Nabers, Schartner; Schartner, Nabers, Budde, Lange, Hoek, Wiltfang, Kötting, Gerwert,
ACS Medicinal Chemistry Letters, 2017

Parkinson´s disease

Parkinson Disease

Unmet medical need: Biomarker

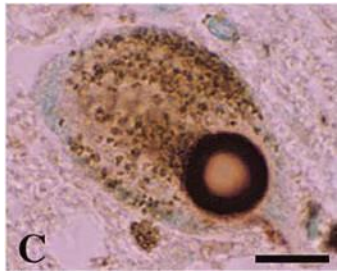
Clinical diagnosis



Clinical diagnostic window

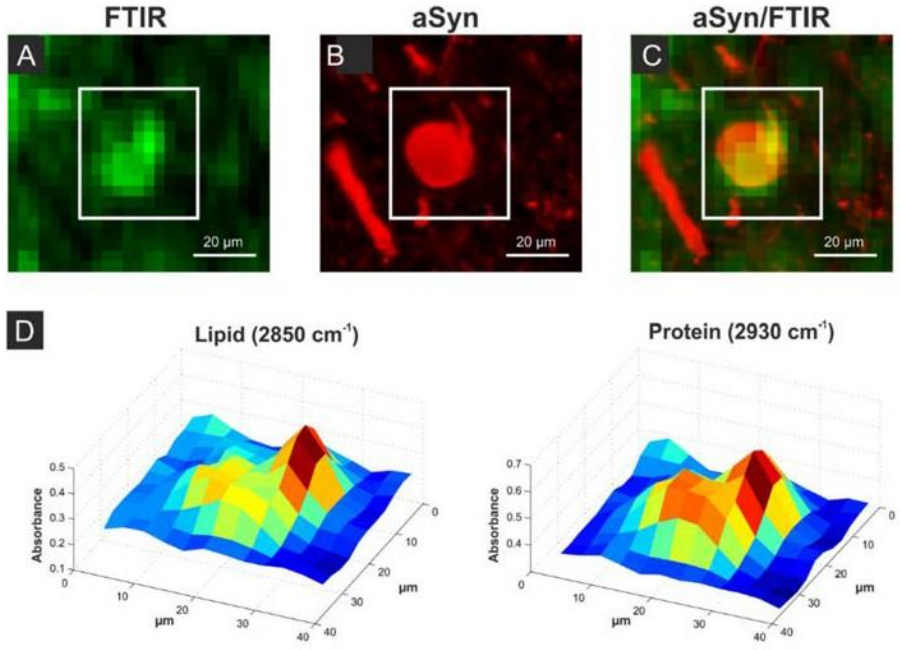
Rodriguez-Oroz, M. C. et al., Lancet Neurol.8, 1128–1139
Kalia, L. V. & Lang, A. E., The Lancet 386, 896–912

Morbus Parkinson: Lewy bodies



Lewy body

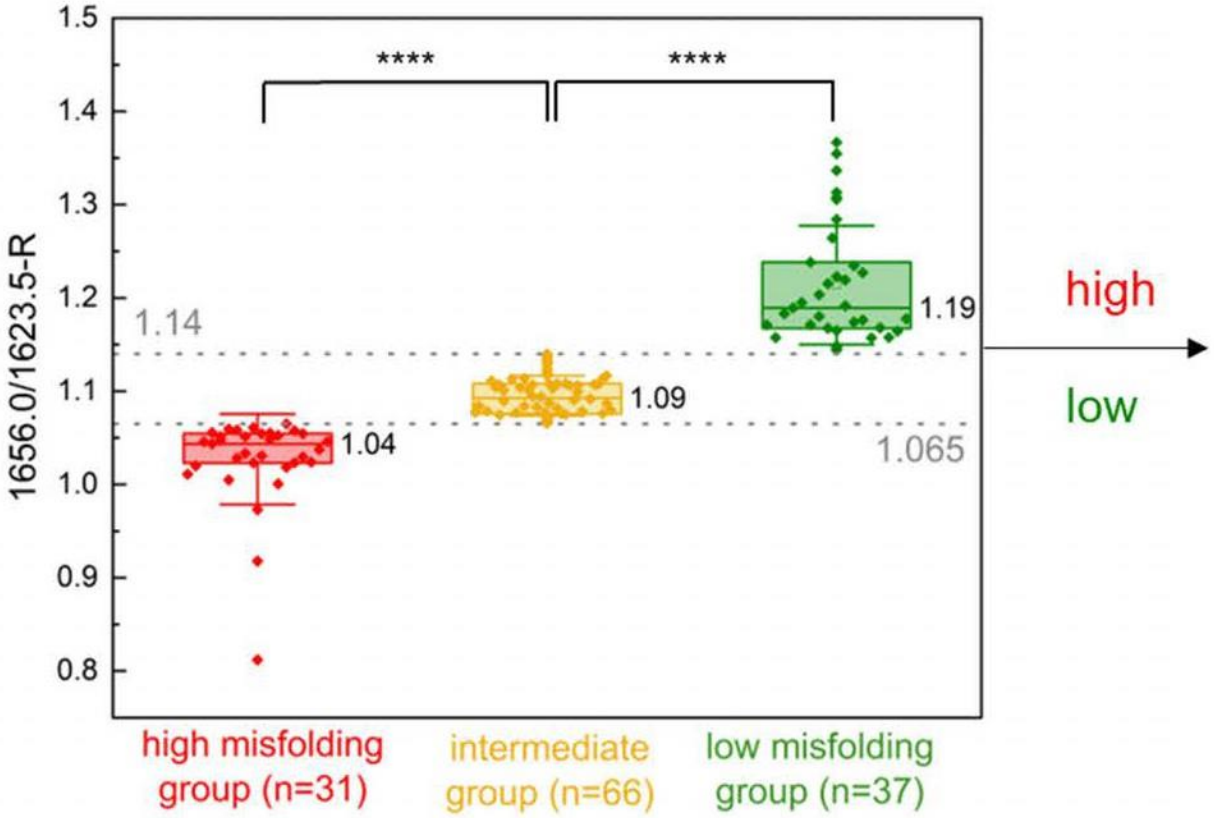
IR-Imaging of Lewy bodies



Wilma D. J. van de Berg, Amsterdam; Matthias Lauer & Markus Britschgi, Roche
Shahmoradian, Sarah et al., *Nature Neuroscience* (2019)
Moors, Tim. et al, *Acta Neuropathologica* (2021)

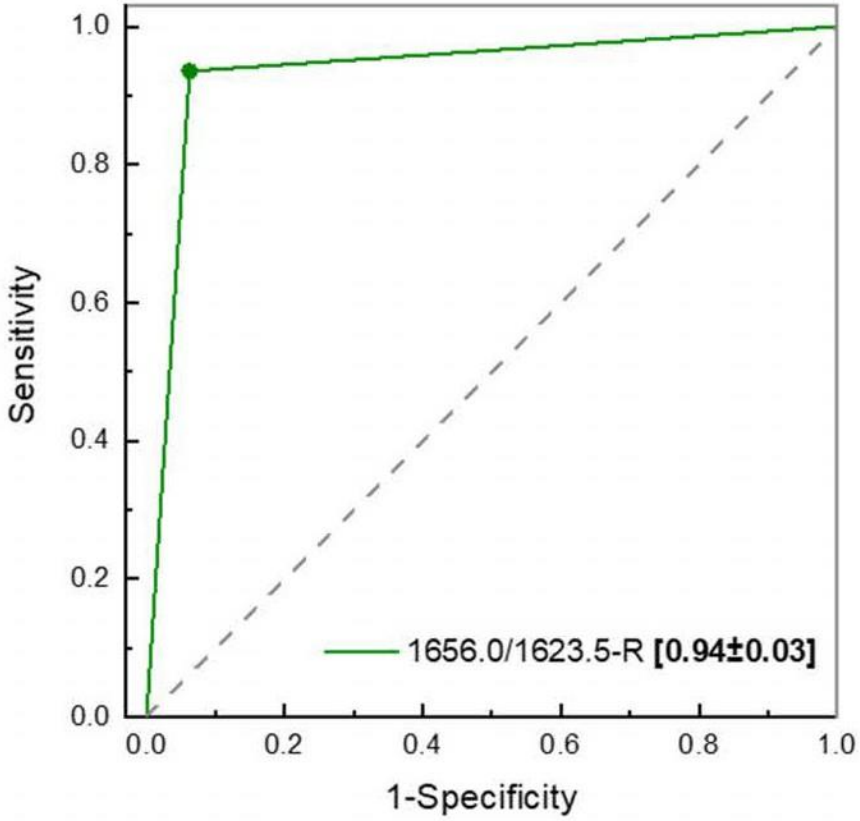
Combianation of Discovery and Validation Results

Traffic Light Scheme for Detailed Risk Determination



high

low



Specificity: 94 %
Sensitivity: 94 %

The misfolding biomarker

- classifies PD / MSA
- differentiate it from other atypical PD

Next steps:

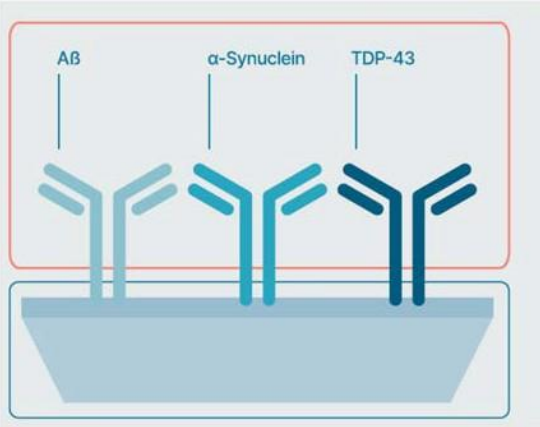
- Early symptom-free stages
- Treatment response
- Plasma

immuno-InfraRed Sensor (iRS) stratifies neurodegeneration to improve therapy response in early stages

betaSENSE

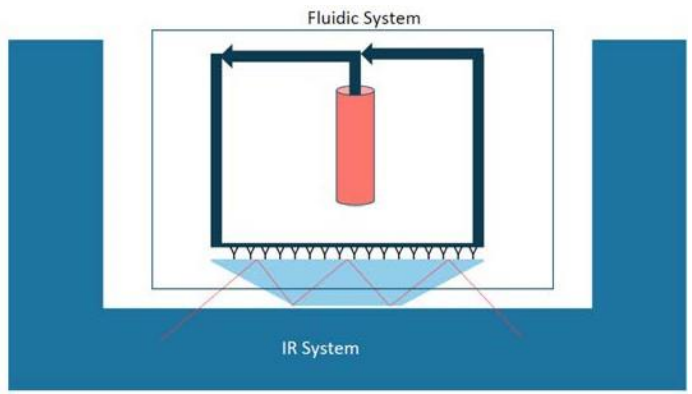
Consumables

Different capture antibodies



Fully automated, patented Instrument

Fluidic system for body fluids and Infrared monitoring

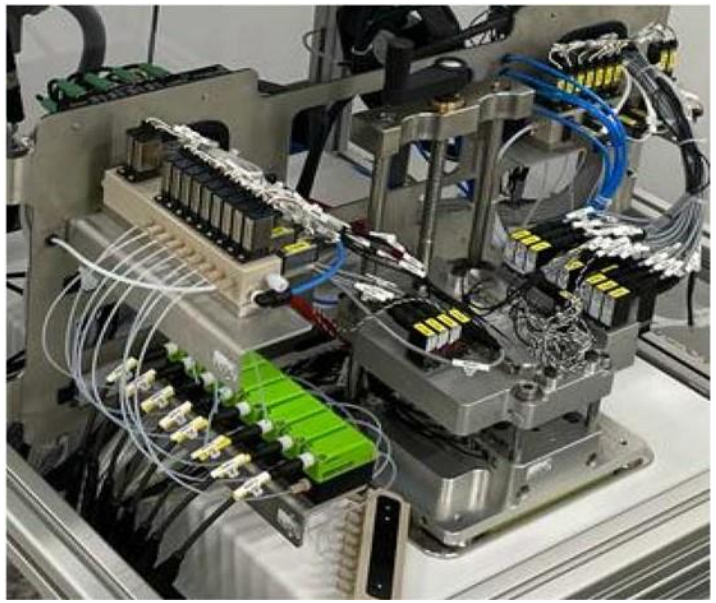


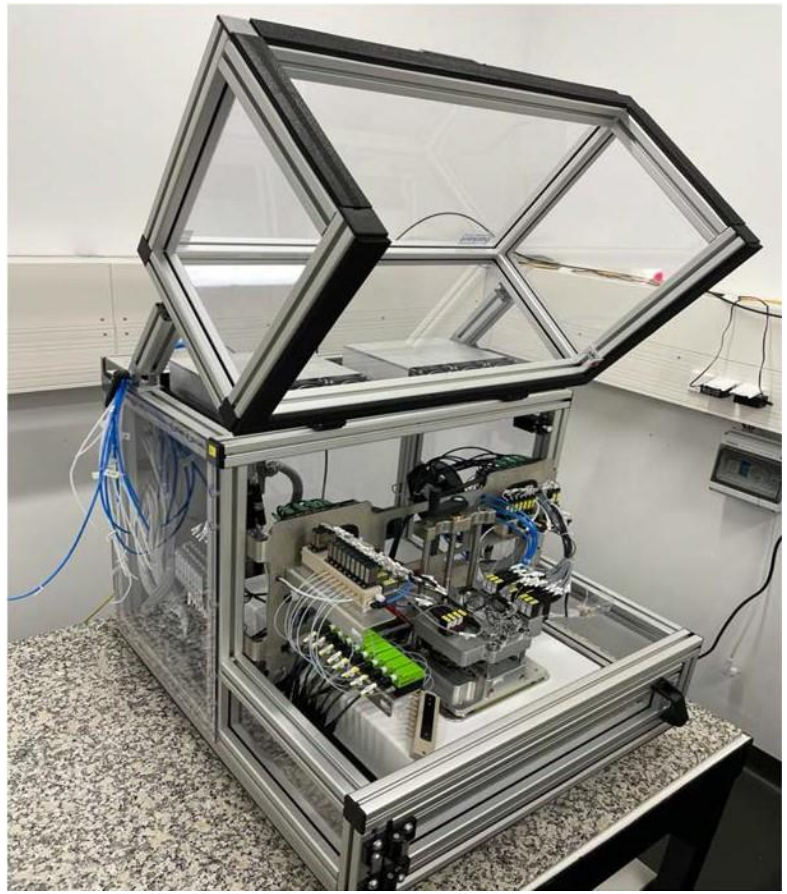
iRS for In-house Measurements (10x); GCLP will be established in Q4 24

automated fluidic

Quantum-Cascade-Laser based IR system

iRS 1.0 QCL
CE certified





betaSENSE

Misfolding fluid biomarker

- Identifies in a preclinical stage Alzheimer`s
- Classifies Parkinson
- Classifies ALS
- monitors therapy response

V.
The Healthcare Chain Institute´s (HCI) Role in Sustainability, Digitalization, and Value Creation from Production to Patient

Monika Derecque-Pois, HCI

HCI HEALTHCARE CHAIN INSTITUTE

Healthcare Chain Institute (HCI)

Driving Sustainability, Digitalisation and Value

Collective Strength & Excellence in Health:
Uniting Forces for a Healthier Tomorrow

HCI Vision and Mission

Fostering **collaboration, innovation, sustainability and growth** within the health sector. A **Think Tank** dedicated to industry organisations, stakeholders, experts and policy makers striving for a **seamless end-to-end healthcare chain** and ultimately to **improve patient care and wellbeing**.

Serving as a unified, **all-inclusive platform** that empowers all those seeking to **overcome challenges**, **optimise healthcare value chain processes and networks**, valorise opportunities and **shape a digitalized, value driven healthcare chain**.

Why HCI is needed?

Healthcare chain stakeholders **operate in silos** - we need to **foster cross sectorial collaboration** - and bring **everyone together!**

There is an **increasing number of cross sectorial issues**, which cannot be solved without the other healthcare chain stakeholders – we need to **address them together**!

There is a **lack of understanding** about the overall healthcare value chain and a **lack of trust** amongst the healthcare chain stakeholders and **a misalignement with policy makers** – we need to **increase understanding, alignment and trust**!

HCI Benefits of Membership

Bridging Silos

Culture of collaboration and trust

Holistic Problem-Solving

Horizontal approach for **transversal solutions**

Communication, Partnerships & Strategic Alliances

Joint visions, plans and processes

Innovation Acceleration

Agile responses driving and accelerating **change**

Efficiency Gains

Streamlining processes for **resource optimization**

Regulatory Convergence

Unified advocacy for **harmonised regulations**

Patient Centric Approach

Joint focus on a **patient-centric approach**

HCI Membership Categories bridging the silos

Supply Chain Stakeholders

Encompass the spectrum of **key players in the healthcare supply chain**, including API and precursor producers, MAHs, contract manufacturers, distributors, logistic service providers, wholesalers and group purchasing organizations (retail & hospital) of healthcare products, along with healthcare retail undertakings

&

Service & Technologies Providers

This category is tailored for **enterprises offering services, equipment, technology or materials** to the healthcare Supply Chain Stakeholders, though not directly integrated into the healthcare supply chain

Associations

Comprises International, Regional and national **associations** representing the array of Supply Chain Stakeholders

Invited Stakeholders

Includes a **broad spectrum of participants** such as hospitals, patient organizations, insurances/payers, individual pharmacies, doctors, standardisation organisation, regulatory bodies, government agencies and educational institutions

…HCI's initial Working Structure Proposal…

INNOVATION PLATFORM

SUSTAINABILITY ESG AND GREEN INITIATIVES

DIGITAL TRANSFORMATION

DATA INSIGHTS, ANALYTICS & AI

SUPPLY CHAIN OPTIMISATION, RESILIENCE & RISK MANAGEMENT

PATIENT-CENTRIC INNOVATION AND APPROACHES

COMPLIANCE & STANDARDS

1 ENVIRONMENTAL SUSTAINABILITY Working Group

2 DIGITALISATION Working Group

3 MARKET ACCESS Working Group

E-COMMERCE AND PATIENT CENTRIC DELIVERY MODELS

other Working Groups, Educational Academy tbc…

STRATEGIC RELATIONS & PARTNERSHIPS

ENGAGEMENT & INTEREST REPRESENTATION

HCI Environmental Sustainability Working Group 1

One Planet – One Perspective - boosting environmental health!

Carbon footprint calculation

1. Map companies active in the area
2. Create a **standards for questionnaires for scope 3 emissions**
3. Check competition compliance
4. Harmonised **CSRD implementation**
5. Create **URS for emissions portal** and specifications for data up and download

Coordination of impact assessment of chemical law restrictions

1. **Identification of substances with potential future restrictions**
2. Check competition compliance
3. Carry out **risk assessment**
4. Draw-up **conclusions** on substance use in the future

Packaging platform for healthcare products

1. **Traceability**, Smart Packaging Solutions, eLeaflet, Adherence solutions
2. Temperature-Controlled Packaging
3. Interactive, Customizable and Personalized Packaging
4. **Supply Chain Optimisation**
5. **Sustainable packaging , Waste reduction**

Circular economy – From "Lab to Human"

1. Sustainable Sourcing
2. **Transparency**
3. Innovative Extraction Techniques
4. Environmentally Conscious Manufacturing & product design
5. **Patient-Centric Approach**
6. Return logistics
7. Regulatory advocacy
8. **Community Engagement**

HCI Digitalisation Working Group - Early Project Areas to Drive Member Benefit

2

Opening up true potential in the supply chain through data

Interoperability

1. Stakeholder ***systems and data capability assessment*** – the true state of today's end to end data supply chain
2. ***Standards development*** – formats, controls, reporting, certification
3. ***Risk & Reward*** – impact of a transparent supply chain and potential new levers for value
4. ***Code of Conduct*** – Real world application and governance

Digital ESG & Supply Chain

1. ***Harmonized standards,*** methodologies and reporting (local to global)
2. ***Options for radical change-*** end-to-end cost benefit analysis, lobbying and funding planning
3. ***Data Tech enablement*** - real-time ESG reporting

Intelligent Supply Chains

1. ***Critical medicine supply*** and automation/centralization of bottleneck events
2. ***Pipeline aligned supply chains*** - augmenting the new wave of clinical innovation
3. ***Tenders & fulfilment*** - unlocking true demand and fulfilment through better data use
4. ***Early access programmes*** - transparency, efficiency and reporting enablement

Web 3.0 & The Patient

1. From data analysis to ***predictive data***
2. ***Impact of data tech evolution*** on the supply chain of the (near) future
3. ***True patient centricity*** and creating the new healthcare experience
4. ***Options for data enabled reimbursement*** changes – accelerated cash flow, new remuneration structures etc.

All Working Groups as enablers – Sustainability, Market Access, Innovation Platform etc.

HCI Market Access Working Group 3

One Goal - One common strategy – to improve access to medicines for patients!

Regulatory Compliance

- Compliance Monitoring
- Emerging Trends and Challenges

Pricing & Reimbursement Reflections

- Value-based healthcare system

Health Economics, Market Trends & Entry barriers

- Cost-effectiveness Analysis & HTA
- Entry Barriers

Distribution, Supply Chain Aspects & Anti Counterfeiting

Medicines Availability & Shortages Mitigation

- Security of Supply

Patient Access & Advocacy

HCI Market Access Working Group 3

One Goal - One common Strategy – to improve access to medicines for patients!

Increasing the security of supply

Demand estimation
Risk & Vulnerability
Diversification of Suppliers
Reshoring

Transparency & Accountability
Production / Inventory / Consumption

Risk mitigation measures
Stockpiling
Product reallocation

Patient specific solutions

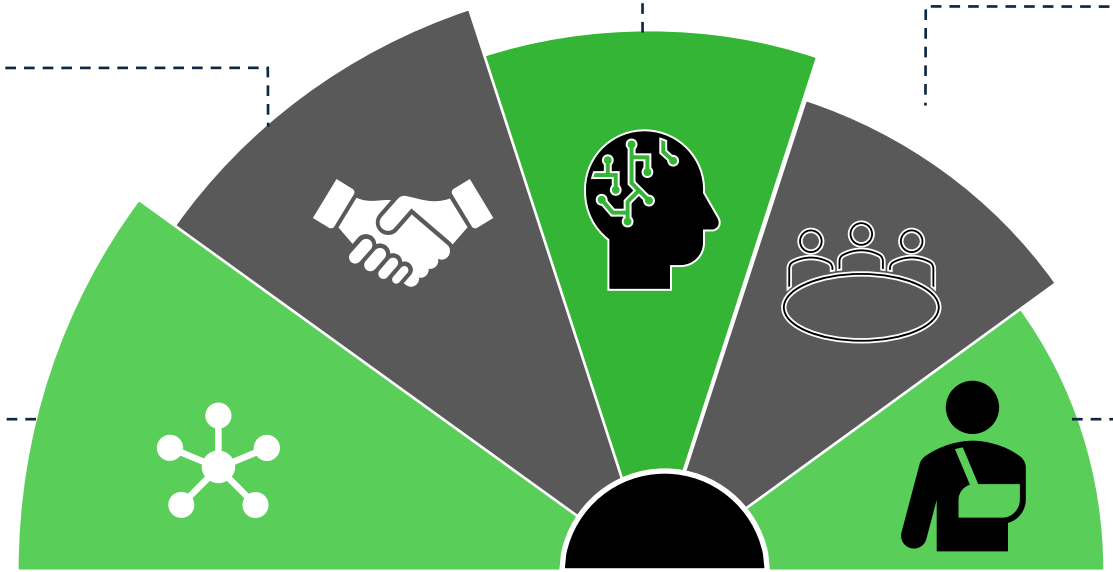
Policy / Product specific solutions

HCI Benefits of membership

Be part of **shaping the future** Healthcare Value Chain, drive and accelerate change via the HCI Working Groups and Innovation Platform

One vision – one approach
One goal – one plan
One planet – one **perspective** in a **transversal, unified approach**

Access to a **trusted network** of supply chain stakeholders **covering the whole healthcare value chain**



One process - one voice for the healthcare value chain!

Receive regular **intelligence reports,** join the **Kick-off event, help shaping the working groups, engage with decision makers** and participate at **the Annual Meetings at a discounted fee**

Join the focus on a **patient-centric approach** considering how patients are impacted in terms of **accessibility, affordability and quality of care**!

HCI Call to Action…

Join the Healthcare Chain Institute to be **part of** a collaborative community **driving innovation, efficiency, and sustainability** across the **entire healthcare ecosystem**. Together, we **bridge the silos** and **create solutions** that **benefit** all stakeholders and of course - **ultimately patients**!

- Expressions of interest
- Legal establishment
- Membership

VI.

The European Commission's Initiative's to support the Pharmaceutical Sector

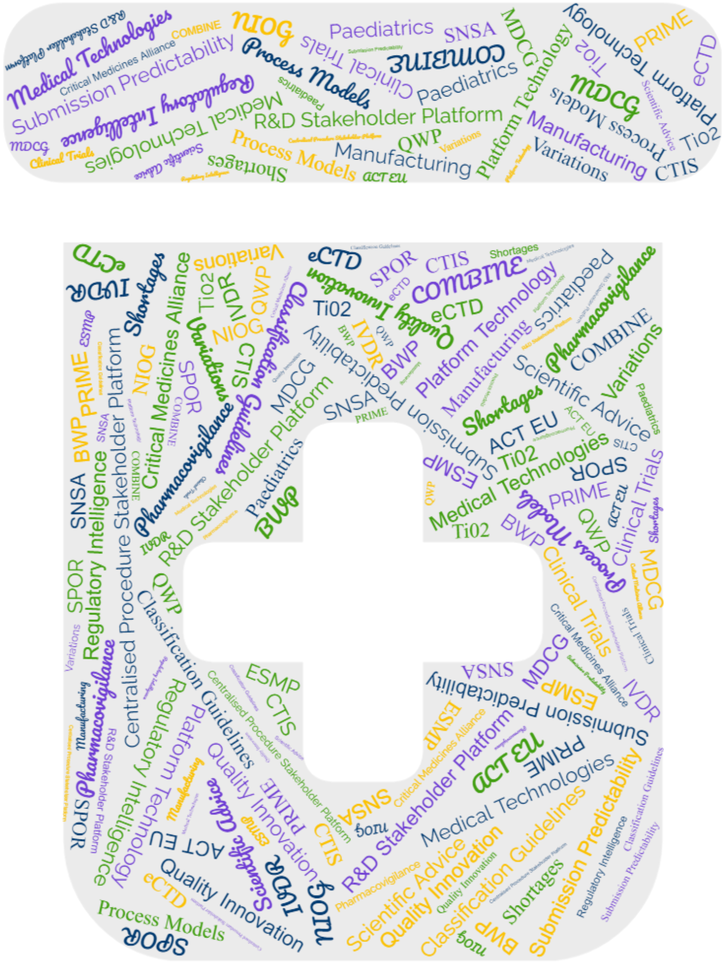
Thomas Heynisch, European Commission

VII.

EUCOPE's Regulatory Working Group - Overview of Regulatory Activities

Seán Byrne, EUCOPE

What has Reg been up to since February?



Working on internal/external priorities:

- Systemising our interactions with members
- Increasing our representation at EMA and other appropriate fora
- Ensuring more regulatory advocacy, particularly during year of mandate change

Next Regulatory WG meeting?

- Wednesday, 10th July 14-16.30 CEST

Priority updates and engagements

R&D / CP

- Topic leadership, support and input across all topics for both platforms

Clinical Trials

- EUCOPE lead cross-trade association group on CTR transition
- Bilateral with EC/EMA/CTCG
- ACT EU

Medical Technologies

- MDCG positioning
- COMBINE project

Quality Innovation

- Classification guidelines – delayed, input in development
- EMA Listen & Learn – Process Models, prep for Platform Technology

RWE/D

- DARWIN EU
- BDSG / HMA/EMA on RWE Methods

Regulatory Digitalisation

- ESMP readiness
- EMA ePI User Acceptance Testing

Critical Medicines Alliance

EUCOPE Representation

WG1 - Manufacturing

medac

Volker Bahr

ORION

Iikka Keskinen

WG2 – Int'l supply chain diversification

emergent biosolutions

Ask Eirik Storsve

SHIONOGI

Patrick Gunther

- Trade associations do not have a seat in the WGs directly.
- To date the WGs have only had their initial meetings, with focus on admin (election of chairs / rules of procedure etc.) and preliminary discussions on themes.
- Core drafting work has not yet commenced. This will be coordinated via a dedicated mailing list which colleagues are welcome to join (contact Seán/Stefano)

Thank you for your attention!