



Patronat polskiej prezydencji w Radzie UE

Patronage of the Polish presidency of the Council of the EU

Patronage de la présidence polonaise du Conseil de l'UE

Minimizing the Ecological and Economic Burden of Medication Waste in Europe

Brussels, June 26th, 2025





Meeting Agenda

Minimizing the Ecological and Economic
Burden of Medication Waste in Europe
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Time	Session / Presentation	Speaker(s)
9:30–9:45	Welcome and Introduction	<ul style="list-style-type: none">Waldemar Dubaniowski – Director of NCBR Office in BrusselsAneta Andrzejczyk, Medical University of LodzProf. Przemyslaw Kardas, Medical University of Lodz
Session 1: Ecological and Economic Burden of Medication Waste in Europe–Current Scenario		
9:45–10:00	Current Scenario in Medication Waste Legislation	Prof. Justyna Rogowska, Medical University of Gdansk
10:00–10:30	Lessons Learned in the Pan-European Study on Medication Usage and Disposal	Prof. Przemyslaw Kardas, Medical University of Lodz
10:30–10:45	Combatting medication waste: from prevention to reuse of unused medication by patients	Dr Charlotte L. Bekker, Radboud University Medical Center
10:45–11:00	WHO-Led Initiatives to Minimize the Environmental Impact of Medication Waste	Dr Mareike Kroll, WHO European Centre for Environment and Health
11:00–11:15	Economic Impact of Medication Non-Adherence and Medication Waste	Prof. Tamás Ágh, Syreon Research Institute & University of Pécs
11:15–12:00	Medication Waste in a Broader Ecological Perspective	Panel Discussion Moderation: Dr Pawel Lewek, Medical University of Lodz Participants: <ul style="list-style-type: none">Rene Luigies, Games for HealthLudwig Erik Aguilar, Novo NordiskErika Brattinga-Roth, TCNN
12:00–13:00 Lunch Break		

Session 2: Strategies for Reducing the Ecological and Economic Impact of Medication Waste in Europe		
13:00–13:20	ENKORE - An Innovative Health Initiative Project Tackling Medication Waste and Advancing Circular Solutions for Medical Devices	Maria Eugenia Beltrán Jaunsarás Universidad Politécnica de Madrid (UPM)
13:20–13:40	The University as a Catalyst for Ecological Transformation: From the GATEKEEPER Digital App to the EcoUMED Environmental Policy	Aneta Andrzejczyk & Dr Ewelina Łojewska, Medical University of Lodz
13:40–14:30	Roundtable Stakeholder Discussion: Implementing Ecological Change in Unused Drug Management Across Europe	Moderation: Dr Pawel Lewek, Medical University of Lodz Participants: <ul style="list-style-type: none">Sean McPike, Eli Lilly & Co LtdProf. Tamás Ágh, Syreon Research Institute & University of PécsProf. Bart van den Bemt, Sint Maartenskliniek / Radboudumc
14:30–15:00 Coffee Break		
Session 3: Shaping the Future: Advancing Scientific Research on Ecology and Economics in Medication Management		
15:00–15:20	Horizon Europe Initiatives Driving Ecological Change in Europe: New Instruments Stimulating and Funding Research in Medicine and Ecology <ul style="list-style-type: none">IHICluster HealthEuropean Innovation CouncilEuropean Innovation EcosystemsEIT Health	Moderation: Dr Pawel Lewek, Medical University of Lodz Participants: <ul style="list-style-type: none">Tomasz Dyląg, European Commission, DG Research and InnovationMagda Krakowiak, EIT HealthKirsty Reid, EFPIA
15:20–15:50	Questions & Answers	Moderated discussion
15:50–16:00	Presentation of the Policy Brief Summary & Closing Remarks	Prof. Przemyslaw Kardas, Medical University of Lodz



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Session 1

Ecological and Economic Burden of Medication Waste in Europe— Current Scenario



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Panel Discussion Medication Waste in a Broader Ecological Perspective



Ludvig Erik Aguilar
Novo Nordisk



Erika Brattinga-Róth
TCNN Innovation
Support



Mostafa Ahmed
International
Solid Waste Association



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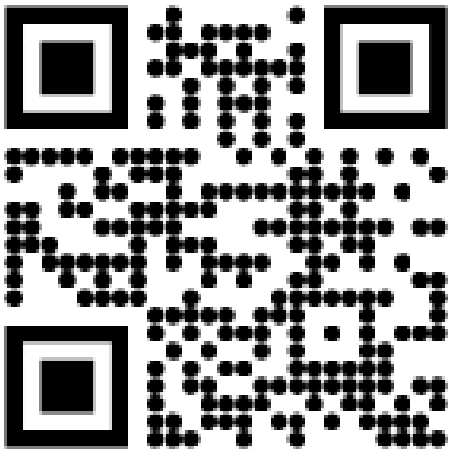


Role of Innovation in Devices and Delivery Solutions in Creating Sustainable Drug-Device Combination Products

- Guiding principles of Novo Nordisk in reducing environmental of our products (Circular Design Guideline)
- Innovation Archetypes in Pharma in environmental impact reduction of our drug delivery solutions
- Holistic design thinking to ensure sustainability without compromising the best standard of care for our various patient segments.

Ludwig Erik Aguilar, Ph.D.
Senior R&D Engineer

Novo Nordisk A/S
Devices & Delivery Solutions,
Hillerød-Denmark
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LGEA@novonordisk.com



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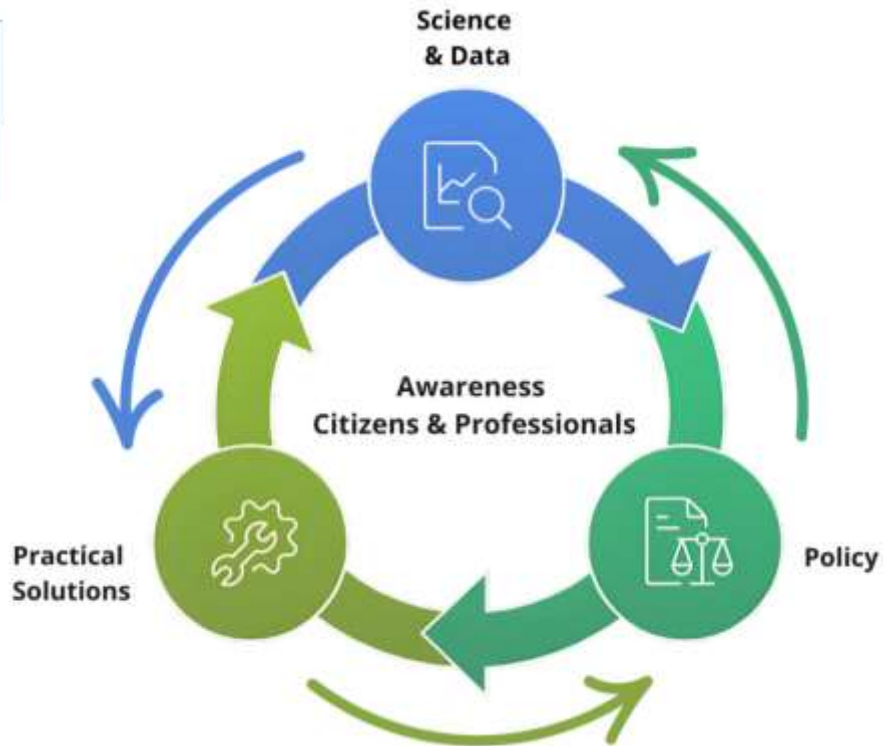
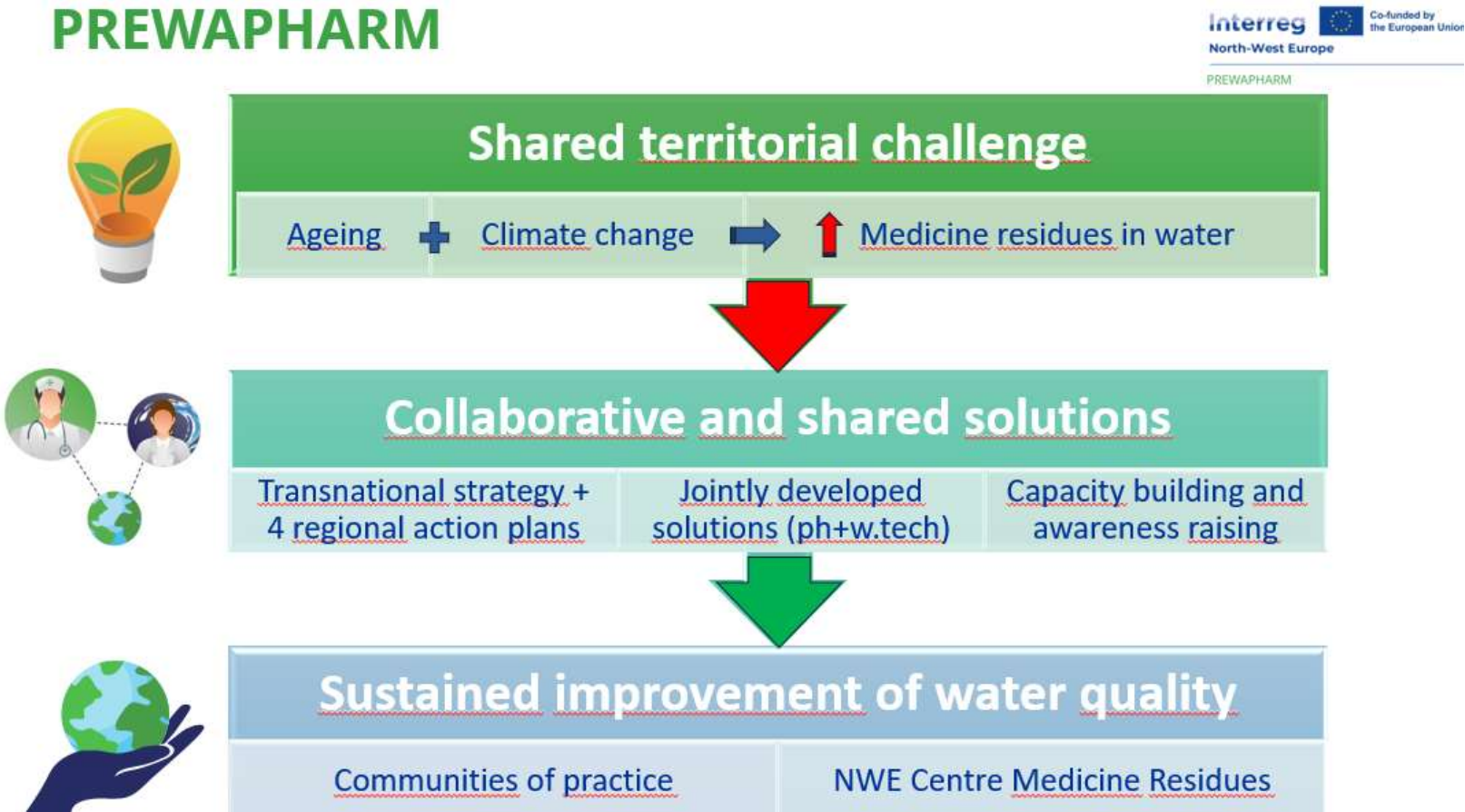


Erika Brattinga-**Róth** PhD
Senior Project Manager

TCNN Innovation Support
Groningen, The Netherlands

www.tcnn.nl
prewapharm.nweurope.eu

PREWAPHARM



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Key points:

Sustainable and Environmentally Sound Waste Management

Packaging Waste Management

Policy and Extended Producer Responsibility (EPR)

Mostafa Ahmed, PhD

International Solid Waste Association

<https://www.iswa.org/>





Panel Discussion Medication Waste in a Broader Ecological Perspective



Ludvig Erik Aguilar
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Session 2

Strategies for Reducing the Ecological and Economic Impact of Medication Waste in Europe



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Roundtable Stakeholder Discussion Implementing Ecological Change in Unused Drug Management Across Europe



Sean McPike
Eli Lilly



Tamas Agh
Syreon Research
Institute



BJT (Bart) van den Bemt
Sint Maartenskliniek



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Sean McPike

Eli Lilly's Global HSE team

<https://www.linkedin.com/in/sean-m-48674819/>

Main topics:

- Global Chemical Regulations (e.g. EU REACH, China REACH, K-REACH)
- EU REACH Application for Authorisation (AfAs),
- Product Stewardship/EPR Regulatory monitoring and assessment (Global Packaging, WEEE, Batteries, RoHS, PCR, Eco Modulation, Plastic Taxes)



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Main topics:

- Economic Impact of Medication Non-Adherence and Medication Waste
- Incorporating Environmental Aspects into the Health Technology Assessment of Novel Health Technologies
- Improving Health System Sustainability through Medication Adherence-Enhancing Interventions



Tamas Agh, MD, PhD, DrHabil

Syreon Research Institute, Hungary

<https://syreon.eu/>

Center for HTA and
Pharmacoeconomic Research,
University of Pecs, Hungary

<https://hta.pte.hu/en>



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Main topics:

- Redispensing unused medication
- Use of **Patient's** Own Medication during hospitalisation
- Individualized prescribing/dispensing of medication:

Prof. Dr. BJF (Bart) van den Bemt, PharmD
Pharmacist/clinical pharmacologist

Head of Pharmacy & Head of Research
Sint Maartenskliniek, Nijmegen, The Netherlands

Research Group Leader Personalized Pharmaceutical Care
Radboud University Medical Center, Nijmegen, The Netherlands





Roundtable Stakeholder Discussion Implementing Ecological Change in Unused Drug Management Across Europe



Sean McPike
Eli Lilly



Tamas Agh
Syreon Research
Institute



BJF (Bart) van den Bemt
Sint Maartenskliniek



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Session 3

Shaping the Future: Advancing Scientific Research on Ecology and Economics in Medication Management



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Panel Discussion
Horizon Europe Initiatives Driving Ecological Change in Europe



Tomasz Dyląg
European Commission



Magda Krakowiak
EIT Health



Kirsty Reid
EFPIA



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- EU policy context
- Horizon Europe green pharma projects
- Strategic Research and Innovation Agenda on Health and Climate Change

Tomasz Dyląg, PhD

Head of Sector for Health Industry
Directorate-General for Research & Innovation
European Commission



Strategic Research and
Innovation Agenda on Health
and Climate Change



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Magda Krakowiak
Director of Business Creation
EIT Health

- Leveraging EU innovation instruments for ecological transformation in medicine and life sciences
- Accelerating research commercialization through structured venture support and funding mechanisms
- Building impact-driven ecosystems through cross-sector collaboration and public-private investment



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Kirsty Reid, PhD
Director Science Policy
EFPIA



- Reduce environmental risks from APIs: prioritize legacy APIs, **identify hazards, promote greener design, enhance data accessibility** for sustainable decisions.
- 2020-2026, EUR 11 million



- Develop an eco-design framework for **single-use medical devices and packaging**.
- Focus on materials that **minimise waste, optimise resource usage** and reduce the carbon footprint, while ensuring devices are safe and fit for use
- 2025–2028, EUR 18 million



- Revolutionise pharma manufacturing: select technologies based on their potential to reduce the use of solvents, substances of very high concern, energy, and water; covering **chemical synthesis, biomanufacturing and decontamination**
- 2024 – 2030, EUR 40 million

EFPIA Actions on Environment and sustainability



IHI Sustainability projects



....Coming 2026 : PFAS



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Tomasz Dyląg
European Commission



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Questions and Answers



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Summary & Closing Remarks



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