FAMHP's activities in innovation & clinical research support at national and European level:

Perspectives from the FAMHP's Innovation office & scientific-regulatory advice unit

Singapore CRI meeting (10.04.2024)



Christophe Lahorte
Head of Innovation office & Scientific Advice Unit



Introduction to the EMRN context:

The European medicines regulatory network

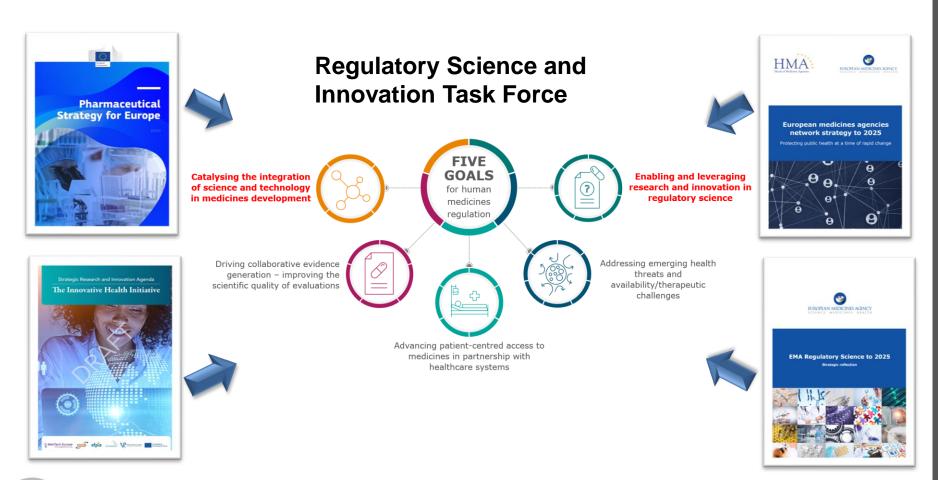


An overview of EMA development support to innovative medicines and technologies



Introduction to the EMRN context:

Translation of EU Strategies into tangible outcomes

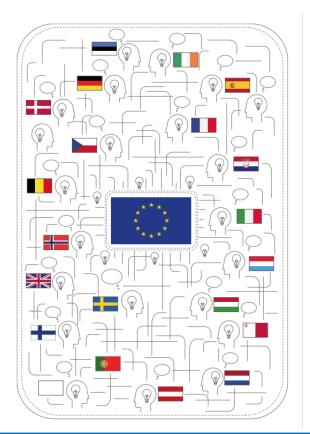






EU Innovation Offices network (EU-IN): as part of the EU Regulatory Network (EMRN):

- EMA (ITF) + HMA + National innovation offices/contact points (NCA's)
- Founded: 2016
- Aim:
- share information & knowledge
- undertake common initiatives related to innovative drug development support
- initiate early dialogue with developers
- create regulatory awareness



Overall Mission:

Support the EU Regulatory Network strategy in facilitating the development of innovative medicines and technologies for drug development across Europe by addressing gaps in early regulatory support to innovation

EU Innovation Offices network (EU-IN): as part of the EU Regulatory Network (EMRN):

Vision and mission Structure **EU-INNOVATION NETWORK (EU-IN)** Working Groups Benchmarking of **EU-IN Introduction and Overview** European Medicines Agencies Strengthening Training of Academia in Regulatory Science (STARS) **EU Network** Pharmacovigilance Oversight Group Involvement of competent authorities in externally funded projects + European Surveillance Strategy Working Simultaneous National Scientific Advice (SNSA) Group **EU Network Training Horizon Scanning** Centre (EU-NTC) former OTSG **EU-IN Members and Representatives EU-Innovation** Network (EU-IN) Contact HMA/EMA Joint Big Data Steering Group HMA/EMA Joint Task **Contact Point** Force on Availability of authorised medicines Secretariat for human and e-mail: EU-INSecretariat@ema.europa.eu veterinary use (TF AAM)



HMA/EMA Joint Audit



Belgian perspective: Evolving mission of the FAMHP



: health is to ensure

ıuman +

3, IVDs and blood,

licines Regulatory

Network (EMRN):

Facilitating the translation of innovative scientific advances into medicinal products meeting adequate standards and

accelerate patients' a

unmet medical needs

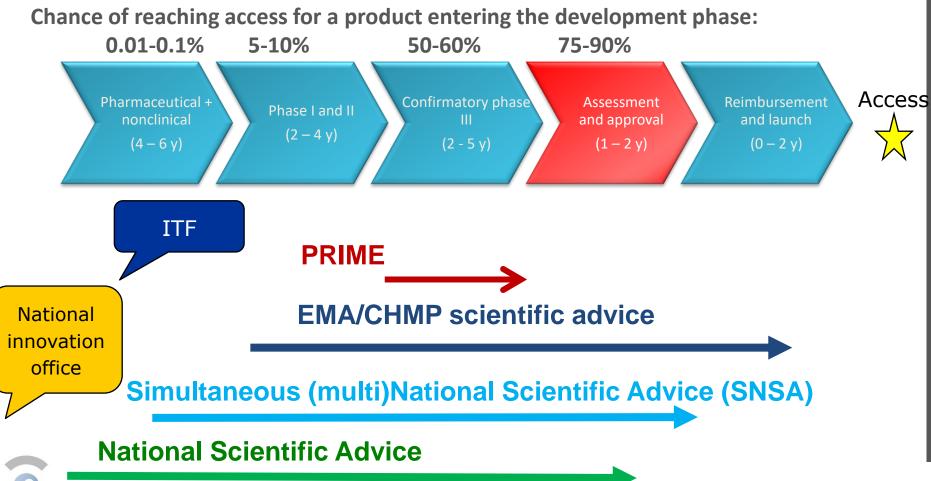
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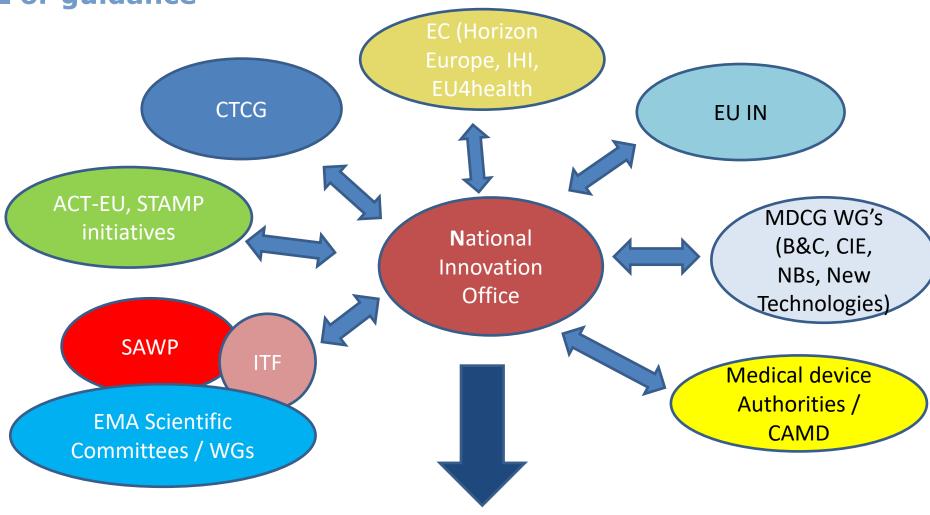
National Innovation Offices as starting point

Creating high impact from early development onwards!



EU Activities: Need for info/knowledge exchange between various groups associated with scientific-regulatory advice

or guidance





National scientific & technical / regulatory support to innovators

Incentives for establishing a national Innovation Office @ FAMHP in 2017:

Strategic importance:

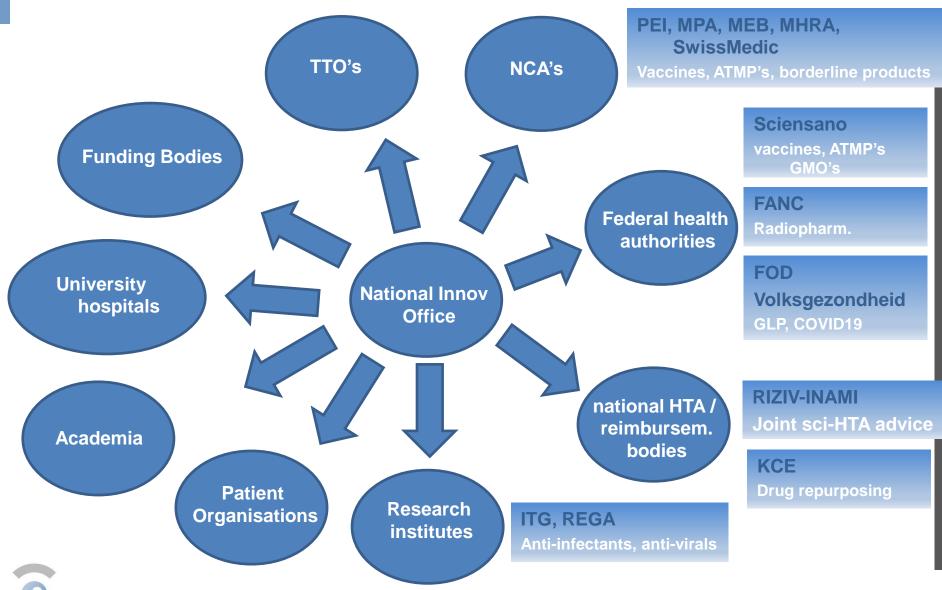


- Translation of basic science clinical research
- Access to innovative drug & healthcare products to patients (eg. via clinical trials)
- Maintaining an attractive Belgian ecosystem for clinical research & attrackting new (pre)clinical research
- 1st contact point for local Innovators to access FAMHP's scientific & technical / regulatory expertise eg. in early development stage
- key interface with EMRN & other EU/national bodies!





National Interaction mechanisms:



National Innovation office: key incentives for industry, academia, spin-offs

- Predictive timelines
- "One-stop-shop" solutions
 - Integrated & diversified advice pathways
- Access to FAMHP's high-quality multi-disciplinary scientificregulatory expertise
- Flexible services & thinking out-of- the-box
- Proactive & iterative guidance through product lifecycle
- Tailor-made support mechanisms targeting specific needs of innovators
- Easily accessible
- Early dialogue & communication towards innovators
- Focus on creating long-term partnerships with stakeholders



Increased success rate and access of new innovative products & treatments to HCP's & patients





FAMHP's National Innovation office: Key activities

3 Main pillars of core activities & services.

- Scientific & technical/regulatory advice (STA & SNSA // SAWP support):
 - optimising current procedures (eg. patient involvement; joint scientific-HTA advice)
 - scope expansion to: Medical devices, IVDs (eg. CoDx), borderline & Drug-Device/IVDs combo products, Blood, cells & tissues
 - developing new services: eg. accelerated STA, Simultaneous National SA (SNSA)
 - SAWP (Human/Vet) support
- Specific support to SME's, start-ups and academic research centers / hospitals: eg. project info meetings (PIMs), 75% STA fee reduction, repurposing drug products
- General innovation support & knowledge management:
 - General regulatory/technical support & guidance (FAQ's)
 - EU activities (eg. EU Innovation Network, HMA, MDCG, CTCG, ACT-EU,...)
 - EU projects (« STARS » Horizon 2020, EU4Health, ...)
 - Horizon scanning
 - Portfolio meetings (Business pipeline)
 - Zero fee for clinical-trial related STA and SNSA requests (if CTA < 2 years)

National innovation office: core activities

I.1 Scientific & Technical / Regulatory Advice

1. Zero fee for clinical trial-related STA requests submitted in **BE under CTR:**

- Implemented may 2019
- CTR pilot submission: < 2 years after STA</p>

2. Patient involvement in STA procedures:

- Pilot project ongoing since Q4 2018:
- Focus on patient experts (clinical, study design & conduct, ...)

3. Accelerated STA procedures:

- Addressing emergency situations, major public health threats: COVID-19
- Implemented March 2020 + legislative initiative

4. STA (staggered) scope expansion to:

- ➤ NB consultation procedures (MDR / IVDR)
- ➤ Medical devices, IVDs (eg. CoDx), borderline & Drug-Device/IVDs combo products, Blood, cells & tissues (cfr. SoHo regulation)





National Scientific-Technical Advice (STA): procedural aspects

- voluntary procedure
- specific questions (eg. 70-80 % CTA related)
- expert responses are prepared & discussed internally
- Formal outcome :
 - written advice: max. 30 days (Type I STA)
 - scientific advice meeting & written advice report max. 70 days + 14 days (Type II & IIIa, IIIb STA)
- Non-legally binding opinion
- Prospective in nature focusing on development strategies rather than pre-evaluation of data to support a future filing (eg. CTA)
- Throughout development life cycle



STA = Valuable tool for de-risking, accelerating drug development & enhancing outcomes (eg. CTA, MAA) or innovative drug products!



Introduction to national STA: Type of questions

Scientific:

- Quality (eg. Pharm dev., product character., release testing,..)
- non-clinical (eg. Safety, toxicol., starting dose, ...)
- clinical (incl./excl. criteria, endpoints, target population, PRO's,...)
- Study design & conduct, statistical aspects
- Clinical development plan
- Benefit /Risk balance
- Unmet medical need (rare / life-threatening diseases)
- Swith Rx to OTC status
- Pharmacovig issues (Risk Managm. Plans, PAES/PASS, ...)
- GMO's: biosafety, containment aspects

Technical – regulatory - procedural:

- GMP, GCP, GLP, ...
- Regulatory / procedural aspects, CTR, ...
- Guidelines
- Regulatory filing strategy (eg. CTA, SAWP, PIP, PRIME, MAA, CHMP re-examination, WHO pre-qualification,...)





Introduction to national STA: Type of questions

Other Questions:

- Complex CT designs (eg. Adaptive, basket trials) & Decentralised CT's
- New (platform)technologies (eg. gene editing)
- New innovative concepts and manufacturing technologies (eg. on-site formulation, 3D-printed DP's)
- Technological issues (eg. e-labelling, m-health)
- Broad advice:
 - Specific issues affecting multiple products or indications could be treated as single broad advice requests (eg. quality changes, platform clinical trials)
 - 2. Non product- / indication-related questions (genotox. Testing, 3R's

How to submit: sta-wta@fagg-afmps.be

Pre-STA submission support & guidance possible!





National Regulatory Advice:





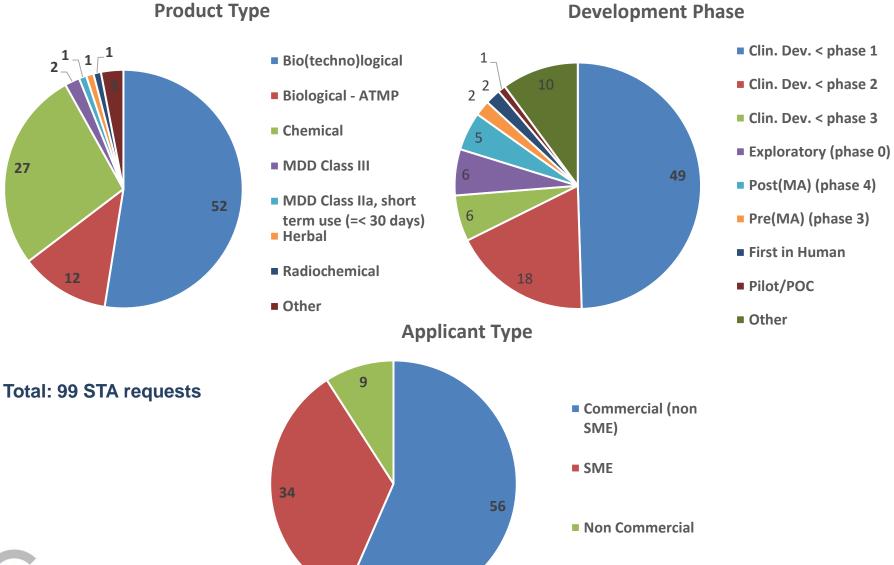
- Main scope:
 Regulatory status of borderline & combination products
 (eg. combined ATMP's) + referred to CAT/EMA when needed
- Formal outcome:
 - written advice: max. 30 days (Type I STA)
 OR (i,e, for highy complex products):
 - advice meeting & written advice report max. 70 days + 14 days (Type II & IIIa, IIIb STA)
- Non-legally binding opinion



RA = Valuable tool for early identifying the correct product development pathway & guidelines to follow!



Experiences with national STA: (2021 – 2022)







SME & academia-related (STA) challenges

1. Lack of kowledge & experience

- Fear to approach regulators & disclose sci data
- Lack in awareness of sci / regulatory requirements
- Innov. support & formal STA procedures not well-known OR wrong perception!
- added value not well-known: TIME / COST vs BENEFIT !
- incentives lacking (eg. for academia)
- Difficulties in identifying & formulating critical STA questions & at appropriate time point
- Lack in awareness of FAMHP activities (BE-EU level) & expertise

2. Lack of resources:

- STA fees = often a financial hurdle (cfr. Pre-Grant sci advice)
- Lack in resources for proper STA file preparation

3. Different needs from academia / SME's vs stakeholder expectations:

 eg. commercial product development - scientifc publications - IP protection project funding - regulatory compliance!





National innovation office: core activities

I.2 EU IN Pilot project on Simultaneous National SA (SNSA):

- > 3 NCA's / SNSA pilot possible to enhance multi-national CT's (CTCG observer possible)
- prior to applying for funding grants to support non-commercial CT's
- to inform the <u>early-stage development</u> of innovative products for which clinical trials are planned (eg. phase I / II CT's)
- enhanced convergence in sci opinions from NCA's
- enhanced efficiency / time gain for applicant
- earlier identification of criticalities requiring EU advice / guidance !
- 90 Days pilot procedure based on common elements from national STA procedures





EU IN Pilot project on Simultaneous National SA (SNSA):



Vision and mission

Structure

Working Groups

Benchmarking of European Medicines Agencies

EU Network Pharmacovigilance Oversight Group

European Surveillance Strategy Working Group

EU Network Training Centre (EU-NTC) former OTSG

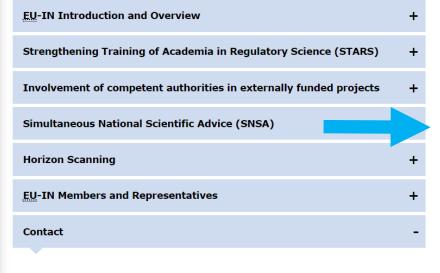
EU-Innovation Network (EU-IN)

HMA/EMA Joint Big Data Steering Group

HMA/EMA Joint Task Force on Availability of authorised medicines for human and veterinary use (TF AAM)

HMA/EMA Joint Audit





Contact Point

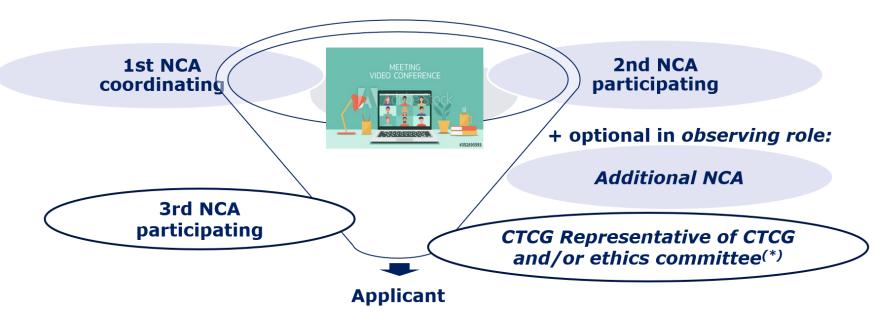
Secretariat

e-mail: EU-INSecretariat@ema.europa.eu

SNSA WG:

- Founded: Q1 2019
- Co-chairs: FAMHP + PEI
- Monthly meetings + annual F2F meeting
- Collaborations & interactions:
 - Other EU-IN WG's
 - CTCG (pre-CTA advice)
 - > SAWP
 - ACT-EU Initiative: PA7 on Scientific advice (+ PA5, PA2)
 - > HMA
 - Annual INNO meetings: (EU-IN, CTCG, SAWP, EUnetHTA)
 - > Industry (eg. EFPIA, EUCOPE,...)

Simultaneous National Scientific Advice (SNSA):

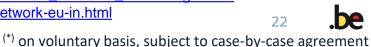


Key benefits:

- > 3 NCA's / SNSA request possible to facilitate multi-national CT's
- enhanced convergence in sci opinions
- seamless transition from national to EU level
- consider before applying for EU funding grants!

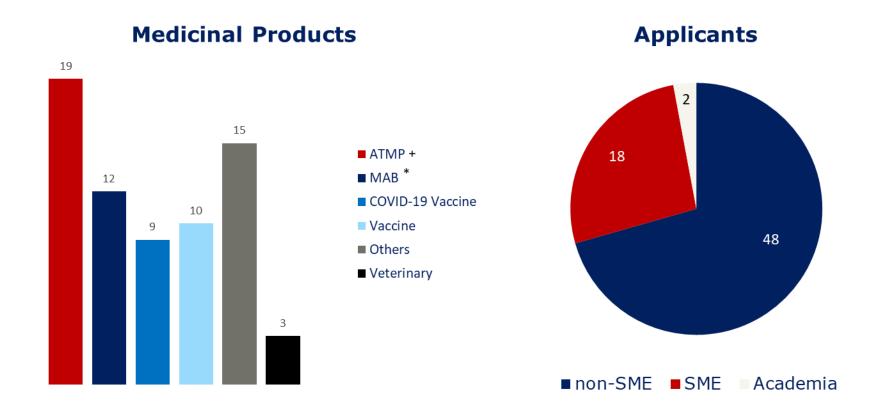
How to submit: **SNSA@pei.de**





Simultaneous National Scientific Advice (SNSA):

Total up to date: 68 SNSA procedures (Oct 2023)



- Focus of advice: mainly (early) clinical stage
 - 17 procedures with \geq 3 NCA's

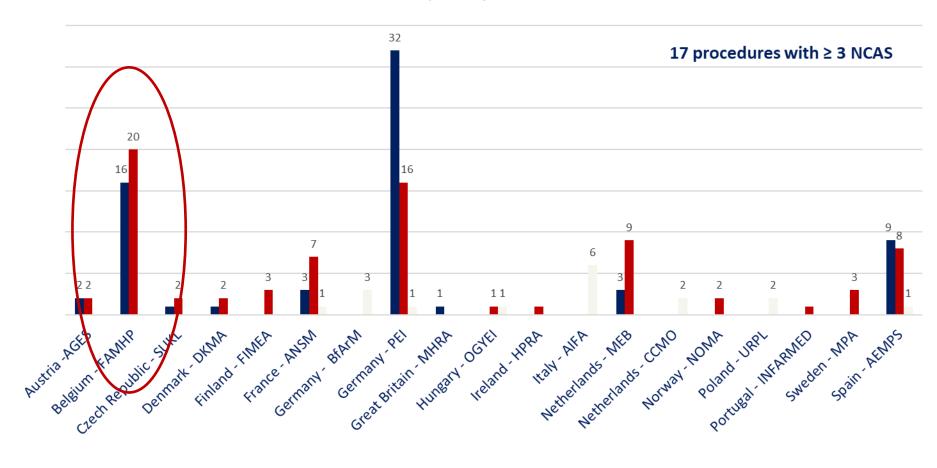




SNSA: NCA participation and applicants

Total number received: 68 procedures (Oct 2023)

Participating NCAs

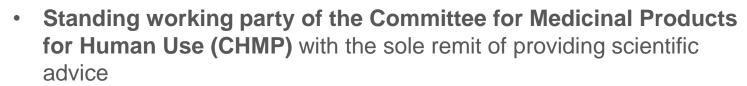


Observer

■ NCA 1 ■ NCA 2

National innovation office: core activities

I.3 EU Scientific Advice & Scientif. Advice Working Party (SAWP-H)



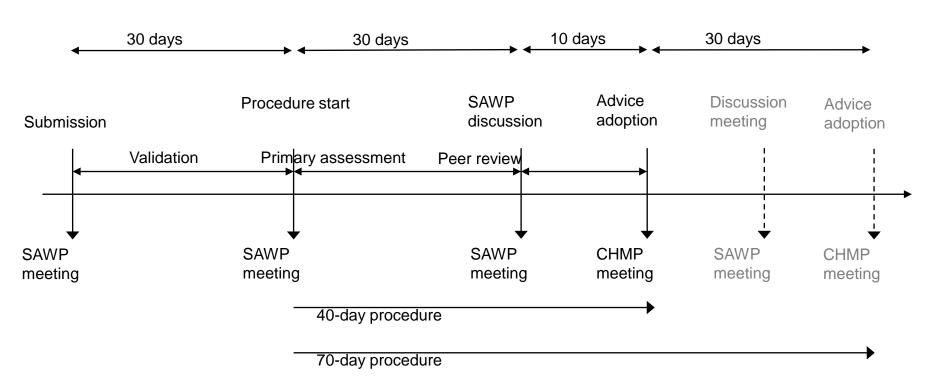


- Meets on a monthly basis 11 times per year (no meeting in early August)
- Consists of 72 members and alternates nominated based on expertise needs including representatives from EMA committees
 BE: 2 members + 2 alternates (FAMHP)
- For each scientific advice or protocol assistance request, two
 members are appointed as co-ordinators and at least one member
 is appointed as peer reviewer
- Requests are additionally referred to other committees, working parties, operational expert groups and working groups for peer review input
- Fee incentives for paediatric(-only) developments, protocol assistance,
 SMEs, ATMPs and PRIME products
- Fee waivers for orphan products from academic applicants and on the clinical development of products addressing public health emergencies



Scientific Advice Working Party (SAWP-H)

The scientific advice procedure



BUT: scientific advice framework has been evolving:

- ➤ It offers qualification of novel methodologies, parallel advice with FDA and HTA, advice for public health emergencies (ETF);
- Under development: advice for medical devices & drug-device combinations, SAWP-CTCG pilots



National innovation office: core activities in Belgium

II. Specific support to SME's, start-ups and academic research centers / hospitals

- 1. Project Infomeetings (PIM) with NIO: ITF-like eg. early stage project presentation of higly innovative drug / health products & technologies (prior to formal STA!)
 - = early dialogue tool prior to formal STA procedures
 - = key facilitator for Applicant in identifying regulatory hurdles / critical issues for R&D project & planning, need for seeking formal STA (eg. Pre-Grant stage)



More efficient & timely use of STA procedures, tailor-made advice, iterative guidance, increased success rate

How to submit: innovationoffice@fagg-afmps.be



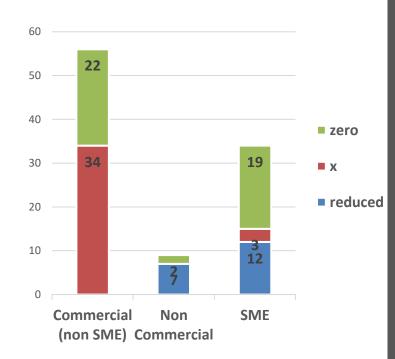


National innovation office: core activities in Belgium

II. Specific support to SME's, start-ups and academic research centers / hospitals

2. Reduced STA fee concept for SME's & Academia

- 75% fee reduction for STA type I,
 II & III requests
- Implemented May 2019 (based on EU SME definition)
- key facilitator for SME's & academia to seek formal STA



3. Drug Repurposing: STAMP / RePoG initiative

- NIO and EU IN involved in 1^e assessment of pilot applications
- KCE funded trials, REMEDI4All and REPO4EU projects





National innovation office: core activities in Belgium

III. General Innovation Support & Knowledge management

- 1. Coordination of Portefolio (business pipeline) meetings:
 - eg. company presentation, overview of R&D pipeline, emerging technologies, key scientific regulatory challenges,...
- 2. Ad hoc meetings on specific scientific-regulatory topics:
 - eg. Biomarkers, Biosimilars, new R&D & technological developments, platform technologies, ...
 - = early dialogue tool prior to formal procedures
 - = key facilitator for identifying broader regulatory hurdles / gaps, upcoming innovations, challenges for EMRN,...



tailor-made advice, iterative guidance increased success rate





National innovation office: 2022 statistics



- **136** European scientific advice requests (SAWP-H)
- 4 European scientific advice requests (SAWP-V)



- **220** FAQ's (eg. regulatory queries, info requests)
- 6 Patient pilots (national STA)
- 6 Project Info meetings with SME's & academia



5 Portfolio Meetings

EU Consultation procedures

- 1 NB consultation for DDCP (MDR)
- 25 TSE consultations for devices manufactured with animal tissue





National innovation office: other core activities @ national level

3. Communication & reach out to local (national) innovators & stakeholders:

eg. dedicated webpage, participation to life science events,...

4. Participation to Guidelines & FU of legislative proposals eg. Belgian regulatory guidance on the use GMO's in clinical trials

5. Projects:

- revision of the FAMHP's commission on borderline products
- revision of the FAMHP's expertise Database
- R&D Biopharma platform

6. Contribution to Political initiatives: eg.

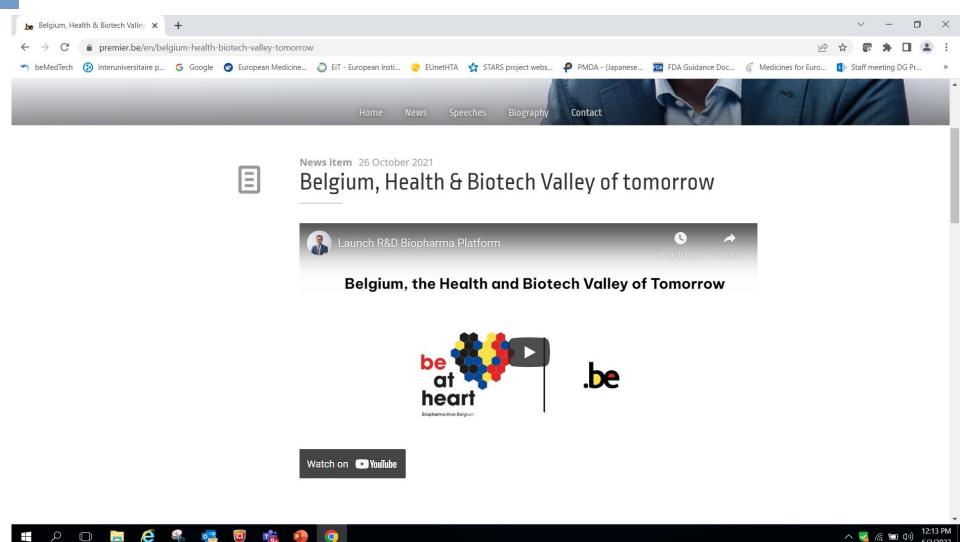
- Pharma Future Pacts 1 & 2
- MedTech Futre Pacts 1 & 2
- "Belgium, Health & Biotech Valley of tomorrow" Initiative of Prime Minister De Croo (Oct 2021)
- EU presidency 2024





National innovation office: core activities

@ national level







National innovation office: core activities @ EU level

III. General Innovation Support & Knowledge management

- FAMHP active partner in the EU IN / EMRN:
 - > Horizon Scanning WG
 - > Simultaneous national Scientific advice (SNSA) WG + ACT-EU AP7
 - ➤ Drug Repurposing (RePoG EU IN) & STAMP
 - > STARS H2020 project: 2019 06/2022
 - > active follow-up of other EU initiatives & platforms (eg. CTCG, HMA, INNO, ICMRA,...)
- EU4Health JA on capacity building (IncreaseNET): WP8 "Innovation"
- MDCG WG on Borderline & Classification issues (incl. Helsinki consultation procedures)



MDCG WG on New Technologies



National innovation office: core activities @ EU level

III. General Innovation Support & Knowledge management

- Proactive follow up of:
 - > New EU Regulations: MDR, IVDR, CTR, SoHo, EU pharma legislation revision, AI Act, etc.
 - New concepts and methodologies:
 eg. Regulatory Sandboxes, Regulatory science
 - New Guidelines: Pharma, Medtech, etc.
 - New Research & Innovation initiatives & policies at EU / international level:
 eg. ACT-EU, EIC, EIT Health, ICMRA, ..
 - Scientific innovations & emerging technologies (eg. 3D/4D printing, gene editing, decentralised CTs, AI/ML, DTx, point-of-care manufacturing, 3R's,...)
 - Regulatory (science) needs / gaps





Innovation Task Force (ITF) - participation

Multidisciplinary platform for preparatory dialogue and orientation on innovative methods, technologies and medicines

Support innovative drug development

Early informal dialogue with opinion leaders (can be requested at any stage of develop.)

1,5-hour discussion – Free of charge

Brainstorming "style" on innovation in areas without existing guidance

First step to engage is submit completed



What topics can be discussed during ITF meetings?

Scientific topics: e.g. pre-clinical development, manufacturing, quality aspects...

Regulatory topics: e.g. "There is no guidance on this type of novel product. How can we proceed?"

Legal topics: e.g., "Is my product a medicinal product?" → which evidence generation requirements!



Innovation Task Force (ITF)

Which types of developments are discussed during ITF meetings?

Emerging therapies

- Gene therapies
- Cell therapies
- Targeted therapies
- Engineered tissues
- Nanotechnology used in medicines



- 3Rs (Replacement, Reduction and Refinement)
- New delivery routes
- New delivery systems

Emerging Technologies

- Digital technologies
- Clinical Trial methodology
- Omics data
- Novel manufacturing
- Platform technologies
- Associated medical devices

Bi-directional interface with:

- NCA's: expertise sharing & development (NCA experts and EU reps)
- National Innovation Offices: for innov. office support & guidance OR formal scientifregul. advice





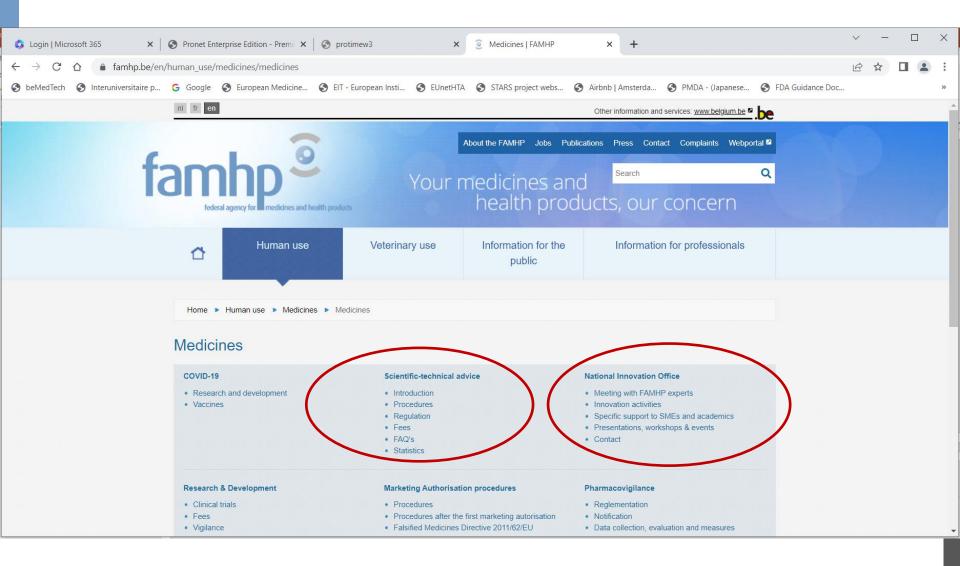
Take home messages & challenges

- Role of Regulators as key enablers for facilitating R&I & early access to patients has significantly increased in EMRN context
- NIO's as 1st contact point can help access & navigate academia & industry through the complex EU regulatory system & refer from national to EU level @ appropriate time point!
- engaging early & iteratively during (pre)clin. development lifecycle with Regulators is key! = move to DYNAMIC partnership
- Globalised product & technology development >< different regulatory requirements across different regions
- Increasing speed & complexity in pharma & medtech product developm., integrated technologies / technol. platforms & digitalisation in healthcare require: eg.
 - more proactive, agile & multi-disciplinary way of working
 - more data(analytical) driven R&I
 - more proactive stakeholder engagement & strategic partnerships (eg. with academia, research infrastructures,..)
 - enhanced network strategies
 - Regulatory science & horizon scanning





FAMHP webpage: where to find us?







Contact

Federal Agency for Medicines and Health Products – FAMHP

Galileenlaan 5/03 1012 BRUXELLES

e-mail: <u>innovationoffice@fagg-afmps.be</u>

https://www.famhp.be/en/innovationoffice https://www.famhp.be/en/human_use/medicines/medicines/scientific technical_advice

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