







EDQM & European Pharmacopoeia: State-of-the-art Science for Tomorrow's Medicines

International Conference organised by the European Directorate for the Quality of Medicines & HealthCare (EDQM),

Council of Europe

19-20 June 2019, Strasbourg, France

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EDQM & European Pharmacopoeia: State-of-the-art Science for Tomorrow's Medicines

Opening Plenary Session







Building Synergies to strengthen and support healthcare in Europe

International Conference EDQM and Ph. Eur.: State-of-the-art Science
For Tomorrow's Medicines
Strasbourg, 19-20 June 2019

systems, medical products and innovation

Healti



Cooperation between EC and EDQM

Legal and financial cooperation to implement the **pharmaceutical** and **SoHO** legislation.

- The European Pharmacopoeia, a legally binding instrument referred to in the EU legislation
- More than 35 ad-hoc technical cooperation projects
- Mutual representation to align the regulatory work
- Expertise to several EMA committees and working parties

Health



25th anniversary of the establishment of the European Network of Official Medicines Control Laboratories (OMCLs)

Centers of excellence for a more efficient protection of Public Heath

- Sampling & testing programme for medicines authorised for the EU
- Official Control Authority Batch Release (OCABR)

Health



Cooperation with EDQM

Major points of collaboration

- Procedure for 'Certification of Suitability'
- Standard Terms database
- Guidance and standards for blood transfusion and for tissue/cell transplantation

More synergies are possible

- Falsified medicines
- Digital Health in pharmaceutical care

Health



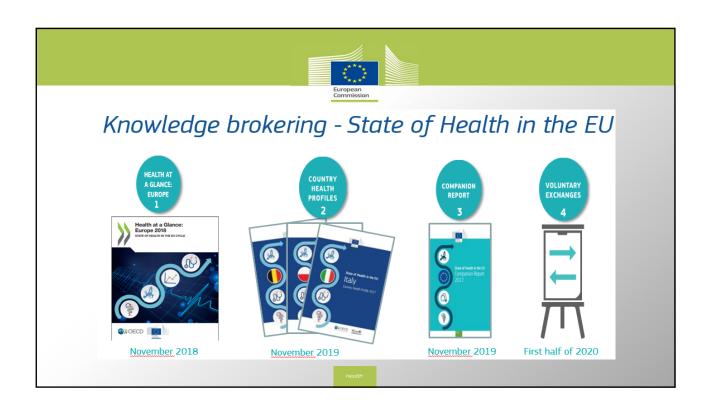
Cooperation with EDQM

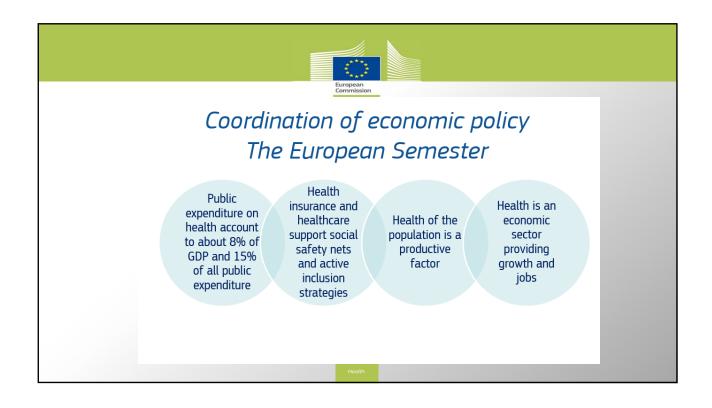
SoHO: new and Extended Grant Agreement with EDQM 2019 - 2021

- SARE analysis and SARE training
- B-QM (Blood Quality Management)
- B-PTS (Blood Proficiency Testing Scheme)
- Plasma Supply
- Contingency planning
- Harmonising Tissue and Cell activity data
- Neighbouring country assessments

Health

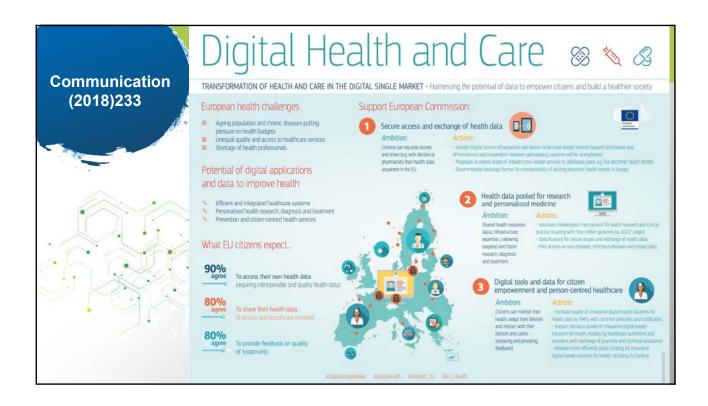


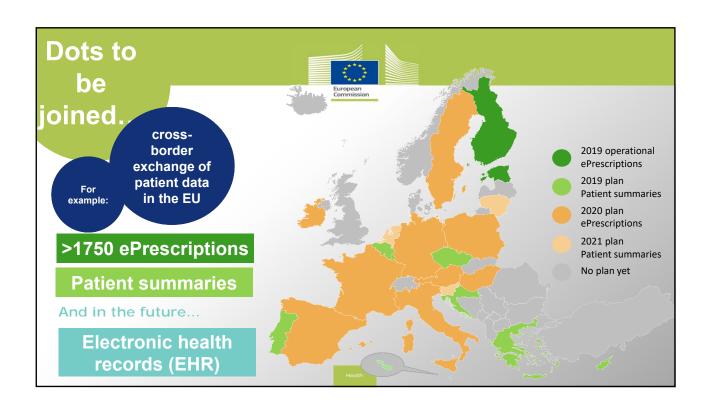


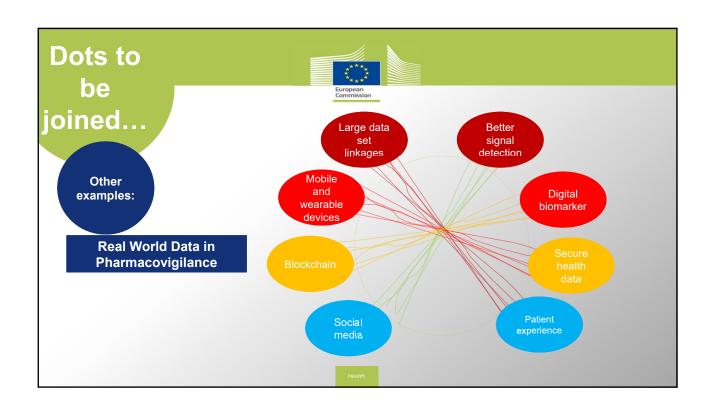


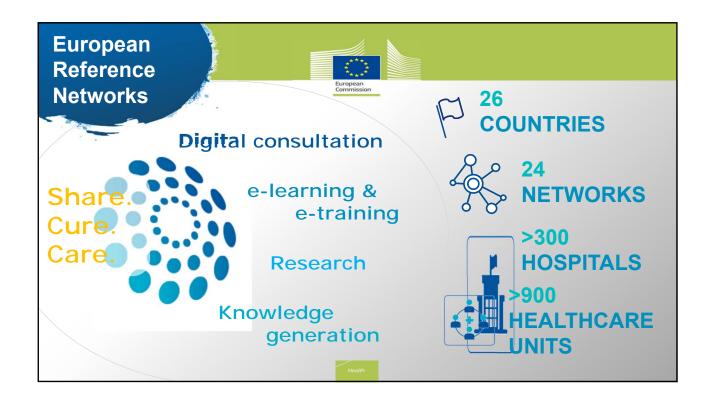


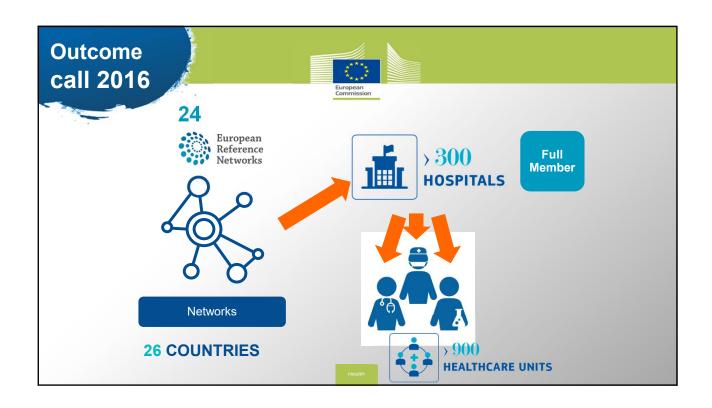


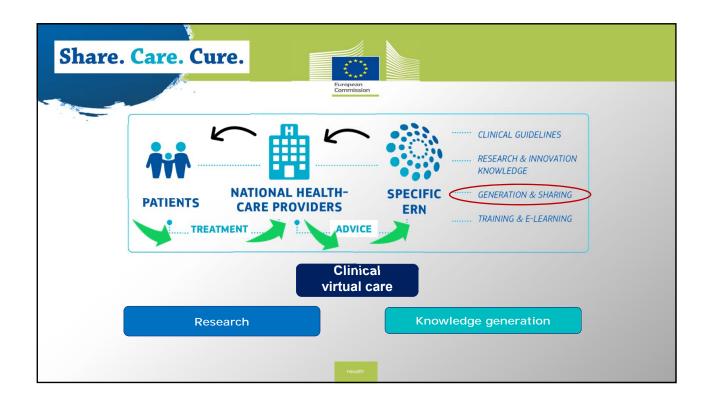






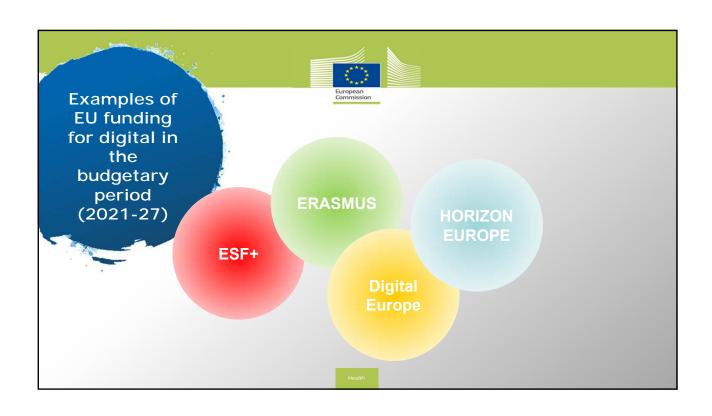


















Globalisation and cross-border cooperation in Europe: the perspective of a national competent authority

Dominique MARTIN

Head of French National Agency for Medicines and Health Products Safety

International Conference organized by the EDQM on the occasion of the publication of the 10th Edition of the Ph. Eur. and the 25th Anniversary of the European OMCL Network and the Certification Procedure.

19-20 June 2019, Strasbourg, France

French National Agency for Medicines and Health Products Safety

- Placed under the supervision of the Ministry of Health
- Part of the HMA
- Large area of expertise

Medicines

Biological products

Medical devices

(Cosmetics and tattoos)





Our working experience

SURVEILLANCE

of benefit / risk ratio products in "real life"

EVALUATION

of medicines and health products

PHARMACOPOEIA

Strong involvement in all the activities

INSPECTION

of manufacturing, importation and distribution activities

LABORATORY

quality control

LEGAL AND REGULATORY

expertise for quality and coherent decisions

INFORMATION

& communication

SUPPORT DIVISIONS

HR, administration and finances, IS, flow management





Our strategy



- Enhancement of an policy of openness and information sharing.
- Making risk management the policy principle behind all our decisions.
- Strengthening the European involvement of ANSM.
- Combining performance and quality of life at work.



Impact and interest of integrated laboratories in the ANSM organisation

Fruitful integration in the matrix

Regular requests by the others divisions

Control division considered as a real partner, appreciated added value of the control's results in the final decisions

Frequent wide solicitations and urgent situations:

- Quality default of medicines and raw materials (e.g. sartans)
- Falsified, illegal or substandard medicines from illegal market in collaboration with customs, justice or police services
- Shortage of vaccines associated with GMP deviations or stability matters
- Microbiological contamination of medical devices (infusion tubing),

- - -

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Impact and interest of integrated laboratories in the ANSM organisation

Strong input in the assessment of generic products

- Expertise in the field of pharmaceutical quality,
- Bioequivalence studies (biowaivers by dissolution)

Annual control program matches the needs of the product divisions and inspection campaigns

Priorities well defined and the same for all divisions, by a risk based approach.



Drugs and raw material

Vaccines and biological products

Blood derivatives medicines

Medical devices...















In the frame of the conference, point of view of a HMA focused on:

- Pharmacopoeia
- Certification
- OMCLs network

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Involvement in Ph. Eur.

HISTORY

Signature of the Convention on the Elaboration of an European Pharmacopoeia in Strasbourg

8 countries (including France), today 38 members states and 30 observers over the world. French/English official languages.

1975 Directive 75/318/CEE

1981 Directive 81/852/CEE

Mandatory character of European Pharmacopoeia monographs when requesting marketing authorisation for human and veterinary use.





Involvement in Ph. Eur.

Strong involvement since the beginning, in different groups

- A French participation in 50/63 Groups
- 19/63 represented by ANSM

Benefits

- Promotes public health
- Provides a legal and scientific basis for the quality control of medicines
- Allows to have official and harmonised standards
- Facilitates the free movement of medicinal products in Europe
- High reactivity in urgent situation (e.g. sartans monographs and dedicated WG)

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Involvement in Ph. Eur.

Focus on new finished products monographs

- 2011 The Presidium decided to prepare a reflection paper, presented in 2012.
- 2012 A pilot phase was launched with a dedicated Working Party.
- First monograph was published and came into force on April 2016 (Pharmeuropa 26.3).



Provide support for the market surveillance (OMCLs), guidance to the industry (especially for generics)...



Involvement in Ph. Eur.

Focus on biological products monographs

Initiate new monographs & manage the follow-up as project leader for blood products, vaccine and biotechnology derived products

Strongly involved in the revision of the biological monographs regarding the state of the art

General texts

Gene transfer medicinal product, cell substrate...

Biological Focus on the establishment of Biological Reference Preparations (BRPs)

Project leader / scientific advisor or participation under the egidium of EDQM for many BSP to the request of DBO (blood products, vaccine and other biologicals products).

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Certification of Suitability

Procedure established in 1994.

Check the suitability to control chemical and microbiological purity (and TSE risk), and the compliance of the sites to GMP

- Participates to ensure the quality of substances and their compliance to European requirements.
- Facilitates the assessment of MA applications.
- Inspectors are appointed by competent authorities or EDQM inspectors.
- ANSM strongly involved.



Certification of Suitability

Sartan crisis showed the importance of CEP:



immediate actions were taken and concerned CEPs were reviewed.

Possibility to suspend or withdraw CEPs.

Noticeable reactivity and coordination by EDQM, and fruitful collaboration within the network.

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Involvement in OMCLs network

HISTORY



- Network created in 1994.
- Based on the collaboration with the aim to save money (avoiding duplication of work) and to facilitate access to state-of-the-art technologies and methods.
- Now almost 60 full members (3 in France, including ANSM for human medicines), 12 associated members.





Involvement in OMCLs network

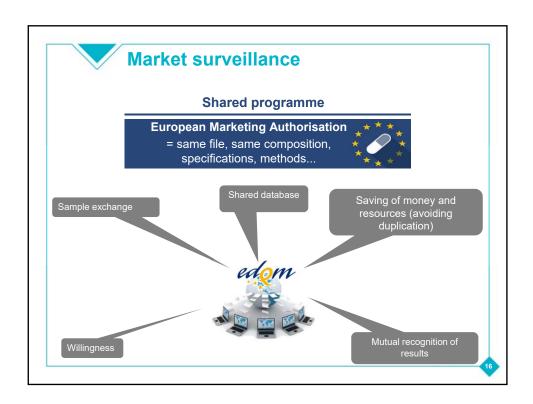
Advantages / benefits

- Strong and efficient collaboration, high level of competences.
- Same QMS (ISO17025).
- Mutual recognition of results by HMA.
- OCABR Batch release procedure for Vaccine and Blood: securing market for highly sensitive products.
- Analytical force/capacity with high reactivity (see example).
- Implementation of risk based approach for the market surveillance, shared within the network via the dedicated database.
- Saves money and resources.
- Samples exchange.



ANSM tested about 900 samples in 10 years, and benefits by about 2 800 results concerning products authorised in France.







Involvement in OMCLs network

Recent example

- Sartans crisis (some sources contaminated by nitrosamines) showed the high level of collaboration.
- Data and result were immediately shared, via dedicated group steered by EDQM.
- Allowed to develop and provide to network and manufacturers analytical methods, to control many samples in short time, to confirm OOS results and manufacturer's results...
- Several thousands of samples were controlled and results shared: independent and rapid results important to take and justify decisions.







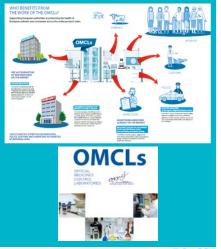
Network is also a way of communication to promote our work

- Communication to professional, stakeholders, ministry, patients... is promoted within the network as well as at a national level
- Benefits (public health and costs) of preventive work and not only in case of crisis could be more explained and emphasized
- New types of medicines (MAb, GT...) are coming in force. The network provide an additional guarantee for patients to access innovative, safe and effective biotech medicines.

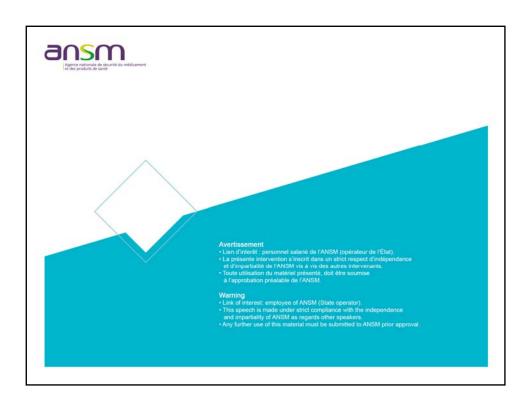
Discover how OMCL contribute to protect your health in Europe and beyond:



https://www.edqm.eu/en/discover-howofficial-medicines-control-laboratoriescontribute-protect-your-health-europe-and-0











Contributions of the General European OMCL Network (GEON) to the protection of Public Health

Patricia Courselle, Strasbourg 19 June 2019

1



What is an OMCL?

- Definition
- Objectives & Missions
- Scope of analysed products
- Roles of OMCLs in Europe
- OMCLs' stakeholder environment

What is an OMCL?



Definition

Official Medicines Control Laboratories are:

- Independent public laboratories
- Established and nominated by National Authorities
- Analysing medicinal products, already or to be marketed, for human and veterinary use

3



What is an OMCL?

Mission and Objectives

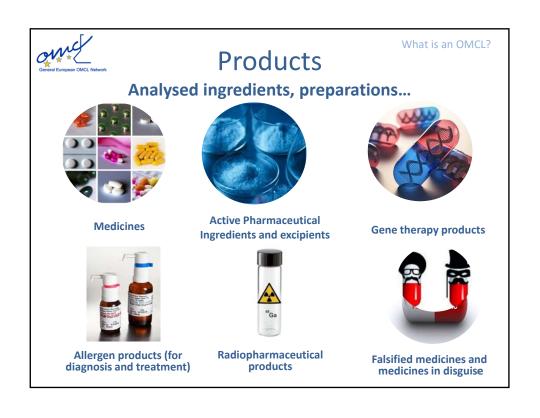
OMCL Mission:

- Support national regulatory authorities in quality control of medicines for human and veterinary use
- Ensure quality, safety and efficacy of medicines to enhance patient and animal welfare

OMCL Objectives:

- Test medicines independently from manufacturers
- React quickly in times of crisis to perform tests and investigate issues







Products

What is an OMCL?

List of Non-medicinal products analysed by OMCLs

- Primary packaging materials
- Medical devices
- Diagnostic products
- Food supplements
- Premixes for medicated feeding stuffs for veterinary use
- Cosmetics
- Tattoo ink















7

General European OMCL Network

What is an OMCL?

Roles of OMCLs in Europe

Pre- and Post-marketing test programmes of medicines & active ingredients:

- Innovator medicines
- Generic medicines and biosimilars
- Unlicensed/unauthorised products
- Suspected falsified/illegal medicines

Emergency testing e.g. in case of adverse reactions of medicines

Packaging and labelling controls

What is an OMCL?

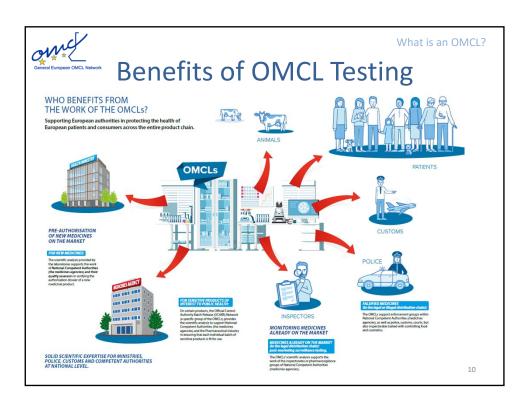


Roles of OMCLs in Europe

OMCLs' activities lend support to:

- Marketing Authorisation Dossiers (in evaluating the quality part)
- Test methods to be included in the European
 Pharmacopoeia
- Good Manufacturing Practice inspections (as laboratory experts)
- Quality defect report evaluation
- Pharmacovigilance investigations

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What is an OMCL?



OMCLs' stakeholders

Government-type Stakeholders (e.g. Regulators and Other Groups)

- The Heads of Medicines Agencies (HMA) Group / EMA
- Agency Inspectorates, Assessors and Pharmacovigilance Groups
- Police/Customs Groups & Forensic Laboratories/Customs Labs
- Food Inspectorates & Food Testing Laboratories
- Cosmetics Inspectorates and related Testing Laboratories

External Stakeholders

- The General Public
- Healthcare Professionals
- The Pharmaceutical Industry

11



What is the GEON?

The General European OMCLs Network

- GEON set-up & history
- Composition/Member ship
- Objectives and benefits of the GEON
- Quality Management Activities and risk-based approach
- The GEON Surveillance programmes and other testing activities



History



The GEON creation & set up:

The GEON organisation:

- Devised in 1994 by the EU Commission & Council of Europe
- To promote the collaboration of OMCLs across Europe (and beyond)
- Set up in 1995 by the European Directorate for the Quality of Medicines & HealthCare (EDQM)
- With financial support from the EU
- Annual work programmes decided with National Authorities and the European Medicines Agency (EMA)
- EDQM: Secretariat and coordination of the Network activities and joint programmes

13

General European OMCL Network

1st meeting in Strasbourg 1994

21 countries

What is the GEON?







Composition





Currently **71 OMCLs** from **43 countries**Members and Observers of the European
Pharmacopoeia Convention

Full, associate or limited membership

- 27 out of the 28 EU countries (except Malta)
 7 European non-EU countries: Belarus, Bosnia & Herzegovina, Republic of
- Moldova, Russian Federation, Serbia, Republic of North Macedonia, Ukraine
- Norway (EEA) & Switzerland (MRA)
- 7 non-European partners (Australia, Canada, Israel, Kazakhstan, Morocco, Singapore and Taiwan FDA): associate members as observers to Ph. Eur. Convention



Status: March 2019

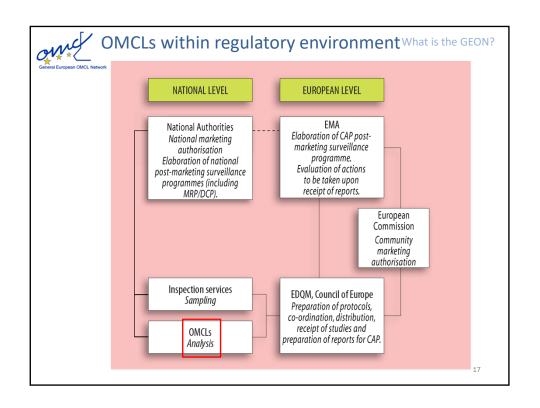
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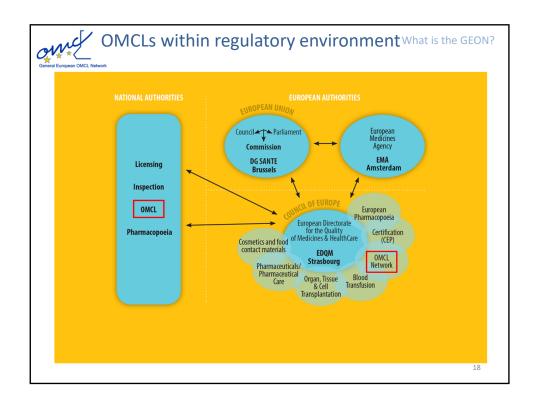


What is the GEON?

23rd GEON Annual Meeting 2018, Sarajevo









Objectives



Protecting public and animal health through independent surveillance testing of medicines (and selected products)



Benefits





Quality Management Activities

Coordination by EDQM

- Publishing OMCL Network Guidelines, Procedures, etc.
- The MJV/MJA programme
- The Proficiency Testing Scheme (PTS)
- Risk Based Approach Sampling
- Training & Educational Activities
- The SUP (Suspicious Unknown Products) Programme

21



Zoom in on GEON's Surveillance programme & other Testing activities

- Surveillance programmes
- Other Testing activities

Surveillance programmes



The CAP Programme

For innovative biological/biotech products as well as IVMPs (Immunological Veterinary Medicinal Products) and for products including new active substances authorised via the Centralised procedure.

- Overall responsibility =>European Medicines Agency (EMA)
- Operational support => EU/EEA OMCL Network, National Inspectorates & the EDQM
- Each annual sampling and testing plan => EMA (input CAP Advisory Group) Risk-based criteria

2014: CAP generic products

2019-2023: Formal authenticity checks of Parallel Distributed CAPs, CAP Biosimilars testing, CAP API testing

The CAP Programmes

Number of products tested and distribution of categories

Programme

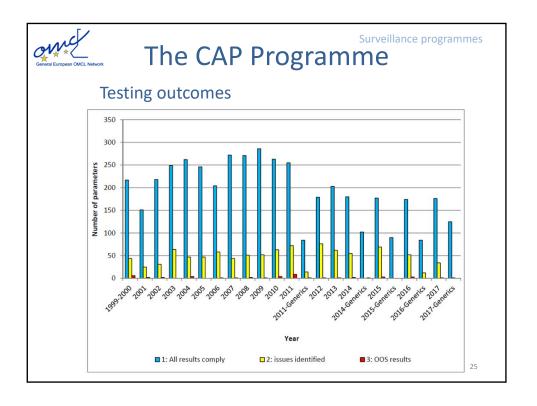
The CAP Programme

Number of products tested and distribution of categories

Programme

The CAP Programme

**The Cap Pr



General European OMCL Network

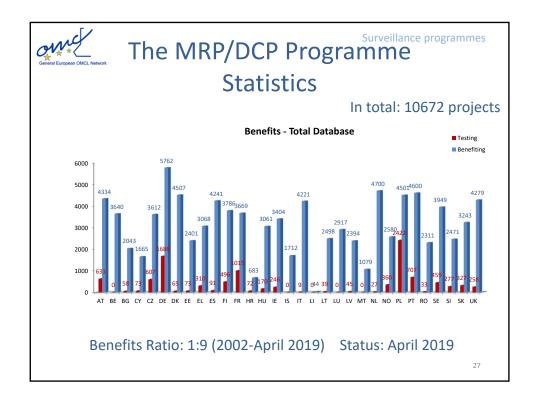
Surveillance programmes

The MRP/DCP Programme

Medicines authorised via the European *Mutual Recognition Procedure* (MRP) and the *Decentralised Procedure* (DCP)

This surveillance programme is restricted to EU/EEA members

- Sampling and testing plans are established by the individual OMCLs
- Information about planned testing activities and test results via a secure IT platform (access restricted to OMCLs and MA)
- Whenever possible national programmes are adapted and samples are exchanged - applying the principle of work-sharing - to avoid overlap testing
- The majority of products are generics



General European OMCL Network

Surveillance programmes

The MSS Programme

Wide range of products open to all OMCL's:

- Testing product groups (a series generics, a series herbal drugs...)
- Specific pharmaceutical forms (modified-release tablets, inhalators)
- Performing specific tests (heavy metals, dissolution..)

Common protocol for testing (scientific advisor)

National level sampling

Common test report

Overview **quality** of focused products on European market Where appropriate **revision** relevant Ph. Eur. monograph and/or general chapters and test methods

Continual **improvement in testing** of those medicines.

Surveillance programmes



The MSS Programme

 Market Surveillance Studies: OMCL contribution to quality and safety of medicines on the market

Dr Lone Olsen, Danish Medicines Agency (DKMA), Denmark

29



Surveillance programmes

OCABR/OBPR Programme

Independent testing and release of batches of human biological medicinal products (vaccines, blood and plasma derivatives) and immunological veterinary medicinal products (IVMPs) for marketing by CA or OMCL

WHY?

- recognised variability inherent in the products, in their production and test methods
- used i.e. in prevention campaigns for healthy children and in helping compromised individuals e.g. blood clotting factors for haemophilia patients
 - Article 114 of EU Directive 2001/83/EC as amended (for human vaccines and medicinal products derived from human blood and plasma)
 - Articles 81 & 82 of EU Directive 2001/82/EC, as amended, for immunological veterinary medicinal products (IVMPs)

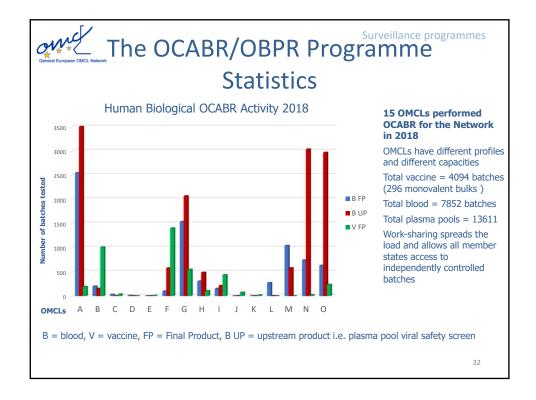
Surveillance programmes

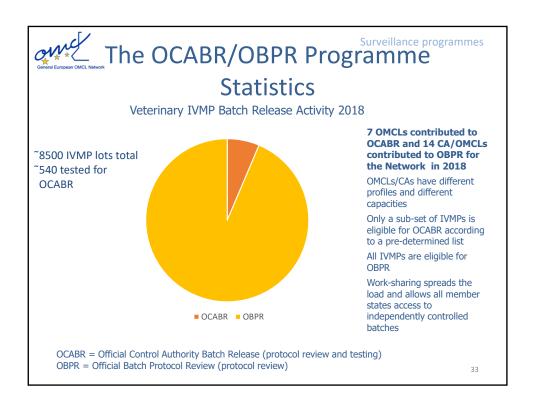


OCABR/OBPR cont'd

Mutual Recognition underpins this programme

- A batch is tested/examined in only 1 OMCL before placed onto the market
 - Independent check of quality
 - Compliance with spec of approved MA dossier
- Review of the manufacturers' batch production records and test results
- Compliant batches are issued an EU OCABR certificate
- Mutually recognised within the EU/EEA, Switzerland and Israel (human vaccines only), and is also recognised as a sign of quality in other parts of the world.





General European OMCL Network

Surveillance programmes

OCABR/OBPR cont'd

 Official Control Authority Batch Release (OCABR): benefits, challenges and perspectives

Dr Volker Öppling, Paul-Ehrlich-Institut (PEI), Germany

Other Testing activities



API Surveillance

Working Group on API Testing was established in 2011

Fostering **collaboration** in quality control and "fingerprint analysis" of APIs on European market
Raising **awareness** of valuable OMCL contributions

- Sharing information via a common API testing database
- Developing sampling strategies/RB selection of API samples
- MS programmes applying, amongst others, chemometric methods
- Organising training for Network members
- Drafting relevant OMCL Network documents

35



Other Testing activities

API Surveillance

API Testing: how OMCLs can support the control of APIs

Dr Eric Deconinck, Sciensano, Belgium and Mr Yvan Grange, National Agency for Medicines and Health Products Safety (ANSM), France

Other Testing activities



Gene Therapy Products

Working Group created in 2008 to foster collaboration between OMCLs active in the field of GTP testing Goals of the WG:

- Sharing of knowledge and latest technologies
- Establishment of methods and reference standards
- Centres of Excellence

Target vectors:

Adenovirus-associated vectors (AAV), Plasmids, Poxvirus vectors, Retro-/lentivirus vectors, Non-replicative adenovirus vectors (AV), HSV1-based vectors

Need for more manpower: more OMCLs and/or include external partners, i.e. academia/manufacturers, in collaborative studies

37



OMCL

FM testing at OMCLs' level

Falsified Medicine Testing Activities

Some OMCL's collaborate routinely with **customs**, **police**, **law courts and health authorities** on the identification and quantification of falsified/illegal medicines.

Decision in 2004

- to better co-ordinate the work of individual OMCLs
- to share information between all GEON members
- to set up common programmes with help of EDQM

FM testing at GEONs' level



Benefits

"Anti-Falsified medicines" activities

- Facilitates the sharing of technical know-how and expertise on the detection of falsified/illegal medicines
- Facilitates the sharing of intelligence and information in this area between OMCLs and NCAs
- Helps OMCLs develop competencies in falsified medicines testing activities
- Offers a forum for OMCLs active in this area to exchange information with other stakeholders
- Speaks as one voice with stakeholders



39



OMCL

FM testing at OMCLs' level

Falsified Medicine Testing Activities

 Combatting falsified medicines - the EDQM's holistic approach in support of the MEDICRIME Convention

Dr Karl-Heinz Buchheit, EDQM, Council of Europe

 The contributions of OMCLs in the fight against Falsified and Illegal Medicines

Mr Stephen Young, Medicines and Healthcare products Regulatory Agency (MHRA), United Kingdom

crisismanagement Example of crisis management June 2018: Valsartan manufactured by Zhejiang Huahai **Pharmaceutical contaminated with NDMA** (nitrosodimethylamine)(possible carcinogenic) EU authorities **NCA EDQM GMP** inspection Review ASMF, Risk Based MAA Review CEP's, Sampling Plan Coordination Risk Based Sampling Plan, Testing, Common Format Method Development CHMP art 31, **Revision Ph Eur** Testing, Support Risk Based Monographs **Evaluation Dossier** Sampling Plan

Ph Eur

OMCI

Example of crisis management

OMCL network contribution to regulatory action with respect to the "sartan crisis",

poster by M. Wierer, R. Wanko, M. Bertrand



For more information on the activities of the **General European OMCL Network** please consult the section "OMCL Network" on www.edqm.eu



General European OMCL Network (GEON)

