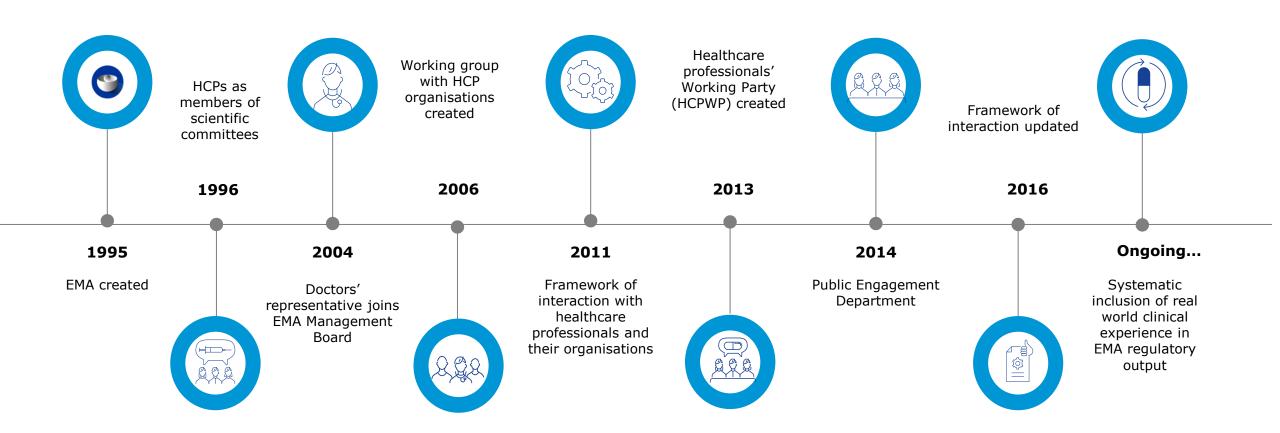
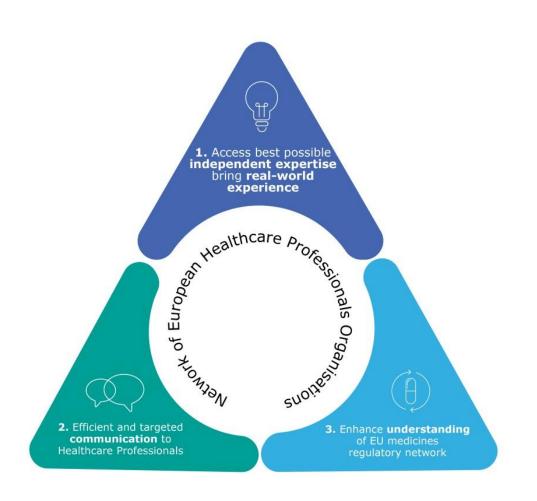


Collaboration with health professionals – the EMA journey



Source: EMA

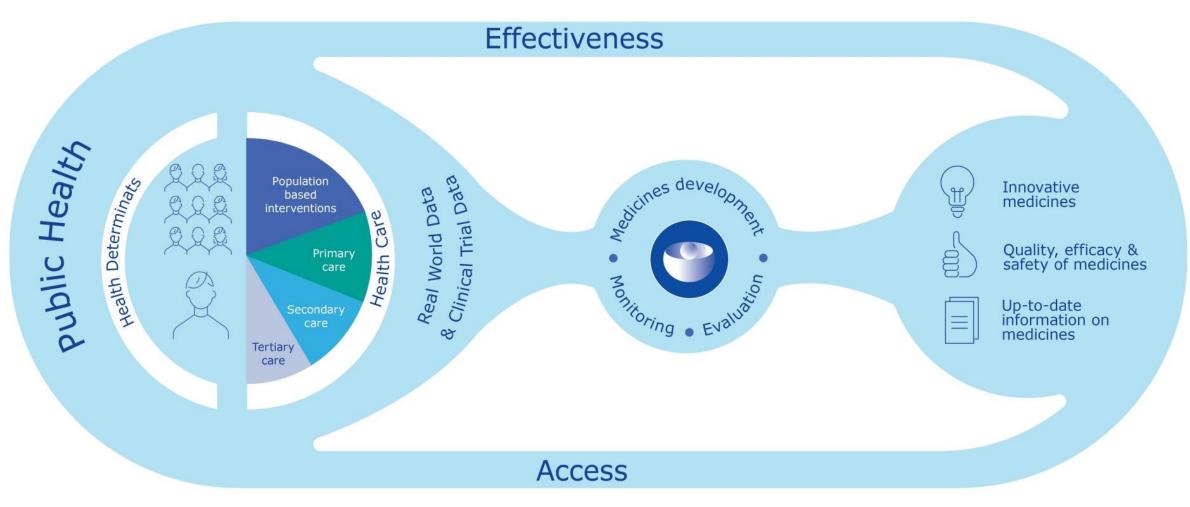
Fostering EMA interaction with healthcare professionals



- Reinforce knowledge existing in the regulatory network with additional valuable input from day-today clinical practice while enhancing communication and outreach to those impacted by EU decisions
- Healthcare professional organisations' including learned societies as key facilitators to channel targeted and meaningful messages to the wider community of healthcare professionals
- Framework of interaction adopted in 2011

Source: EMA

EMA in the Public Health context



Source: EMA

STRENGTHS OF THE EU REGULATORY SYSTEM

Multicultural

Peer-reviewed

Reasonably foreseeable

Major achievement of the EU

Some fashion terms that you may be used (upset?) to hear ...

- Unmet medical need
- Innovation
- Timely access
- Targeted therapies
- Personalised medicines



PRIME - PRIORITY MEDICINES

CAR-T cell recommended for approval in the EU → KYMRIAH*

(tisagenlecleucel) Suspension for IV infusion



Kymriah: regulatory tools and measures applied pre- and post-authorisation

Pre-authorisation

PRIME designation - 23 June 2016

Scientific Advice pertained to quality, non-clinical and clinical aspects – 2014, 2016 (twice) and 2017 (twice)

[...]

Yescarta: regulatory tools and measures applied pre- and post-authorisation

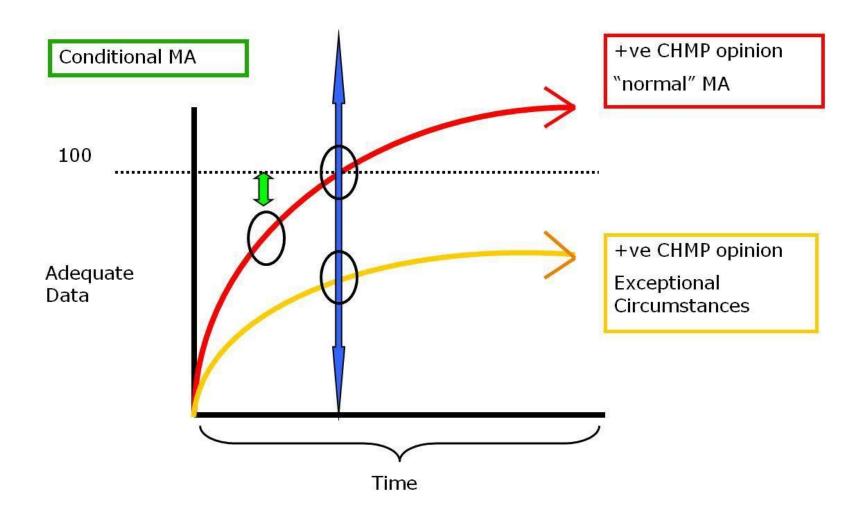
Pre-authorisation

PRIME designation - 26 May 2016

Scientific Advice pertained to quality, non-clinical and clinical aspects – 2015 (twice) and 2017 (twice)

[...]

Type of authorisation



TIMELY ACCESS

- PROS-
 - Earlier access for patients
 - Favourable for companies
 - Gradual entry into the market

CONS-

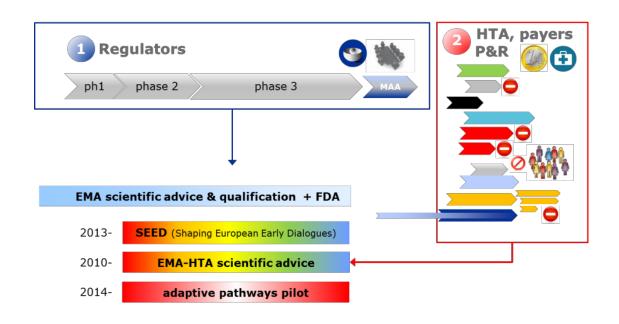
- Level of uncertainty
- Over-interpretation of phase II data
- Almost lack of safety information
- Biomarkers rather than outcomes

THE FUTURE

AREAS OF IMPROVEMENT

HTAs (European HTA?)

health technology assessment (HTA)



dialogue regulators &HTAs &payers





IPT – therapeutic positioning reports (REA)









ISSUES TO ADDRESS

- Harmonization: there is no scientific reason explaining differences in Access across the EU
- Inverse evaluation
- Pricing and reimbursement

THE FUTURE

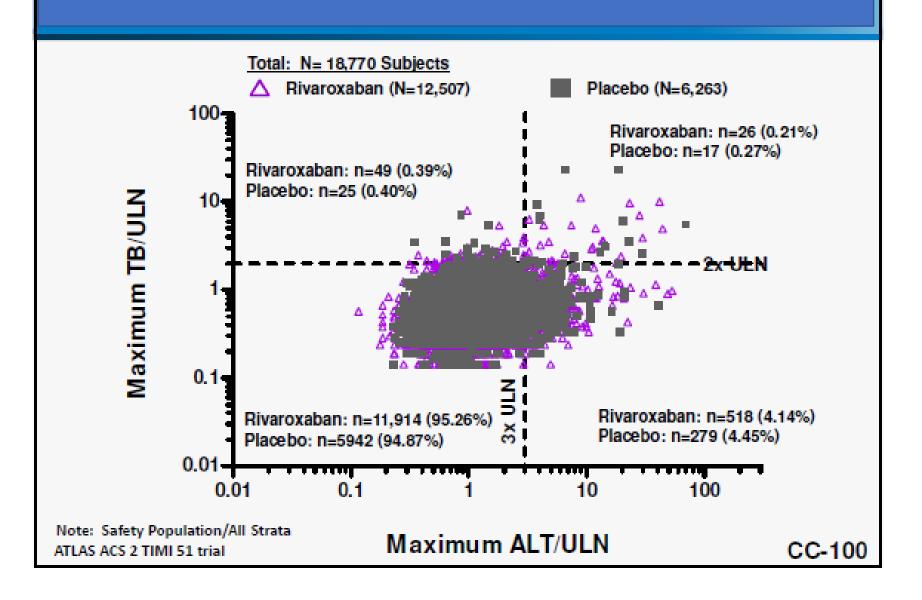
AREAS OF IMPROVEMENT

- HTAs (European HTA?)
- Efficiency of clinical research
 - Non-go decisions
 - Optimization of CTs
 - Relevant a easy-to measure endpoints

CRF IN ACS STUDY

- 113 page CRF template
- Resulting in over 1000 pages for some subjects

HEPATOTOXICITY



PATIENT STATUS AT THE END OF THE STUDY

| | placebo | 2.5 | 5 |
|-------------------|---------|------|------|
| complete | 85% | 85% | 84% |
| death | 4% | 3% | 4% |
| good f/u | 89% | 88% | 87% |
| consent withdrawn | 8% | 9% | 9% |
| lost | 0.3% | 0.2% | 0.3% |
| other | 3% | 3% | 4% |
| bad f/u | 11% | 12% | 13% |

Source: Sponsor's TRLSTAT (Stfatus a En o Study) in ADSL.XPT

GRAPHICALLY SPEAKING

CTs population



RW population



THE FUTURE

AREAS OF IMPROVEMENT

- HTAs (European HTA?)
- Efficiency of clinical research
 - Non-go decisions
 - Optimization of CT
 - Relevant a easy-to measure endpoints
- Use of innovative tools
 - New CT design: framework, master, basket, adaptive ... designs
 - RWE Big Data

The NEW ENGLAND JOURNAL of MEDICINE

REVIEW ARTICLE

THE CHANGING FACE OF CLINICAL TRIALS

Jeffrey M. Drazen, M.D., David P. Harrington, Ph.D., John J.V. McMurray, M.D., James H. Ware, Ph.D., and Janet Woodcock, M.D., Editors

Master Protocols to Study Multiple Therapies, Multiple Diseases, or Both

Janet Woodcock, M.D., and Lisa M. LaVange, Ph.D.

A look over the fence - to other industries



E-controls, sensors → real-time analysis →

keep plane safe in the air and inform next-gen product design

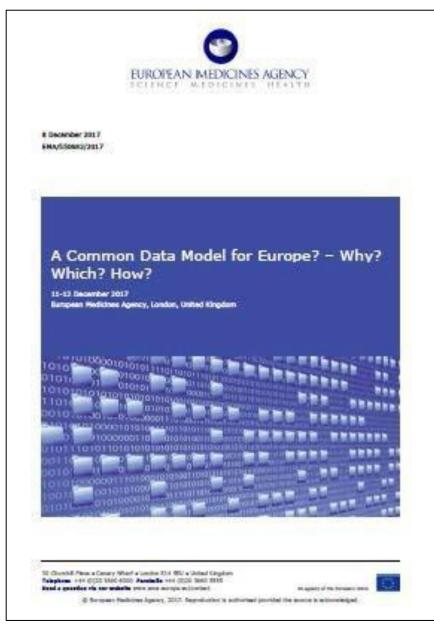
Source: H-G Eichler



Sensors for real-time monitoring; geocoded maps; soil, weather conditions \rightarrow raise agricultural productivity **and** inform next-gen product and services design

Source: H-G Eichler

A Common Data Model for Europe?



Objectives:

 To define the opportunities and challenges around implementation of a common data model in Europe to support regulatory decision making.

• Output:

 To propose guiding principles for the development of Common Data model in Europe including key criteria for validation in the context of regulatory decision making.

Enabling Sharing of Real World Data

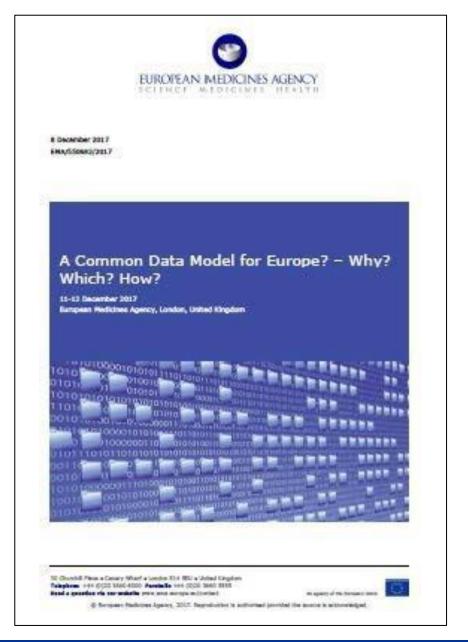


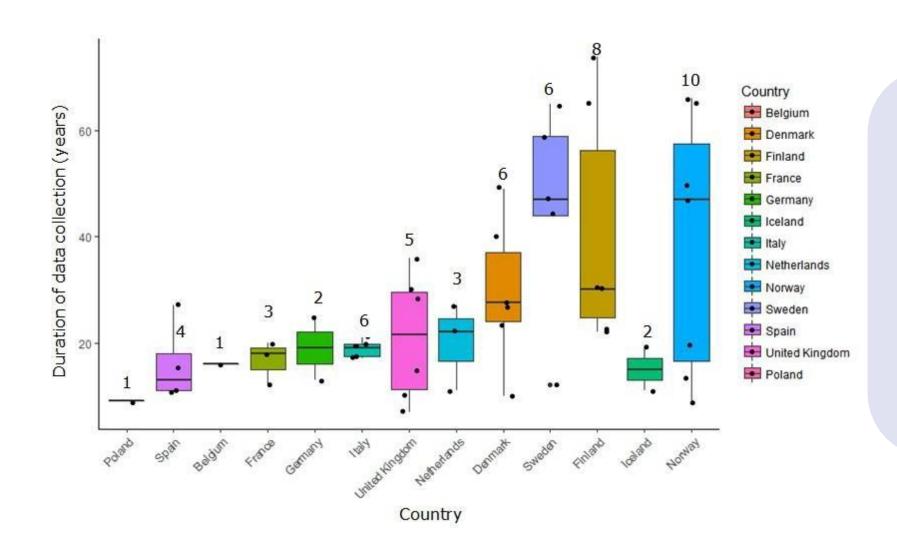




Three workshops on:

- Cystic Fibrosis: 14th June 2017
- Multiple-Sclerosis: 7th July 2017
- Car-T cells: 9th February 2018 8th June 2018





Following an analysis
of electronic
healthcare databases
across Europe, only
34 databases across
13 member states
relevant for regulatory
decision making

Healthcare Professionals Working Party (HCPWP)

Platform for dialogue and exchange on relevant issues concerning medicines

The HCPWP provides recommendations to the EMA and its Human Scientific Committees on all matters of direct or indirect interest to healthcare professionals

