The role of rare disease registries (RDRs) in drug development

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EPIRARE
European Platform for Rare Disease Registries

A three year project co-founded by the European Commission within the framework of the EU program of Community Action in the field of Public Heath

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EPIRARE (European Platform for Rare Disease Registries) is a three-year project co-funded by the European Commission within the EU Program of Community Action in the field of Public Health. EPIRARE started officially on April 15, 2011.

Final EPIRARE Deliverables

The EPIRARE deliverables are available.

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2013 EURORDIS POLICY FACT SHEET - RARE DISEASE PATIENT REGISTRIES

Rare Disease Patient Registries represent a fundamental research effort upon which a number of critical activities are based. They constitute key instruments for increasing knowledge on Rare Diseases (RD) by pooling data for fundamental and clinical research, epidemiological research, and real-life post-marketing observational studies[1]. They broadly support health and social service planning by playing a pivotal role in healthcare organisation. They also represent a necessary infrastructure for the implementation of the European Reference Networks for rare diseases, and as such they represent a top priority[2] for the RD communitiy at a National, European and International level. Furthermore, Patient Registries are one of the main pillars of the current EU policy framework on National Plans for RD[3]. EURORDIS holds Patient Registries as an advocacy priority and is actively participating in the major EU projects[4, 5, 6]. In the field, shaping and implementing an EU coordinated strategy on registries that will be patient-centred.

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EUCERD
European Union Committee of Experts on Rare Diseases

EUCERD Core Recommendations on Rare Disease Patient Registration and Data Collection

Executive Summary

On 5 June 2013, during the eighth meeting of the European Union Committee of Experts on Rare Diseases, the *EUCERD Core Recommendations on Rare Disease Patient Registration and Data Collection* were unanimously adopted by the 51-member EUCERD. This Recommendation is the fruit of various multi-stakeholder meetings, consultations of the EUCERD and previous publications in the field.

Rare disease registries are valuable instruments for increasing knowledge on rare diseases, and for supporting fundamental, clinical and epidemiological research, as well as for post-marketing surveillance of orphan medicinal products and medicines used off-label. This data is also crucial for the planning of healthcare services.

The Council Recommendation on an Action in the Field of Rare Diseases (2009/C 151/02) (8 June 2009) cites registries as a source of information on rare diseases and encourages this resource to be supported at Member State and Community level. Registries and data collection for rare diseases are also key aspects of the national plans/strategies for rare diseases currently being elaborated/implemented at Member State level, as encouraged by the Council Recommendation.

The *EUCERD Core Recommendations on Rare Disease Patient Registration and Data Collection* cover six main aspects on which a consensus has been reached by stakeholders in relation to patient registries and data collection.

Firstly, the recommendation calls for the international operability of registries and databases, primarily by use of appropriate coding systems and core data sets to enable the

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WT3:
Work package description

Project Number [1]	603160	Project Acronym [2]	ASTERIX
One form per Work Package			
Work package number [53]	WP4	Type of activity [54]	RTD
Work package title	Improved use of patient level information and perspectives		
Start month	1		
End month	42		
Lead beneficiary number [55]	4		

Objectives

Objective 4.1: Optimize use of patient registries to inform design

Objective 4.2: Deliver methodology to include patient's preferences in the weighting of outcomes

Objective 4.3: Assessing the value of Goal Attainment Scaling in rare disease trials

Objective 4.4: Establish methods to facilitate patient involvement in trial design

Description of work and role of partners

General description:
In WP4, we will develop methodology to systematically obtain patient level information as well as perspectives to include in the design of trials. These pertain to patient registries, weighting patient preferences for outcomes, improved relevance of outcomes to patients and actual participation of patients. For the latter, also ethical aspects of innovative design will be investigated. Methodology applied will include surveys and survey design and focus groups with the aim to quantify results such that they can be used in designing trials, e.g. through weighting or Bayesian priors. In addition, it will contain qualitative research, especially to assess ethical implications. Focus groups will be included in Tasks 4.2 and 4.3; surveys will be included in Tasks 4.2 and 4.4.

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Definition

- General: database/organized system collecting specific information about patients in standardized manner

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Using registries to recruit subjects for clinical trials ☆

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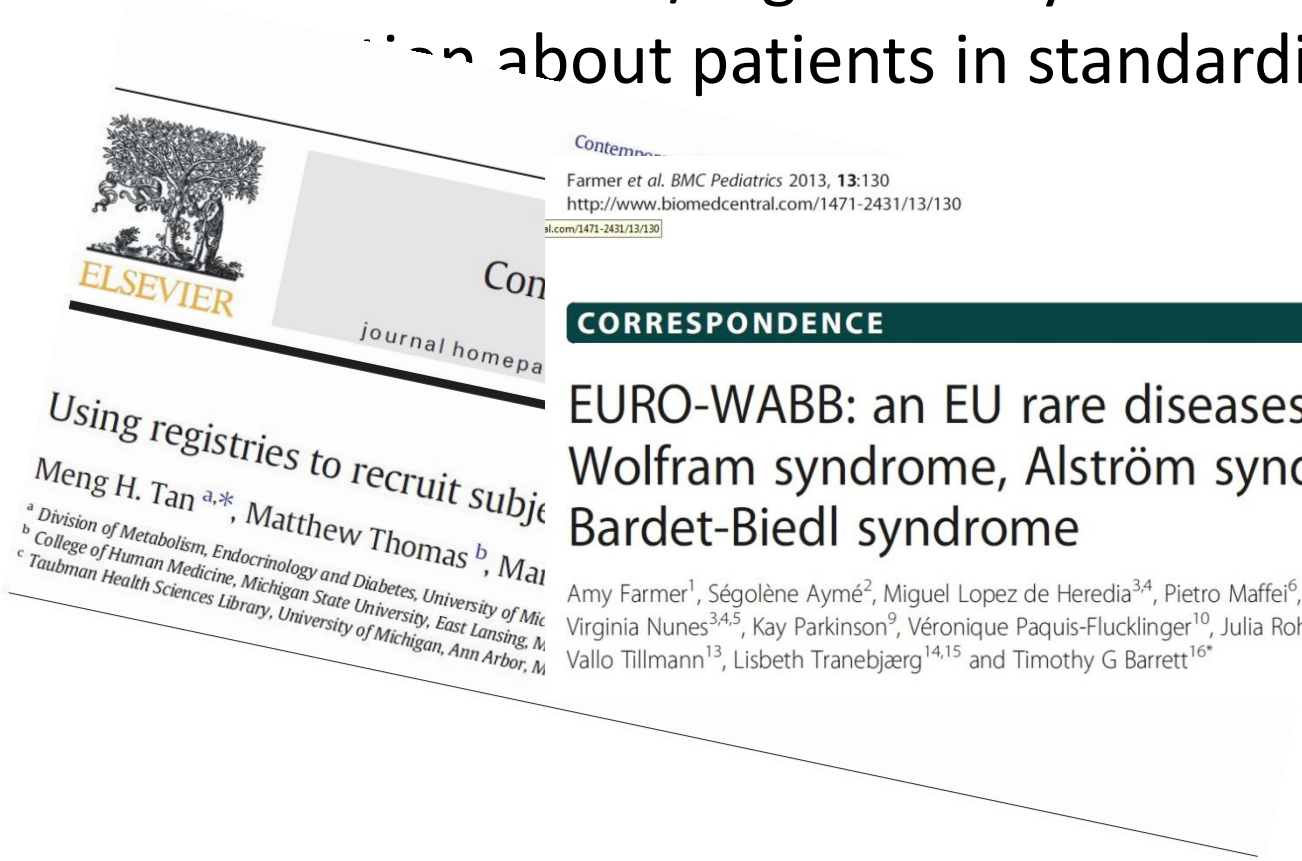
Definition

- General: database/organized system collecting specific [illegible] about patients in standardized manner



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Farmer et al. BMC Pediatrics 2013, 13:130
http://www.biomedcentral.com/1471-2431/13/130

BMC Pediatrics

CORRESPONDENCE Open Access

EURO-WABB: an EU rare diseases registry for Wolfram syndrome, Alström syndrome and Bardet-Biedl syndrome

Amy Farmer[1], Ségolène Aymé[2], Miguel Lopez de Heredia[3,4], Pietro Maffei[6], Susan McCafferty[7], Wojciech Młynarski[8], Virginia Nunes[3,4,5], Kay Parkinson[9], Véronique Paquis-Flucklinger[10], Julia Rohayem[11], Richard Sinnott[12], Vallo Tillmann[13], Lisbeth Tranebjærg[14,15] and Timothy G Barrett[16*]

Goal

- General: database/organized system collecting specific information about patient in standardized manner

- Focus: on registries collecting outcomes for a population defined by a particular disease/condition

- Goal: how can a registry be useful in trial design?

RDR applications

- RDRs can help to improve efficiency in trial design and drug development
  - Sample size calculation
  - Registry-based clinical trial
  - Post-marketing phase
  - Historical controls

RDR applications

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  - Historical controls

Example 1

- Myozyme in Pompe's disease
  - Rare lysosomal storage disease, incidence 1 in 40,000, high mortality rate for infantile-onset patients
  - Double-blind, RCT with placebo among late-onset patients (n=90, adults)
  - Single-arm trial among infantile-onset patients (n=9, children), compared to historical controls from registry
  - Myozyme authorized for both late-onset and infantile onset Pompe's disease patients

http://www.ema.europa.eu/ema/index.jsp?curl=pages/medicines/human/medicines/000636/human_med_000917.jsp

Example 2

- Defitelio in severe veno-occlusive disease (VOD)
  - Condition: hepatic veins blocked in patients after stem-cell transplantation, high mortality rate (75%-85%)
  - Single-arm trial among patients with VOD (n=102), compared to historical controls from registry,
    - » Mortality rate trial group: 62%
  - Defitelio authorized, under ‘exceptional circumstances’

http://www.ema.europa.eu/ema/index.jsp?curl=pages/medicines/human/medicines/002393/human_med_001646.jsp&mid=WC0b01ac058001d124

Conclusions

- Although in general a RCT remains the design of first choice,…
- RDRs can help to improve efficiency in trial design and drug development
- In certain circumstances the use of historical controls from a RDR can be a solution in an ethically difficult situation

General recommendations

- To be useful for different research purposes longitudinal data collection is indispensable
- Next to standardized and validated outcomes, a standardized system for data collection is advised
- A disease-specific RDR is advised, in which all patients with the disease are included

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Thank you!

Collaborators:

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