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Carlos III



Plataforma de Mercados  
Autonómicas

MEDICAMENTOS INNOVADORES  
Plataforma Tecnológica Española

NANOMED

PLATAFORMA  
ESPAÑOLA INNOVACION  
TECNOLOGIA SANITARIA

X CONFERENCIA ANUAL DE LAS  
PLATAFORMAS TECNOLÓGICAS  
DE INVESTIGACIÓN BIOMÉDICA

La innovación en el Sistema Nacional de Salud

Madrid, 7 y 8 de marzo  
Hotel Meliá Avenida América

asebio

farmaindustria

Instituto español  
de empresas de  
TECNOLOGÍA SANITARIA



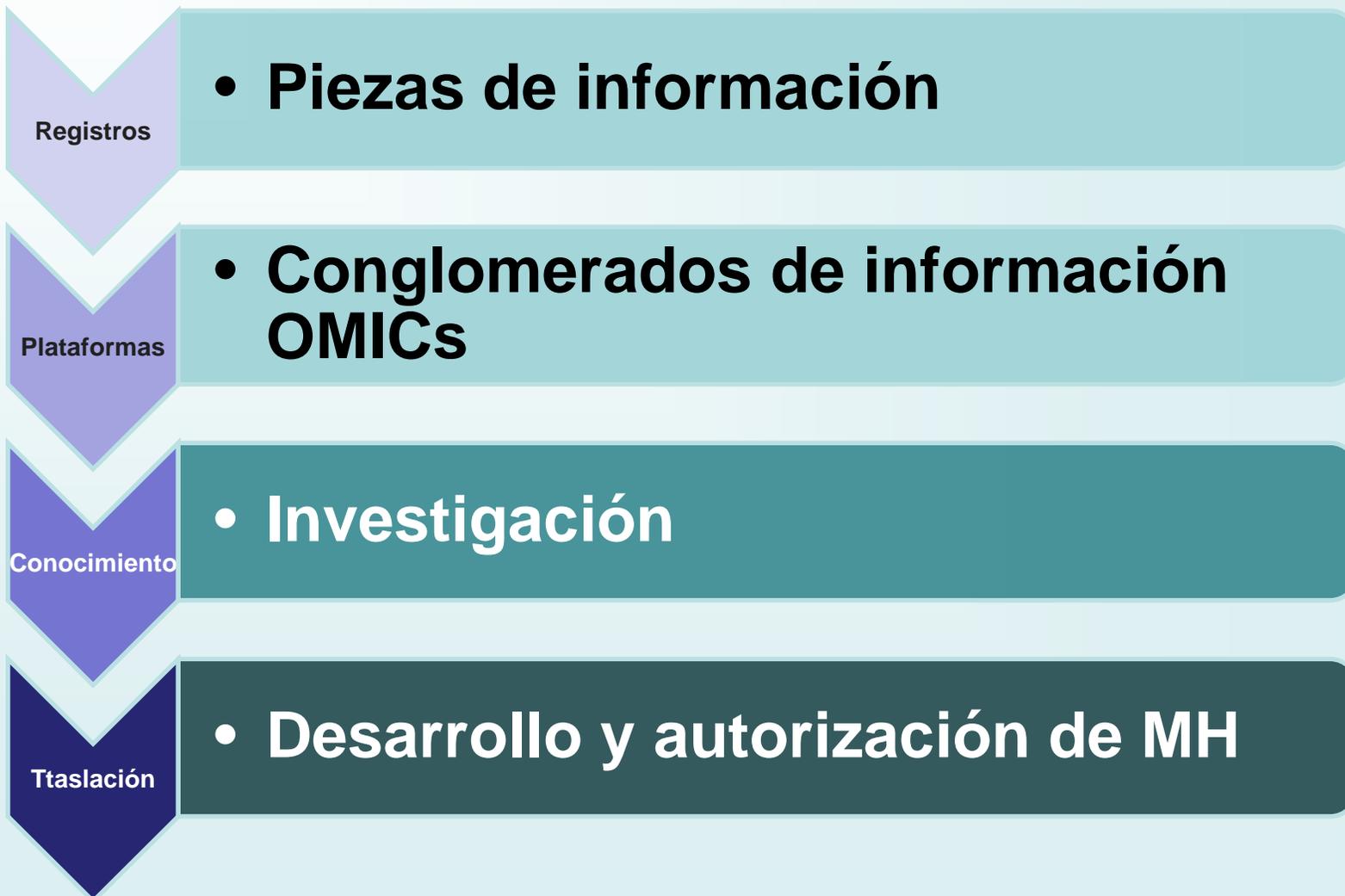
## I+D y Comercialización de Fármacos para Enfermedades Raras

El papel de los registros y plataformas ómicas de enfermedades raras en el desarrollo y autorización de medicamentos huérfanos

**Manuel Posada De la Paz**

Director del Instituto de Investigación de Enfermedades Raras (IIER, ISCIII)

# Puntos Clave



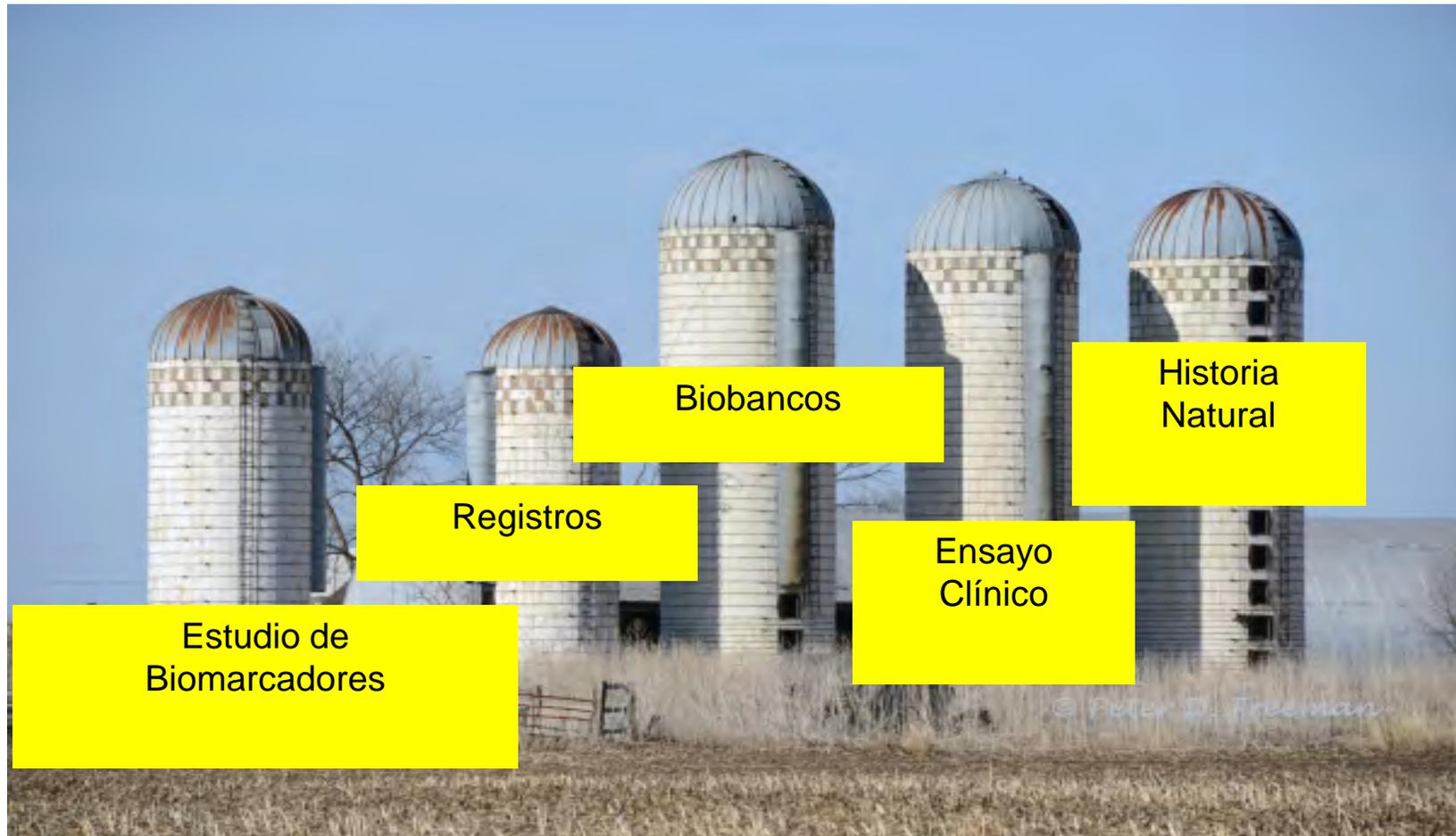
# Registros: Definición

- **Los registros son herramientas epidemiológicas**
- **Basadas en métodos observacionales**
- **Utilizan la recogida sistemática de datos sobre el comienzo y desarrollo de la enfermedad**
- **Objetivo de favorecer la**
  - **Investigación etiológica**
  - **Investigación clínica**
  - **Contribuyen a la planificación de los recursos socio-sanitarios**

**Registro  $\neq$  Base de datos**

## Derrotar a los Silos de información

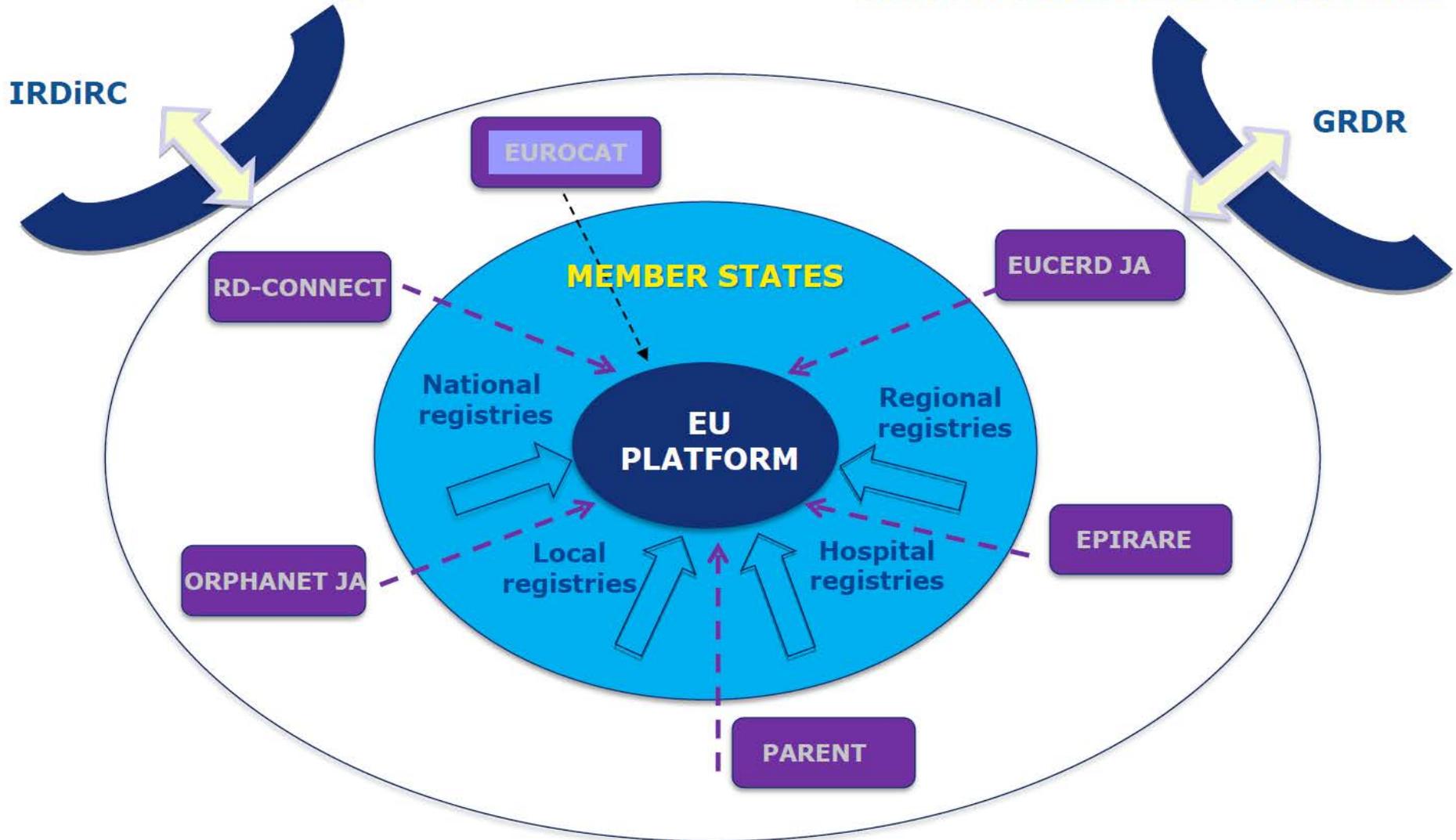
Compartir datos para investigar y mejorar los análisis

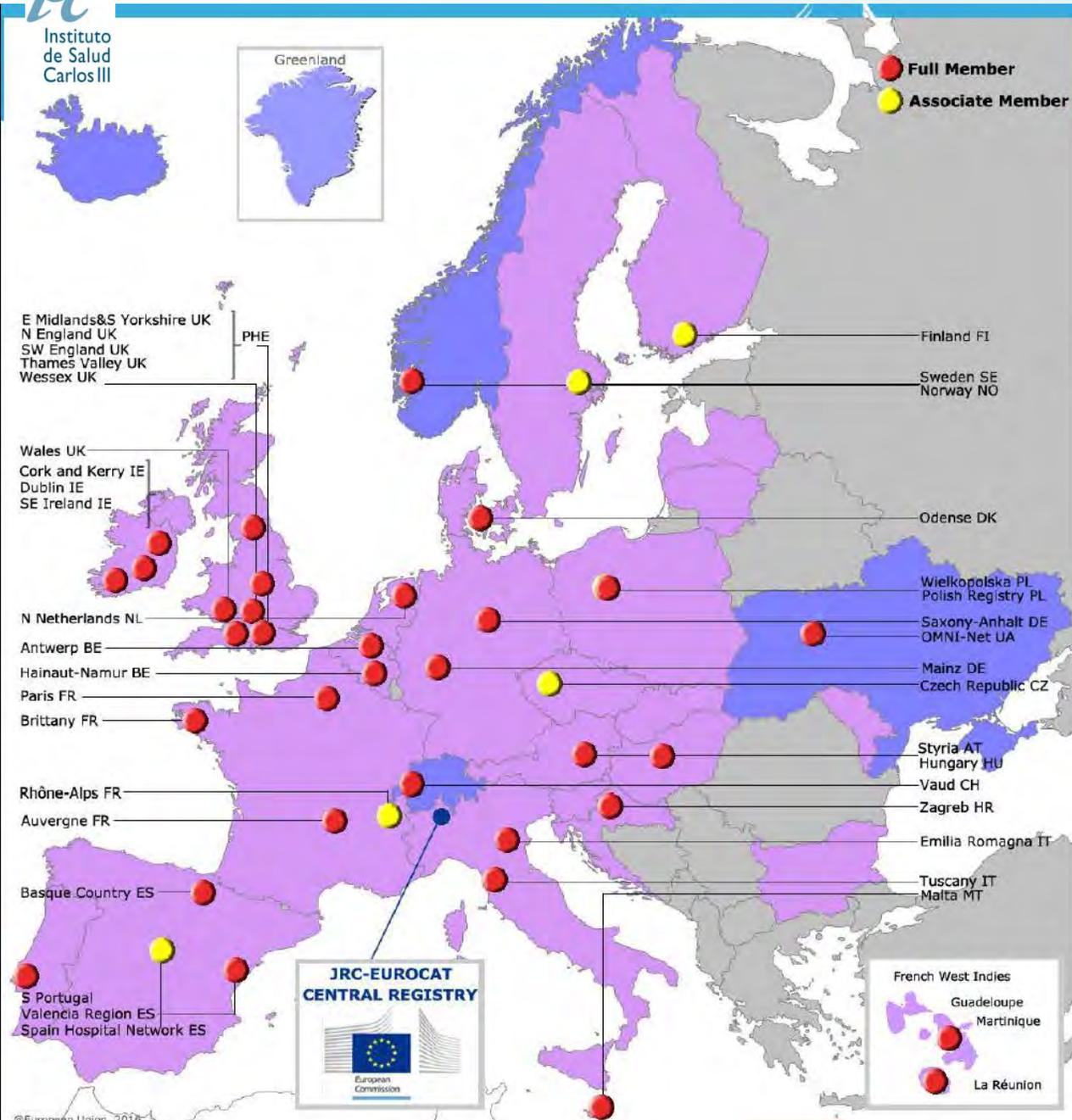




## Building the Platform:

## collaborations and interactions





## FULL MEMBERS

- 32 registries in 18 countries
- population-based registries transmitting case data on all congenital anomaly (CA) cases in their region.

## ASSOCIATE MEMBERS

- 6 registries in 6 countries
- transmit an aggregate file containing the total number of cases in each congenital anomaly subgroup by type of birth.

# Global Rare Diseases Patient Registry Data Repository

## GRDR

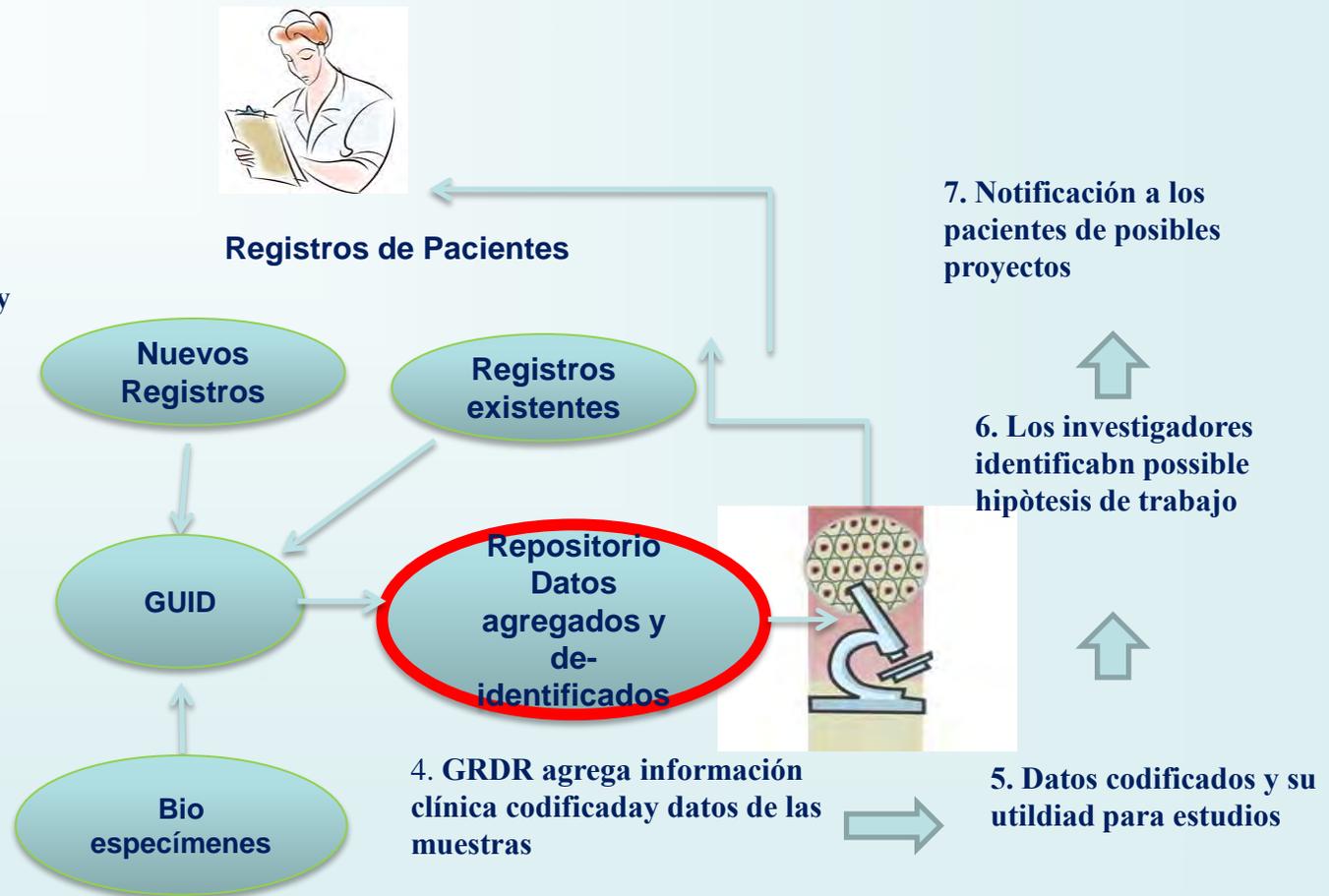
1. Los pacientes proporcionana información en salud y resultados de tests a través de los DCE



2. Se asigna un Global Unique Patient ID (GUID);



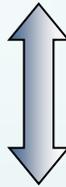
3. Los datos del pacientes son unidos a sus muestras biológicas



Pacientes

Investigadores

CCAA



Registro de  
pacientes

Registro de Base Poblacional  
PLANIFICACIÓN EN SALUD

INVESTIGACIÓN

Historia natural de  
la enfermedad  
Seguimiento  
Ensayos clínicos  
(reclutamiento)  
Muestras biológicas



Políticas de salud  
Prevalencia  
Incidencia  
Mortalidad

# EU Platform on Rare Diseases Registration

## INTEROPERABILITY

- Inventory of registries/databases
- Metadata registry
- Web hub
- Tools for registries

ERNs IT  
Platform



RD  
Platform

## SUSTAINABILITY

### Data Repository

JRC-EUROCAT  
Central Registry

JRC-SCPE Central  
Registry

Central  
Database

Central  
Database

# Interoperabilidad en el marco de la Plataforma MatchMaker Exchange





## 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. 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 for the RD community 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<sup>1</sup>. EURORDIS holds Patient Registries as an advocacy priority and is actively participating in the major EU projects<sup>2,3</sup>. In the field, shaping and implementing an EU coordinated strategy on registries that will be patient-centred.

### WHY ARE REGISTRIES SO IMPORTANT FOR RD PATIENTS?

It has been demonstrated that Patient Registries are a major determinant for successful translational research in the field of RD. Where well-implemented registries and active patient organizations exist, the likelihood for developing a treatment for the disease in question is increased<sup>4</sup>. Furthermore, the consistent longitudinal collection of patient data facilitates the creation of standards of care and demonstrably improves patient outcomes and life expectancy even in the absence of new therapies. These compelling arguments for Rare Disease Patient Registries as indispensable infrastructure tools for translating basic and clinical research into therapeutic solutions have elevated their status to a major priority for all stakeholders, making them a building block of any sound policy on RD.

### HOW TO ADDRESS THE ISSUE?

Being very thorough research infrastructures, Patient Registries require significant time and human resources as well as conspicuous financial investment and sustainability plans. Standard operating procedures and common resources or platforms for centralizing new or existing registries should be developed. Collaborative efforts at all levels are paramount to establish and manage Rare Disease Patient Registries and derive from them meaningful outcomes in the most efficient manner and for the upmost benefit of patients. Nevertheless, no uniform, accepted standards currently govern the collection, organisation, or availability of data collected by Rare Disease Patient Registries. The existence of conspicuous data-sharing barriers creates a compelling argument for developing globally accepted definitions, classifications, data standards and favourable and congruent policies and resources facilitating data sharing and pooling.

### DEVELOPING RARE DISEASE PATIENT REGISTRIES: THE 10 MAJOR PRINCIPLES PROMOTED BY EURORDIS<sup>5</sup>

1- Patient Registries should be recognised as a global priority in the field of Rare Diseases. The priority for establishing and supporting them has become more and more compelling and urgent for all stakeholders in order to achieve their different but complementary goals aimed at augmenting knowledge and developing new therapeutic breakthroughs in the field of RD.

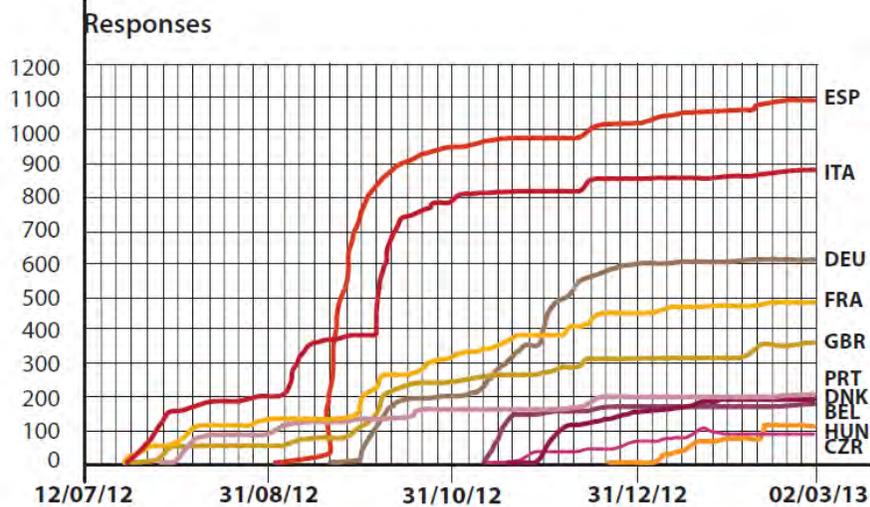
2- Rare Disease Patient Registries should encompass the widest geographic scope possible. The benefits of international collaboration and maximization of limited resources are most obvious for rare diseases, especially the very rare ones, due to the low individual prevalence and the scarcity of information related to each of them.

3- Rare Disease Patient Registries should be centred on a disease or group of diseases rather than a therapeutic intervention. Disease focused registries assure higher quality and completeness of data and allow setting post-marketing requirements, especially for regulators and payers, ( long-term outcomes and cost-effectiveness of new medicines).

4- Interoperability and harmonization between RD Patient Registries should be consistently promoted. It becomes a compelling necessity to develop globally accepted classifications, data standards and favourable policies and resources facilitating data sharing and put standard operating procedures and common resources for centralizing new or existing registries should be developed.

5- A minimum set of Common Data Elements (CDE) consistently used in all Rare Disease Patient Registries would facilitate the standardization of data (same data entry procedures), harmonization (facilitation of data comparison), and interoperability (shared quality assurance standards).

**Figure 4.**  
Access to survey per language



Survey progress

# The Voice of 12,000 Patients

Experiences and Expectations of Rare Disease Patients on Diagnosis and Care in Europe



# Registros: Medicamentos Huérfanos

- **Informan y permiten**
  - El análisis de riesgos, tendencias y variabilidad geográfica
  - Optimizan la inversión de recursos
- **Promueven la innovación**
  - Nuevas hipótesis: Etiología vs mecanismos
  - Relación causa-efecto: Medicina personalizada
- **Promueve la investigación**
  - Medicina centrada en el paciente y ensayos clínicos
  - Estudiar la historia natural de la enfermedad
  - Medidas de coste-efectividad e impacto del MH
  - Control de los efectos secundarios

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The screenshot shows the website for 'feder' (Federación Española de Enfermedades Raras). The banner features a group of five children in white clothing. On the left, a green speech bubble contains the text: 'LA INVESTIGACIÓN ES NUESTRA ESPERANZA #SOMOSFEDER'. On the right, the text reads: 'DÍA MUNDIAL DE LAS ENFERMEDADES Raras' and '28 DE FEBRERO'. At the bottom of the banner, it says 'ADHIÉRETE' and '¿QUÉ PUEDES HACER TÚ? APÓYANOS, PARTICIPA, DIFUNDE, ...'. The website header includes navigation links: 'EL DÍA MUNDIAL', 'MATERIALES', 'ACTÚA', 'AYÚDANOS', 'ACTIVIDADES', 'NOTICIAS', and 'COLABORADORES'.

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