# Modelos actuales de atención y futuras direcciones en las DSD



Dr Andreas Kyriakou Paediatric Endocrinologist, Glasgow, UK

#### **Year 2006**

#### Presenting 4 cases of a rare DSD

#### The IVS2-2A>G mutation in the SRD5A2 gene is present in all Greek-Cypriot with 5 Alpha Reductase Deficiency diagnosed so far

Andreas Kyriakou<sup>1</sup>, Yiannis S. Ioannou<sup>1</sup>, Meropi Toumba<sup>1</sup>, Amalia Sertedaki<sup>2</sup>, Christina Kanaka-Gantenbein<sup>2</sup>, Serge Lumbroso<sup>3</sup>, Charles Sultan<sup>3</sup>, Nicos Skordis<sup>1</sup>

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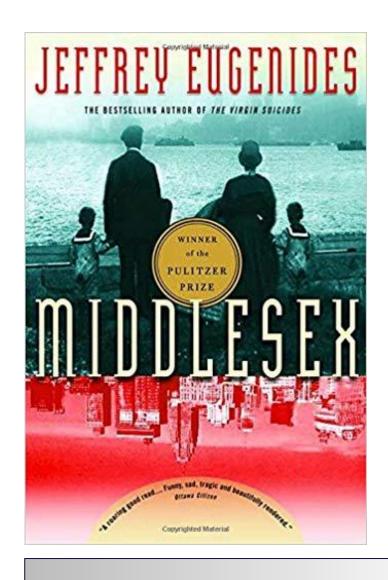
#### Four girls with a rare DSD condition

- The changes in their body
- Their hormone levels in their body
- The differences in their genes

#### I was not aware of

- the challenges they may face in their lives
- they were not informed about their condition
- the irreversible surgeries they had without being completely informed





## **Middlesex**

Pulitzer prize-winning novel

- The main character is a person with the same rare DSD
- a fascinating character
- the relationships in adolescence and adulthood
- the person's emotions and challenges in life

No discussion about genes or doctors or tests

#### **Year 2006**

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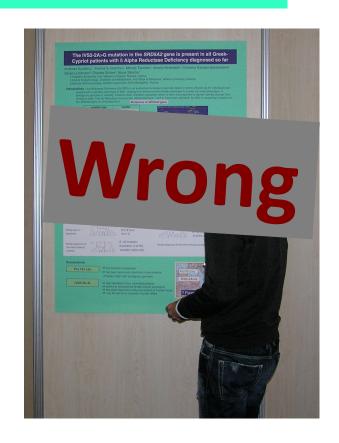
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## **Optimal Care for DSD**

**Holistic approach** 

Life-long

care for all aspects of the life of the person

from birth to adulthood

## Requirements

- Multidisciplinary care: a wide range of specialists involved
- Collaboration between centres and between countries to create national and international networks
- Collaboration with families and Support Groups for DSD

#### **International Collaboration**

#### COST Action DSDnet 2013 - 2017

European countries with various cultural and financial background

23 European countries (with 3 near neighbour and 5 international countries)

#### 2. Wide range of Specialties

- Paediatric Endocrinologists
- Psychologists
- Geneticists
- Biochemists

- Support Group members
- Gynaecologists
- Nurses
- Surgeons/Urologists

## **Working Group**

#### **Team: Members from 9 European countries**

4 Paediatric Endocrinologists 1 Nurse

2 Psychologists 1 Geneticist

2 Support Group representatives 1 Surgeon

#### Aiming to explore

- 1. The current models of clinical care how do specialist centres work
- Communication of healthcare professionals with individuals/families and Support Groups
- The needs for future research

#### End of Action meeting in February 2018





# Current Models Of Care for DSD – Results From An International Survey Of Specialist Centres

A. Kyriakou<sup>1</sup>, A.B. Dessens<sup>2</sup>, J. Bryce<sup>1</sup>, V. Iotova<sup>3</sup>, A. Juul<sup>4</sup>, M. Krawczynski<sup>5</sup>, A. Nordenskjöld<sup>6</sup>, M. Rozas<sup>7</sup>, C. Sanders<sup>8</sup>, O. Hiort<sup>9</sup>, S.F. Ahmed<sup>1</sup>

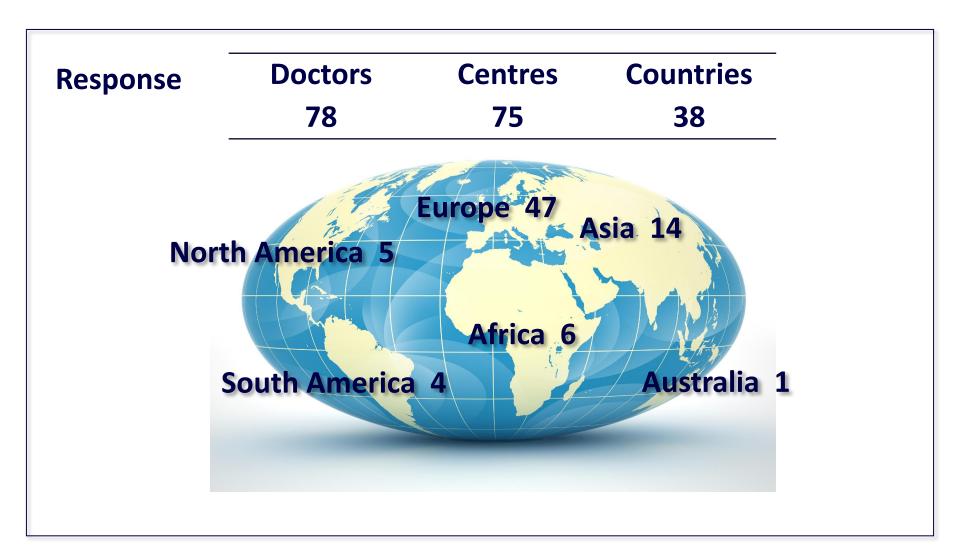
1. Glasgow, UK 2. Rotterdam, The Netherlands 3. Varna, Bulgaria 4.

Copenhagen, Denmark 5. Poznan, Poland 6. Stockholm, Sweden 7.

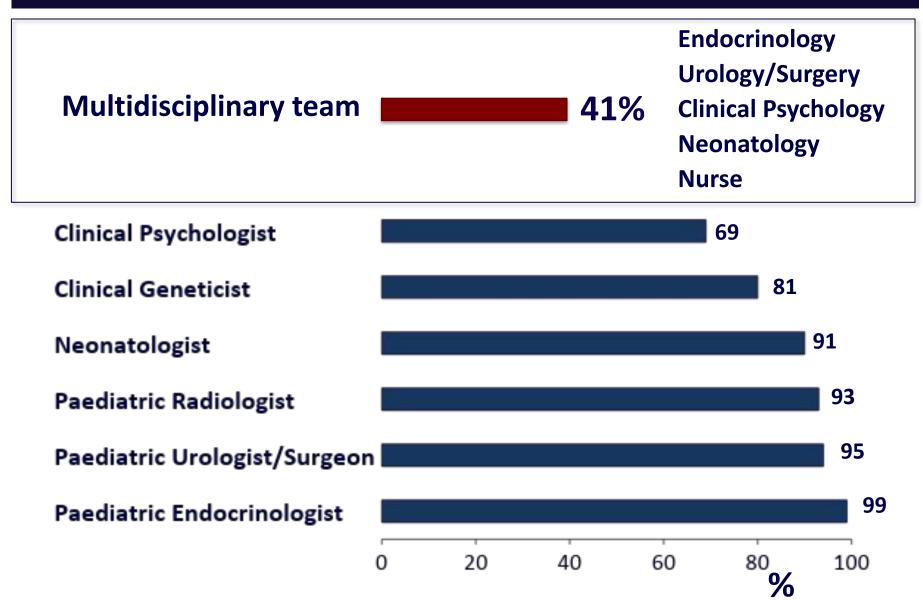
GrApSIA Spain 8. Liverpool, UK 9. Lübeck, Germany

## International Survey of Clinicians/Centres delivering Specialist Care for DSD

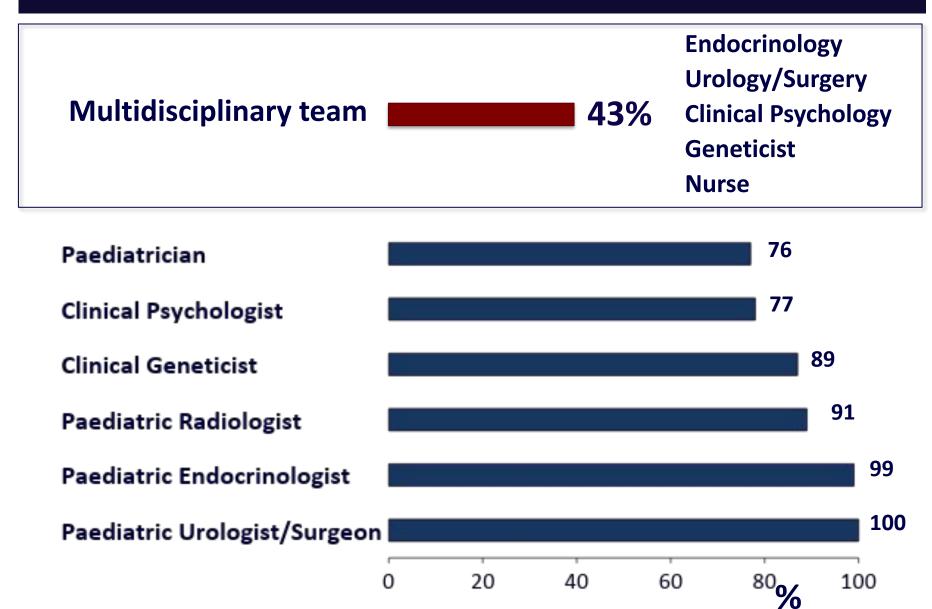
Questionnaire about the current clinical practice



## Specialists involved in the initial evaluation of a newborn with DSD - At diagnosis

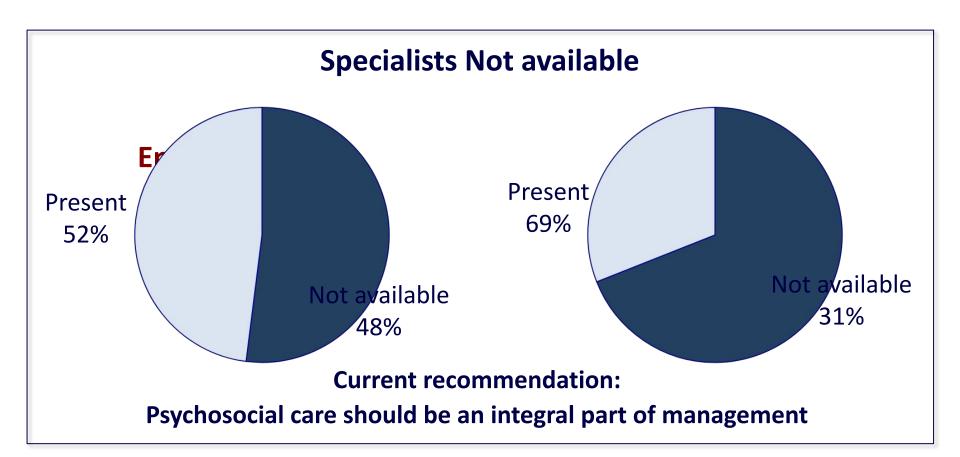


## Specialists involved in the long-term care of a child with DSD



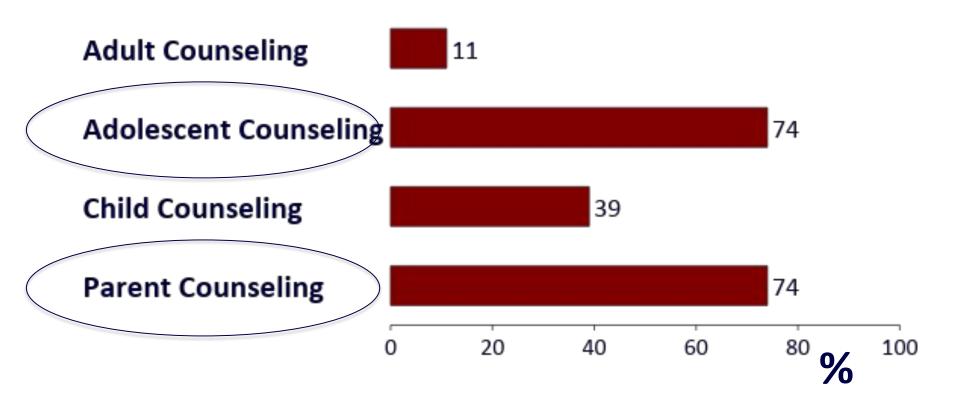
## Multidisciplinary Teams in Specialist Centres

- An increasing number of DSD centres have access to specialist healthcare professionals
- However the majority of the centres do not have all staff available at the same time



## **Psychology Support**

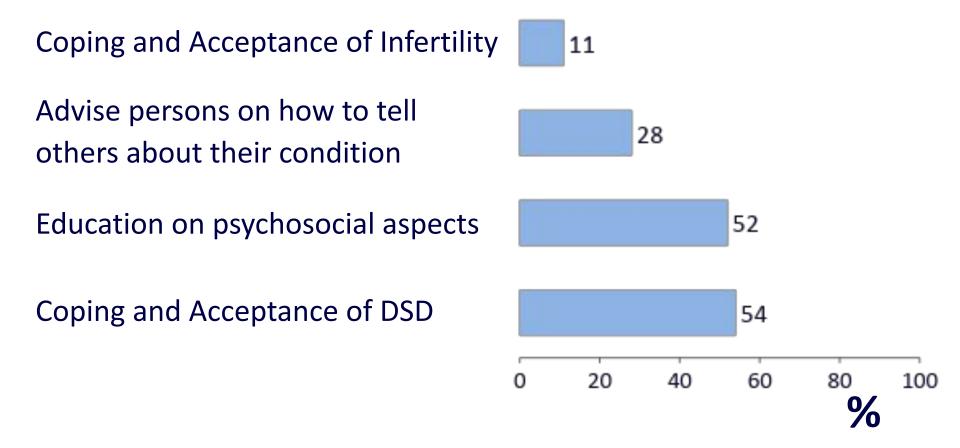
#### Involvement in Clinical care



Dessens AB et al., BMJ Paediatrics Open Aug 2017, 1 (1)

## **Psychology Support**

#### **Counseling activities**



Dessens AB et al., BMJ Paediatrics Open Aug 2017, 1 (1)

## Current surgical practice in DSD

In the past

Surgery very early in life and to remove the gonads

**Recent years** 

There is a trend for delaying surgery or removal of gonads

Intersex activists have encouraged legislative bodies to ban elective irreversible "sex-correcting" surgery without the individuals' consent

#### **Current recommendation**

Delay/Avoid unnecessary surgical procedures until the persons are mature enough to make their own decisions

## Current surgical practice in DSD

#### A need to learn more about

- Risk for cancer in gonads if they are not removed
- Psychological development and well-being
- Hormones in adulthood
- Sexual functioning

## Why is Research Important

Have you ever been in a situation where you had a question relevant to your condition, to which your doctor replied that there is no research available that allows him/her to answer your question?

- Cause
- Diagnosis
- Treatment options
- Outcome

There are many unsolved questions in our field

The aim of research is to learn more about DSD, find solutions to problems and ultimately improve clinical care and quality of life

#### Challenges in research in DSD

#### Requirements for conducting high quality research

#### 1. The research topic should be important, with unsolved questions

Discrepancy between research topics proposed by doctors and by individuals with DSD – disagreement on what is more important

#### 2. Sufficient number of participants in order to report reliable results

DSD includes a group of rare conditions: requires collaboration between centres at a national and international level

#### 3. Individuals with DSD and healthcare professionals working together

Many individuals and families lost trust because they were mistreated in the past by healthcare professionals

## Research priorities

- Genetic causes of DSD
- Improvement in methods for diagnosis

### Research priorities

- Studies related to long-term outcome in adulthood
  - Quality of life: sexual function, gender development, fertility
  - Long-term effects of treatment with hormones
  - Hormone treatment in adulthood (e.g. in menopause)
  - Other health problems: cardiovascular health, bone health
  - Cancer risk and development of reliable surveillance methods
- Communication & Understanding between families and doctors
- Genetic causes of DSD
- Improvement in methods for diagnosis

The information from the studies should be shared with individuals and their families

#### Recent studies related to long-term outcome

Health status in 1040 adults with DSD: a European multicenter study.

Falhammar H et al. Endocrine Connections 2018 Mar;7(3):466-478

Hormone therapy and individuals' satisfaction with treatment, in a large cohort of diverse DSD.

Nordenstrom A. et al. Clin Endocrinol (Oxf) 2018 Mar;88(3):397-408.

#### Recent studies related to long-term outcome

The Long-Term Outcome of boys with Partial Androgen Insensitivity Syndrome and a mutation in the Androgen receptor gene.

Lucas-Herald A, et al. J Clin Endocrinol Metab. 2016 Nov;101(11):3959-3967.

Bone mineral density in complete androgen insensitivity syndrome and the timing of gonadectomy.

King TJF, et al. Clin Endocrinol (Oxf) 2017 2017 Aug;87(2):136-140

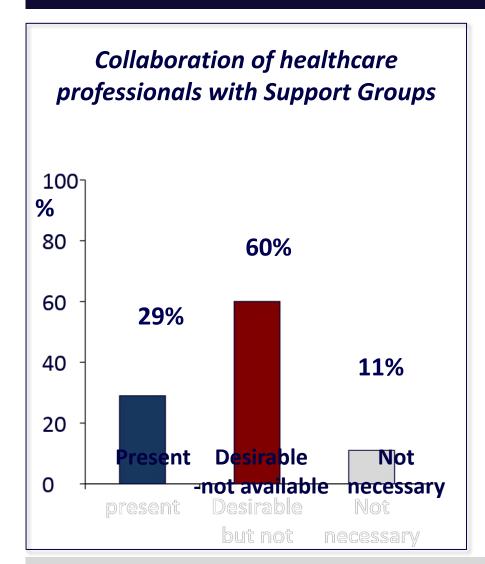
It is necessary for individuals/families and professionals to work as research partners

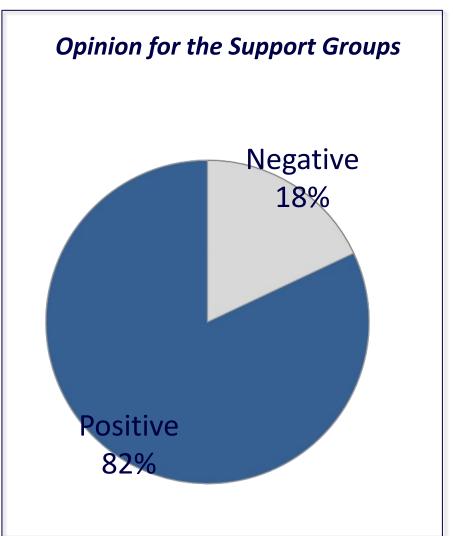
## Communication Of Doctors With Peer Support Groups And Families

A. Kyriakou<sup>1</sup>, M. Rozas<sup>2</sup>, A.B. Dessens<sup>3</sup>, J. Bryce<sup>1</sup>, V. Iotova<sup>4</sup>, A. Juul<sup>5</sup>, M. Krawczynski<sup>6</sup>, A. Nordenskjöld<sup>7</sup>, C. Sanders<sup>8</sup>, O. Hiort<sup>9</sup>, S.F. Ahmed<sup>1</sup>



## Communication of Doctors and Support Groups





Doctors should learn more about peer support groups for affected families in their area

We have tried to ask 77 Support Groups worldwide about:

- The services they offer
- The information they provide
- Their opinion regarding the research topics that should be prioritised in the future
- If they collaborate with healthcare professionals
- If they collaborate with other Support Groups

#### Only 16 Support Groups from 8 countries responded



#### Small number of responses – Not reliable results

#### How is the support provided?

- Mainly via social media, website
- All groups use phone calls, texts and emails
- A small number are using face to face discussions, either person to person or in group sessions

#### Information regarding the condition

- All groups provide information material (online or leaflets)
- They all agreed that they information material is not sufficient and it is not easily understood by the families

- National meetings of families once a year, either by organising a social event or by organising a conference
- Informing society about DSD via social media and the press
- Collaboration with healthcare professionals
  - Support groups work very closely with Psychologists
  - They would wish for more regular contact with doctors

#### We also learnt

- Support Groups are run by volunteers
- There is no time available
- There is no money available

For working together, a questionnaire is not the right way to start

- "Thank you for your contact. I am curious if you are aware that many advocates oppose the use of the term DSD to describe people with atypical sex characteristics"
- "Reducing intersex people to our body parts by calling us people with "Disorders" or "Differences" of sex development does not assist in us being viewed and treated as whole, equal human beings"

#### **Comments from Support Groups**

"Unfortunately, after careful consideration, we have to decline to participate in this survey.

- The structure is too rigid to allow us to express our views, and is in fact tilted towards the interests of the medical establishment and not of the persons concerned.
- We are afraid this might be construed by some doctors as a justification to continue with research and treatments clearly in violation of ethics and human rights.
- May we suggest instead, that you could facilitate a meeting of support groups to facilitate a real discussion about the needs and interests of persons concerned and their organisations"

#### **Comments from Support Groups**



Persons/Parents and a healthcare professional from 9 European countries (Austria, Belgium, Bulgaria, Germany, Ireland, Italy, Netherlands, Spain, United Kingdom)

#### Organised by 2 Support Group members and a Nurse

#### Aims of the workshop:

- To hear the individuals' and support groups' voice
- To inform and educate professionals on the needs of individuals and families

#### Informal discussion, in groups

- Experience around the time of diagnosis
- Experience during childhood and adolescence
- Experience during transition to adulthood
  - ? What is working well
  - ? What is not working well
  - ? Changes that need to be made in the future

### Experience around the time of diagnosis

- Worked well when professionals were able to help individuals and families
   "find a language" that was helpful to understand and to tell others
- "Doctors liked my baby and told me that it is not a problem -families can live with it"
- Does not work well when healthcare professionals lack knowledge about DSD
- Children or parents are not always informed about the diagnosis kept as a secret.

## Experience during childhood and adolescence

Many individuals reported challenges to personal body integrity and a lack of respect

- especially linked to physical examinations from doctors

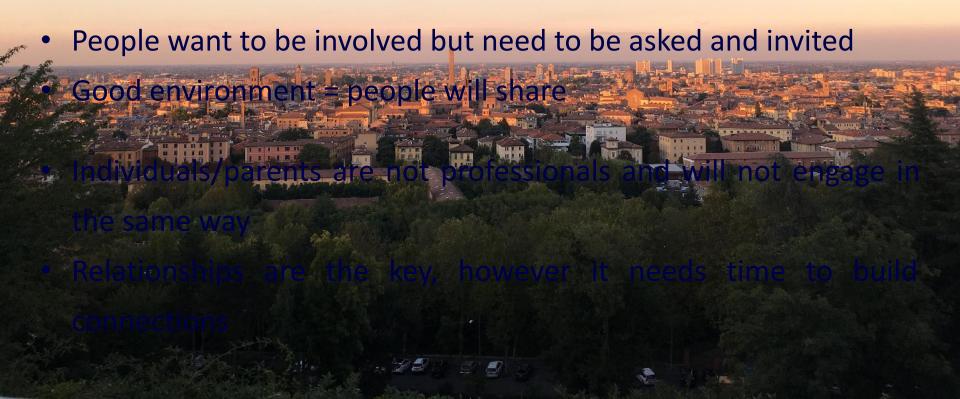
## Experience during transition to adulthood

- Links to support groups, networks;
  - When persons found connections using social media and support groups their confidence was improved
- It is important for privacy to be respected and treated as a "whole person" especially when "learning what my body can do rather than it cannot".

## Moving forward

## **Lessons from Bologna**

 Organising Workshops locally: by local professionals, in partnership with support groups/individuals with DSD /familes



## Moving forward

#### Working together

- 1. Networks between specialist centres for DSD
- 2. Partnership between Support Groups and healthcare professionals

## **European Reference Networks on Rare Endocrine Conditions**(Endo-ERN)

Network of specialist centres for DSD

#### **Sex Development and Maturation**

**Adult Endocrinologists** 

Paediatric Endocrinologists

Elected representatives of individuals/families

#### **European Patient Advocacy Groups (ePAGs)**

#### https://endo-ern.eu



European

Advocacy

Patient

Bring together elected representatives of support groups, to ensure that the individuals' voice is heard in the European Networks

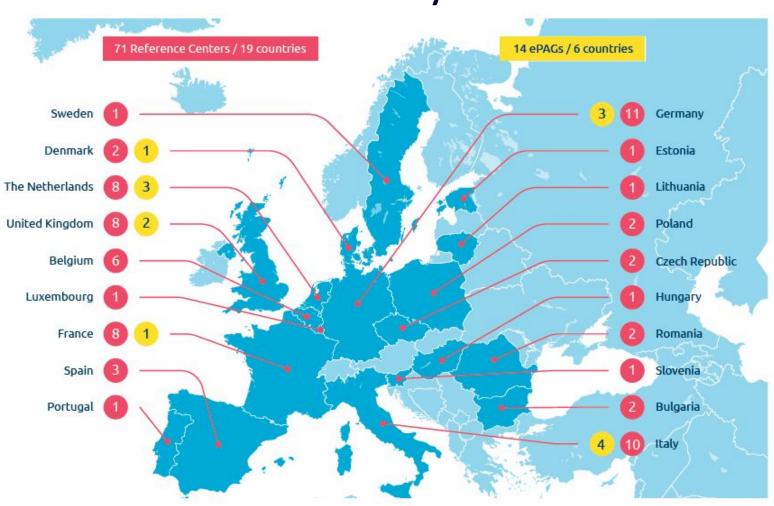


- Representation, with a clear mandate, of a national patient organisation for a (cluster of) rare endocrine condition(s), as specified in one of the Main Thematic Groups.
- · Good understanding of the English language, sufficient for adequate discussions and communication.
- Experience/specific expertise from the patient's perspective in rare endocrine conditions

## Moving forward

#### **Working together**

#### **Endo ERN- currently 71 centres**





## Yolanda Marta

Carla Diaz Juhl

## Thank you

