



# Rare diseases: collecting best practice and research recommendations

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## “Create a platform to improve the management of rare disease patients”


- Promote communication on rare diseases by disseminating trustworthy guidelines
- Identify rare diseases research needs
- Facilitate timely, effective and efficient translation of research into patient oriented clinical and public health practice

- Developing collection criteria: procedures for collection of guidelines and research recommendations
- Collection and evaluation of existing guidelines
- Identifying and collecting recommendations for research
- Horizon scanning to monitor emerging evidence on diseases
- Meta level guideline on evidence translation for RD



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**WP4 collection development procedure manual V2.0Final**

Best practice and knowledge sharing in the clinical management of rare diseases  
*(RARE-Bestpractices)*

Author(s)  
Michele Hilton Boon, Jan Manson, Karen Ritchie



**WP4 guidance on searching for guidelines V1.0Final**

Best practice and knowledge sharing in the clinical management of rare diseases  
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A	B	C
<b>RARE-Bestpractices</b>		
Name of searcher		
Date of searches		13/02/2015
Disease/condition	Klinefelter	
Synonyms	XXY syndrome, XXY trisomy/ies	
Prevalence	6-9/10,000	
ICD10	Q98.0, Q98.1, Q98.2, Q98.4	
OMIN#		
SNOMed CT		
	<b>Search terms</b>	<b>Total number of res</b>
Orphanet	klinefelter, XXY	
G-I-N	klinefelter, XXY	
National Guidelines Clearinghouse	klinefelter, XXY	
EuroGentest molecular testing		
EuroGentest clinical utility gene cards		
NICE Evidence search		
Google 100	klinefelter, XXY	
PubMed		
Patient websites		
Klinefelter syndrome association UK		



## WHICH RARE DISEASES?

- > 6000 recognised rare conditions to choose from!

An initial list of disease topics derived from:

- Search protocol test conditions: purposive sample of high, medium and low prevalence RDs
- Project partner and advisory board areas of interest
- Clinical Knowledge Summaries topic suggestions
- European Academy of Paediatrics (EAP)
- EURORDIS Federation



<b>Addison's disease</b>	<b>Congenital cataract</b>	<b>Hirschsprung's disease</b>	<b>Noonan syndrome</b>
<b>Alstrom disease</b>	<b>Congenital myasthenias</b>	<b>Huntington's disease</b>	<b>Osteosarcoma</b>
<b>Anal atresia</b>	<b>Costello syndrome</b>	<b>Joint hypermobility syndrome</b>	<b>Paroxysmal haemoglobinuria</b>
<b>Aniridia</b>	<b>Cushing's syndrome</b>	<b>Klinefelter's syndrome</b>	<b>Phaeochromocytoma</b>
<b>Bardet Biedl disease</b>	<b>Cushing's disease</b>	<b>Lichen sclerosis</b>	<b>Phenylketonuria</b>
<b>Biliary atresia</b>	<b>Cystic fibrosis</b>	<b>Long QT syndrome</b>	<b>Porphyrias*</b>
<b>Brucellosis (human)</b>	<b>Epidermolysis bullosa</b>	<b>Lyme disease</b>	<b>Progressive subnuclear palsy</b>
<b>Carcinoid syndrome</b>	<b>Gaucher's disease</b>	<b>Mitochondrial disease * (multiple disorder)</b>	<b>Turner syndrome</b>
<b>Catatrophic antiphospholipid syndrome</b>	<b>Giant cell arteritis</b>	<b>Multiple myeloma</b>	<b>Waldenstrom macroglobunemia</b>
<b>Coarctation of the aorta in the newborn</b>	<b>Hereditary spastic paraplegia (Strumpell-Lorrain disease)</b>	<b>Myasthenia gravis</b>	<b>Wolfram disease</b>
<b>Congenital anaemias*</b>	<b>Herpes simplex encephalitis</b>	<b>Neuromuscular disorders* (incl. Duchenne muscular dystrophy &amp; Spinal muscular atrophy)</b>	

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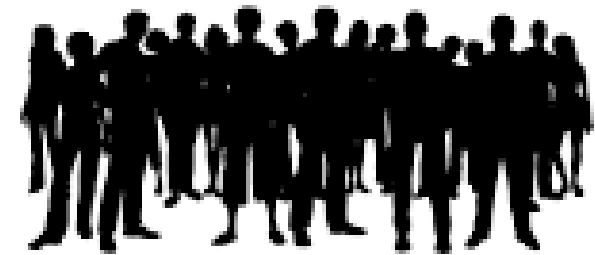


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Congenital anaemias* 10	Herpes simplex encephalitis	Neuromuscular disorders* (incl. Duchenne muscular dystrophy & Spinal muscular atrophy) 9	

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- Collection of validated research recommendations for diagnosis and treatment of rare diseases
- Research recommendations are statements that describe “*the need for further research, and the nature of the further research that would be most desirable*” (Cochrane Handbook for Systematic Reviews of Interventions, 2011)
- Identified from high quality systematic reviews (Cochrane Library) and presented with information on ongoing clinical trials where available
- Used to prioritise research efforts and resources

## C (View Summary Descriptions)

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- » Congenital toxoplasmosis: prenatal education
- » Cystic fibrosis: inhaled antibiotics
- » Cystic fibrosis: switching to new nebuliser systems for cystic fibrosis
- » Cystic fibrosis: vitamin D supplementation for cystic fibrosis

top

## D (View Summary Descriptions)

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- » Dravet's Syndrome: antiepileptic drugs (stiripentol) for the treatment of severe myoclonic epilepsy in infancy
- » Duchenne muscular dystrophy: scoliosis surgery

top

## G (View Summary Descriptions)

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- » Gaucher disease: enzyme replacement and substrate reduction therapy
- » Giant cell arteritis: low-dose aspirin
- » Guillain-Barre syndrome: pharmacological management of pain

## Research Recommendation Summary

Research is required to further explore enzyme replacement and substrate reduction therapies in Gaucher disease.

## Evidence Based Recommendation

### Evidence (Citations)

Systematic Review	<p>Shemesh E, Deroma L, Bembi B, Deegan P, Hollak C, Weinreb NJ, et al. Enzyme replacement and substrate reduction therapy for Gaucher disease. Cochrane Database of Systematic Reviews 2015, issue 3. URL: <a href="http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010324.pub2/epdf">http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010324.pub2/epdf</a> DOI:10.1002/14651858.CD010324.pub2</p>
Other References	Not Applicable
Ongoing Reviews	Not Applicable
Ongoing Studies	<p>A multi-center, open-label, efficacy and safety study of velaglucerase alfa enzyme replacement therapy in children and adolescents with type 3 Gaucher disease. ID: CTRI/2012/05/002666. URL: <a href="http://apps.who.int/trialsearch/Trial2.aspx?TrialID=CTRI/2012/05/002666">http://apps.who.int/trialsearch/Trial2.aspx?TrialID=CTRI/2012/05/002666</a></p> <p>A phase 3, randomized, double-blind, placebo-controlled, multi-center study confirming the efficacy and safety of Genz-112638 in patients with Gaucher disease type 1 (ENGAGE). ID: NCT00891202. URL: <a href="http://apps.who.int/trialsearch/Trial2.aspx?TrialID=NCT00891202">http://apps.who.int/trialsearch/Trial2.aspx?TrialID=NCT00891202</a></p>

- Collection of clinical practice guidelines on rare diseases
- Defined as systematically developed statements which assist providers, patients and stakeholders to make informed decisions about appropriate health care for specific circumstances
- The quality of the methods used to develop each guideline has been evaluated
- Inclusion criteria:
  - Any aspect of care for a rare disease (diagnosis, treatment, etc)
  - Must contain recommendations
  - Published in last 10 years
  - English, French, Spanish, Dutch, Italian, German

## **B** (View Summary Descriptions)

Best practice guidance for the diagnosis and management of cystic fibrosis associated liver disease

Best practice guidelines for molecular genetic diagnosis of cystic fibrosis and CFTR-related disorders: updated European recommendations

Bone cancer

Bone sarcomas: ESMO clinical practice guidelines for diagnosis, treatment and follow-up

British Thoracic Society guideline for respiratory management of children with neuromuscular weakness

## **C** (View Summary Descriptions)

Care of girls and women with Turner syndrome: a guideline of the Turner syndrome study group

Catastrophic antiphospholipid syndrome: updated diagnostic algorithms

Colistimethate sodium and tobramycin dry powders for inhalation for treating pseudomonas lung infection in cystic fibrosis

Consensus on the use and interpretation of cystic fibrosis mutation analysis in clinical practice

Consensus on timing of intervention for common congenital heart diseases

Consensus statement on diagnosis and clinical management of Klinefelter syndrome

Cystic fibrosis foundation evidence-based guidelines for management of infants with cystic fibrosis

Cystic Fibrosis Pulmonary Guidelines Chronic Medications for Maintenance of Lung Health

Cystic fibrosis pulmonary guidelines pulmonary complications: hemoptysis and pneumothorax

## Mifamurtide for the treatment of osteosarcoma

[Current Version](#) | [Status and Details](#) | [Guideline Evaluation](#) | [Guideline Development](#) | [Associated Information](#) | [Historic Versions](#) | [Print](#)

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NICE. Mifamurtide for the treatment of osteosarcoma. Technology appraisal 235. 2011 [cited 12 Feb 2016]; Available from: <http://www.nice.org.uk/guidance/ta235>

You can access the full text of this guideline using the link above. Before you look at the guideline you might want to click on the “**Guideline Evaluation**” link to find out what others thought of the quality of the guideline. Alternatively you can access the guideline and any associated documents we located using the “**Associated Information**” link.

<http://rbpguidelines.eu/>



Question	Evaluators: 2	
Scope and Purpose	Response	Comments
1. The overall objective(s) of the guideline is (are) specifically described.	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	No clear objective is specified but the title gives a clear indication of the subject.
	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	None
2. The health question(s) covered by the guideline is (are) specifically described.	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Limited information on health questions. Mainly consider clinical effectiveness and cost effectiveness of single treatment.
	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Key Questions are not used in this guidance however, sections are clearly laid out and show the topic they are addressing
3. The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Detailed description given on age group, condition and treatment status at which mifamurtide to be used.
	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	None
Stakeholder Involvement	Response	Comments
4. The guideline development group includes individuals from all relevant professional groups.	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Document is guidance based on assessment of manufacturer submission to a committee which contains a range of specialities.
	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Not stated and this is a manufacturers submission so unlikely
5. The views and preferences of the target population (patients, public, etc.) have been sought.	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Patient experts consulted about the submission.
	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Not stated
6. The target users of the guideline are clearly defined.	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Target users are not specifically defined, however NICE guidance is mandatory in England.
	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Not stated, but fairly select clinical groups would use or access this
Rigour of Development	Response	Comments
7. Systematic methods were used to search for evidence.	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Not Applicable
	<span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span>	Not stated

## HOW CAN YOU GET INVOLVED?

- Limited time remaining to expand the collection (Dec 2016)
- More volunteers needed to search for guidelines and appraise guidelines using AGREE II
- If you would like to contribute, contact:

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