European Rare Diseases
Research Alliance

Resource on the State of the Art of Rare Disease Activities

2025 Report for Belgium

National Mirror Group

Belgium has a National Mirror Group (NMG), which was launched on 20th May 2025. The NMG is coordinated by Sciensano. This NMG has overseen the collection of data from Belgium via a data contributing committee. Contributors are listed at the end of this report.

Definition of a Rare Disease

Belgium adopts the formal European Union (EU) definition of a rare disease (i.e. those with a prevalence of no more than 5 patients per 10,000 persons. This definition is laid down in Regulation EC no. 141/2000 on Orphan Medicinal Products, Directive 2011/24/EU on Cross Border Healthcare as well as in the Council Recommendation on an action in the field of rare diseases of 8 June 2009.). The National Plan espouses the definition that a rare disease affects 1 in 2,000 people. The EU definition is widely used but in some cases (e.g. the cancer registry) another definition can be used.

Some clinicians in Belgium find it challenging that the use of the EU definition does not allow for national/local differences in prevalence, for example, with Lyme disease (ORPHA:91546), which they consider to not be rare in Belgium. Some tropical disease specialists would also like certain differences in the prevalence of certain infections to be considered.

Status Quo of any National Plan or Strategy for Rare Disease

What is the status quo?

Belgium has a National Plan that is described as live and open-ended. The national plan has been live since 2013 and has always been considered an open-ended plan. However, a new national plan is currently being developed, which will have a fixed duration (2026-2030).

Elaboration and Adoption/How was the original plan elaborated?

In February 2009, the Chamber of Representatives in Belgium unanimously adopted a resolution aimed at establishing an action plan for rare disease and orphan drugs. At the request of the Minister of Social

Co-funded by the European Union

ERDERA has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement N°101156595.
Views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Union or any other granting authority, who cannot be held responsible for them.

Affairs and Health, the Fund for Rare Diseases and Orphan Drugs (King Baudouin Foundation) presented a report at the end of 2011 containing proposals and recommendations for a Belgian action plan for rare disease. It was submitted in October 2011 to the Cabinet of the Minister of Social Affairs and Health and proposed 42 recommendations, divided into 11 areas of work.

A rare disease steering committee was set up to be responsible for the drafting and adoption of the National Plan. The steering committee consists of members from the NIHDI (National Institute for Health and Disability Insurance), the FPS Public Health, the Scientific Institute for Health (WIV-ISP, now Sciensano) and the Cabinet of the Minister for Social Affairs and Public Health. The Minister for Social Affairs and Public Health asked the FPS Public Health and the NIHDI to analyse the current rare disease situation in Belgium and identify priority actions. The analysis was used to develop a coherent multi-year plan. In December 2013, a national plan for rare diseases was published, containing 20 actions in four domains.

The National Plan developed in 2013 is not enshrined in law but some actions in the plan were used to form specific legal frameworks and decrees including: 'functions rare diseases', 'networks for rare diseases' and 'expertise centres' (Royal Decree of April 25, 2014 published on August 8, 2014).

Is there funding for the Plan? How is it Implemented and/or Monitored or Evaluated?

A dedicated budget of €15 million was allocated in 2013 to Belgium's National Plan for Rare Disease.

The same group responsible for the drafting and adoption of Belgium's National Plan for rare disease are responsible for overseeing and implementing the plan. The group meets regularly. No formal evaluation or monitoring of the National Plan has taken place.

Research in National Plans or national research strategies relevant to rare disease

Belgium's current National Plan for Rare Disease does not address rare disease research. The new National Plan is currently in development and will include a section on 'Collaboration in research and training'.

Select Achievements of the National Plan

Below are five select achievements resulting from Belgium's National Plan for Rare Disease:

1. Creation of the 'function rare diseases' framework, recognizing eight hospitals as centres capable of, and dedicated to, diagnosis and care for rare disease
2. Development of a central registry for rare disease
3. The development of Orphanet Belgium
4. The creation of specialised centres for haemophilia
5. Developing a quality system for genetic testing

Rare Disease Research Programmes and Funding

There are no programmes or funding calls reserved specifically for rare disease in Belgium but rare disease projects are funded from general research programmes.

Rare Disease Registration and Biobanking

Registries

Belgium has a national registry for rare disease. Sciensano (a federal scientific institute for health) is financed by the Belgian health authorities (National Institute for Health and Disability Insurance) to implement and manage a Central Registry of Rare Diseases (CRRD), as recommended by the European Commission (2009/C 151/02). The CRRD is a population-based registry collecting a limited data set, in a standardised way, since 2015.

The CRRD aims to centralise data from patients affected by a rare disease (who have consulted a specialist in Belgium about their condition) in order to:

- Collect epidemiological data
- Facilitate recruitment of patients for research and clinical trials
- Guide health policies and reimbursement decisions
- Improve the quality of care through benchmarking
- Enable research at European and international levels.

Data is currently collected from eight officially recognised Belgian centres for human genetics and Rare Disease Functions. Patients with a confirmed diagnosis of a rare disease, according to the European definition, are eligible for inclusion in the CRRD, as well as those with a rare disorder without a determined diagnosis after full investigation (ORPHA: 616874). Any data requests, beyond published reports, from external partners (e.g. researchers, health care professionals and policymakers) must be submitted as an official request through the Belgian Health Data Agency (HDA).

There is a specific action within the current National Plan ('Central Registry of Rare Diseases') which focuses on creating and managing the CRRD to collect and centralise data from patients affected by rare disease in Belgium. The Belgian National Plan for Rare Disease, currently under development, will also address actions related to data registration and management.

The use of the Orphanet nomenclature in the CRRD has been mandatory since September 2024. The registry also uses ICD-10, SNOMED CT, ICD-O, HPO, OMIM, ISCN, and HGVS coding systems. The registry uses Common Data Elements for rare disease registries, recommended by the European Commission through the European Platform on Rare Disease Registration (EU RD Platform).

Belgium has disease specific rare disease registries:

- The Belgian Cystic Fibrosis registry (BCFR)
- The Belgian Neuromuscular Diseases Registry (BNMDR)

- The Belgian Rare Bleeding Disorders Registry (BRBDR)

Some additional registries are in development for Hirschprung and FAPA (Polyposis and Hereditary Colorectal Cancer).

The main objectives of the Belgian national rare disease specific registries are: epidemiological research, improvement of quality of care, information of health policies, sharing data at EU level, and facilitation of patient recruitment for clinical trials. These national registries are funded by the National Institute of Health and Disability Insurance (NIHDI), or by private funders. In addition to these registries, there are also other local and national disease specific registries developed by clinicians and/or patient associations.

Belgium's national registry for rare disease embeds FAIR (Findable, Accessible, Interoperable, Reusable) data principles. Further information can be found here.

Biobanks

Belgium does not have a rare disease specific biobank but The Central Biobank Platform Sciensano includes rare disease biosamples. There are also individual biobanks for the collection of rare disease biosamples.

In Belgium, each biobank has to be notified to the Federal Agency for Medicines and Health products (AFMPS). An overview of these notified biobanks can be found here. Belgian biobanks appear in the BBMRI catalogue here.

Organisation of Rare Disease Care

Centres of Expertise

There are currently no officially recognised Centre of Expertise for rare disease in Belgium. However, eight Belgian hospitals (with a genetic centre) are recognised as 'Rare Disease functions hospitals' in a royal decree of 2014. These hospitals are recognised as having expertise in the diagnosis and treatment of rare diseases. These centres include UZ Antwerp, UZ Ghent, UZ Leuven, UZ Brussel, CHU Liège, Cliniques Universitaires Saint-Luc, HUB Érasme, as well as the Institute of Pathology and Genetics and the Grand Hôpital de Charleroi. The Rare Disease Functions are defined by Belgian law and refer to all activities related to the care and treatment of rare disease. They include multidisciplinary teams for diagnosis, monitoring and treatment, as well as collaboration with European reference networks for the sharing of expertise.

No national policy is in development to formally establish Centres of Expertise for rare disease in Belgium. However, the Belgian Minister of Health has announced in 2025 that as part of the development of the new action plan, a cartography of the current expertise in Belgium will be made, in a joint effort between the Rare Disease Function hospitals, patient associations and authorities.

ERNs

Belgium is involved in multiple European Reference Networks (ERNs). For the latest details on participating HCPs, click here.

Newborn Screening

In Belgium, newborn/neonatal screening is the responsibility of communities/regions and is regulated in regional legislation. Below is a summary of newborn/neonatal screening programmes by region:

- **Flanders:** 19 diseases are screened for. These diseases are: Biotinidase deficiency (LMCD), Carnitine palmitoyltransferase deficiency 1, Congenital adrenocortical hyperplasia (CAH), Congenital hypothyroidism (CHT), Phenylketonuria (PKU), Glutaric acidemia type 1 (GA1), Holocarboxylase synthetase deficiency (HLCS), Homocystinuria, Isovaleric acidemia (IVA), Maple syrup urine disease (MSUD), Methylmalonic acidemia (MMA), Medium-chain acyl-CoA dehydrogenase deficiency (MCADD), Cystic fibrosis, Multiple acyl-CoA dehydrogenase deficiency (MADD), Propionic acidemia (PA), Spinal muscular atrophy, Tyrosinemia type 1, Tyrosinemia type 2 and Severe Combined Immunodeficiency (SCID). Further information is available here.

- **French community:** 23 diseases are screened for. These diseases are: Congenital hypothyroidism, Congenital adrenal hyperplasia, Phenylketonuria, Tyrosinemia, Maple Syrup Urine Disease (MSUD), Homocystinuria, vitamin B12 deficiency and metabolic disorders of remethylation, Galactosemia, Deficiency of acyl-CoA dehydrogenase of medium-chain fatty acids (MCAD deficiency), Multiple acyl-CoA dehydrogenase deficiency (Glutaric aciduria type II) (MAD deficiency), Acyl-CoA dehydrogenase deficiency of very long-chain fatty acids (VLCAD deficiency), 3-hydroxyacyl-CoA deficiency of long-chain fatty acids dehydrogenase (LCHAD), Carnitine Uptake Deficiency (CUD), Carnitine palmitoyltransferase type I (CPT1) deficiency, Methylmalonic acidemia (MMA), Propionic acidemia (PA), Glutaric aciduria type I (GAI), Isovaleric acidemia (VIA), HMG-CoA-lyase deficiency or 3-hydroxy-3-methylglutaric aciduria, Mitochondrial acetoacetyl-CoA thiolase (T2) deficiency, or β-ketothiolase deficiency, Biotinidase deficiency, Cystic fibrosis, Spinal muscular atrophy (SMA) and Sickle cell disease. Further information is available here.

A new project called BabyDetect (an advanced genomic screening option) screens more than 165 diseases but this advanced screening is currently not reimbursed in Belgium.

Belgium is involved in international initiatives about newborn screening decision making including Screen4Care.

Diagnostics

Genetic testing is carried out exclusively by the eight Belgian Centres for Human Genetics, whose operational standards are established by Royal Decree and reimbursed by the NIHDI. All genetic centres have obtained an accreditation of their diagnostic activities according to the ISO 15189 standard and must regularly participate in external quality assessments. Specific reimbursement conditions for genetic tests have been organised in a stratified reimbursement system. This includes a comprehensive list of diagnoses and genes for which testing is available in Belgium.

The publicly accessible website of Belgian genetic tests (Belgian Genetic Tests Database (BGTD)) centralises comprehensive and relevant information about genetic tests offered in Belgium for the diagnosis of diseases with a genetic basis. In addition to increasing the visibility and transparency of available genetic services, the website provides technical details and quality that are specific to each test, in order to meet the needs of all stakeholders including patients, researchers, clinicians and health authorities. Orphanet provides information on diagnostic tests performed in Belgium, available to view here.

Genetic testing abroad is possible, when referred by Belgian genetic centres. The genetic tests carried out abroad are reimbursed by convention with these centres. Reimbursement for tests performed abroad covers transportation and laboratory costs and cannot exceed the budget determined annually by the NIHDI General Council. This reimbursement is also subject to certain rules, such as the recognition of the laboratory as being able to perform genetic tests on human genetic material and working according to internationally recognised or equivalent quality standards.

Currently, there is no dedicated national approach in Belgium to identifying and retesting individuals suspected of having a rare disease, who currently have no diagnosis. However, there is an initiative conducted by the Belgian Genome Resource to Resolve Rare Diseases (BeSolveRD). In this study, 800 patients and both parents will be recruited. Half will be sequenced by WES (Whole Exome Sequencing) and half with WGS (Whole Genome Sequencing). The aim of the project is to:

- Technically validate WGS at different genetic centres in Belgium
- Investigate the clinical utility of WGS for intellectual disabilities/developmental disorders diagnosis
- Assess the health economic impact of WGS

The most important aspects for the WGS tests are: reimbursement by the healthcare system, the staggering of its introduction across different disciplines, and information for all healthcare providers and the public.

Belgium participates in the Undiagnosed Diseases Network International (UDNI). There are also some local initiatives such as the 'Programma voor Ongediagnosticeerde Zeldzame Aandoeningen (PrOZA)'at Ghent University Hospital, which is a comprehensive programme for undiagnosed conditions that uses DNA sequencing to identify genetic causes.

There is a policy in place to ensure national providers in Belgium provide genetic counselling to anyone with a suspected or confirmed rare disease. There is an agreement between the eight Belgian genetics centers and the NIHDI regarding genetic counselling, which defines, among other things, clinical activities, content, guidelines, and test complexity. The latter is subject to different reimbursements depending on whether it is standard genetic counselling or complex genetic counselling.

National Alliances of Rare Disease Patient Organisations

RaDiOrg (Rare Diseases Organization Belgium) is Belgium's National Alliance of Rare Disease Patient Organisations. Further information can be found here. There is also Rare Disorders Belgium (RDB), which is an umbrella patient organisation, mainly aimed at the French speaking community of Belgium. Further information can be found here.

Information Resources for Rare Disease

National Orphanet Engagement

There is an operational Orphanet team in Belgium hosted by Sciensano. The team is funded by the National Institute for Health and Disability Insurance (NIHDI) and through the Orphanet Data for Rare Disease Direct (OD4RD) grant.

The Orphanet Belgium team is responsible for the collection, registration, validation, publication and regular update of Belgian activities relating to rare disease in the central Orphanet database, including expert centres, medical laboratories and diagnostic tests, patient organisations, research projects, clinical trials, registries and biobanks. Data collection, validation and publication is governed by the Orphanet Standard Operating Procedures.

Helplines

Belgium does not currently have a national helpline dedicated to Rare Disease. However, there is a regional helpline available in French managed by Rare Disorders Belgium (RDB).

Training and Education

Rare disease training activities are available within Belgium. Various organisations provide rare disease training for different stakeholders and organisations. Examples include:

- The Orphanet nomenclature national hub which provides training to all Rare Disease Function Hospitals and ERN centres on Orphanet Nomenclature and Classifications (ORPHAcoding). The target audience for this training are clinicians, geneticists, coders, registry manager, and IT

professionals. Training is free and provided online or onsite in three languages (French, Dutch and English).
- Training/webinars are also provided to raise awareness of rare disease to a subset of Belgian general practitioners.

Orphan Medicinal Products (OMPs)

Out of 279 OMPs or ex-OMPs with EU designation, 161 are reimbursable in Belgium. Belgium has the following early/expanded access programmes:

- **Compassionate use:** Medical need programmes are possible but are regulated and managed by the competent administration in terms of registration. Further information is available here.
- **Special Fund of Solidarity:** Under certain conditions, the Special Fund of Solidarity can intervene in the costs of medical treatments for rare disease. Further information is available here.
- **Early & Equitable Fast access (EEFA)**: This initiative provides financial intervention by social security through NIHDI for medicines indicated for medical needs not yet met and not yet reimbursable. Further information is available here.

Belgium is part of several international initiatives relating to access to medicines and therapies for rare diseases:

- MoCA (Mechanism of Coordinated Access) to Orphan Medicinal Products: A voluntary European platform where several stakeholders, such as authorities, payers, patients, and companies exchange information and discuss OMP's early on to address uncertainties. This allows a prospectively planned approach earlier in development and, consequently, to support more timely, sustainable and equitable access to new OMP's.
- The Beneluxa Initiative: A collaboration with the Netherlands, Luxembourg, Austria, and Ireland. This initiative focuses on pharmaceutical pricing policy and aims to improve access to new and innovative medicines. In addition to strengthening strategic and policy cooperation, the initiative also carries out joint health technology assessments and price negotiations, including but not limited to OMP's.
- IHSI (International Horizon Scanning Initiative): A collaboration between several European countries that jointly scan the pharmaceutical pipeline to identify upcoming medicines early and prepare for their potential impact on healthcare systems. OMP's can be included but IHSI covers all types of new medicines.

ERDERA
European Rare Diseases
Research Alliance

Disclaimer: The data collection activities which enabled this 2025 national report were supported by the ERDERA. ERDERA has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement N°101156595. Views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Union or any other granting authority, who cannot be held responsible for them, nor should this document be viewed as an official national 'position'.

Co-funded by the European Union

The Data Contributing Committee of Belgium, which provided this 2025 data (correct as of the end of November 2025) in the context of the Resource on the State of the Art of Rare Disease Activities, is composed of the following individuals:

- Laura Debouverie, Sciensano,
- Joke Wuyts, Sciensano,
- Annabelle Calomme, Sciensano, National Orphanet Coordinator
- Evy D'Hondt, Sciensano
- Amina Jirari, Sciensano
- Nathalie Lannoy, Sciensano
- Marlène Jagut, Sciensano
- Eva D'Haese, National Institute for Health and Disability Insurance