

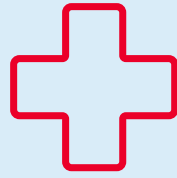
Spotlight on Rare Diseases

What is a Rare Disease?

In Europe, a disease is considered rare if it affects fewer than five in 10,000 people (0.05%).¹



According to **EURORDIS (The European Organisation for Rare Diseases)**, there are more than 6,000 different rare, or "orphan," diseases.² Combined, these diseases affect approximately 30 million European Union citizens.²



>6,000 rare diseases affect \approx 30 million European Union citizens

Living with Rare Diseases

People affected by rare diseases may face challenges such as:^{3,4}



Lack of information



Difficulty in obtaining a diagnosis, or misdiagnosis



Psychological burden



Few physicians experienced in treating rare disease



Limited support services for the patient and family

Patients and their families may feel isolated and frustrated, and can be emotionally and financially devastated.⁴

For more information on disease burden and prevalence please visit www.diseaselelens.com

Treatment

Drug development can be challenging for rare diseases.

Because of the scarcity of patients, pharmaceutical companies can find it **difficult to enroll the number of patients needed** for a rigorous clinical trial. In addition, the scientific knowledge about and **experience with rare diseases is limited.**



These are two of the reasons that the vast majority of rare diseases have no approved treatments.⁵



Medicines intended for treatment, diagnosis or prevention of life-threatening or chronically debilitating rare diseases and disorders are referred to as "orphan drugs."^{6,7}

Janssen's Work in Rare Diseases



Janssen is committed to developing compounds in areas of unmet medical need – and this can include rare diseases. Our work in rare diseases includes:



Multicentric Castleman's disease, a disorder in which lymph nodes enlarge because lymphocytes (a type of white blood cells) are over-produced^{8,9}

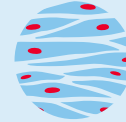


Mantle cell lymphoma, a life-threatening and aggressive blood cancer¹⁰

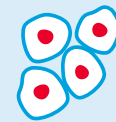


Acute myeloid leukemia, a cancer in the bone marrow and blood occurring when the white blood cell count increases rapidly¹¹

Myelodysplastic syndrome, a cancer in the bone marrow resulting in low numbers of one or more type of blood cells¹²



Soft tissue sarcoma, a cancer developed from soft tissue¹³



Chronic lymphocytic leukemia, a slow-growing rare disease that belongs to a family of blood cancers classified as B-cell malignancies¹⁴



People impacted by blood cancer need more than treatment and care. To improve awareness and further support patients and their families, Janssen has launched 'Make Blood Cancer Visible' - a campaign to get people talking about blood cancers and bring forward patient perspectives.

#LETSTALKABOUTBLOODCANCER

visit www.facebook.com/letstalkaboutbloodcancer

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