ENDOCRINOLOGY

lpsen has helped improve the lives of people affected by rare endocrine disorders and continues to develop high-quality innovative treatments that address the unmet needs of these patients. With a portfolio of therapies to treat endocrine disorders. or other endocrine diseases, our goal is to support patients with products, services and solutions across the entire continuum of care for these disabling conditions, from diagnosis to treatment follow-up.

ACROMEGALY

ACROMEGALY IS A HORMONAL DISORDER CHARACTERIZED BY **DEFORMATIONS AND EXAGGERATED** GROWTH IN THE FACE AND **EXTREMITIES**

-10 YEARS: AVERAGE TIME BETWEEN THE ONSET OF THE DISEASE AND THE DIAGNOSIS.

GROWTH DISORDERS

GROWTH DISORDERS ARE PROBLEMS THAT PREVENT CHILDREN AND TEENAGERS FROM ACHIEVING NORMAL HEIGHT AND WEIGHT. THEY ARE CAUSED WHEN THE BODY DOES NOT PRODUCE ENOUGH GROWTH HORMONE OR, IN RARE CASES, INSULIN-LIKE GROWTH FACTOR.

PRECOCIOUS PUBERTY

CENTRAL PRECOCIOUS PUBERTY (CPP) IS CHARACTERIZED BY THE SAME BIOCHEMICAL AND PHYSICAL FEATURES AS NORMALLY TIMED PUBERTY BUT OCCURS AT AN ABNORMALLY EARLY AGE, UNTREATED. CPP HAS THE POTENTIAL TO RESULT IN EARLY EPIPHYSEAL FUSION AND A SIGNIFICANT COMPROMISE IN ADULT HEIGHT. THUS, THE MAIN GOAL OF THERAPY IS PRESERVATION OF HEIGHT POTENTIAL

ACROMEGALY

69,000 **PATIENTS** WORLDWIDE

3-4 NEW CASES PER 1 MILLION PEOPLE EVERY YEAR

40-50 YEARS OLD: AVERAGE AGE AT DIAGNOSIS

GROWTH DISORDERS

34,500

CHILDREN WITH GROWTH HORMONE DEFICIENCY IN WESTERN EUROPE

42,500 ADULTS WITH GROWTH HORMONE DEFICIENCY IN WESTERN EUROPE

2-3 YEARS AVERAGE TREATMENT DURATION FOR ADULT HORMONE DEFICIENCY

PRECOCIOUS PUBERTY

1/5,000 1/10,000 CHILDREN INCIDENCE OF CENTRAL PRECOCIOUS PUBERTY **OVER 50%** MOST CASES OF CPP ARE SEEN IN GIRLS

psen is committed to endocrine disorders

with therapies to treat pituitary diseases (acromegaly), growth disorders (growth hormone and IGF-1 deficiencies) or other endocrine diseases (such as precocious puberty). Ipsen's innovative medicines address the unmet medical needs of patients. Our ambition is to become a recognized and unique partner in patient program management and provide innovative resources. Acromegaly is a rare disease caused by excess growth hormone production as a result of a tumor in the pituitary gland. Acromegaly can cause a wide range of symptoms that tend to develop slowly over time, but common signs include a thickening and widening of the hands and feet as well as an alteration of facial features. Patients with acromegaly often experience a long journey of multiple doctors' visits and debilitating symptoms that can last for years before the correct diagnosis is made. Many patients experience substantial pain and discomfort, which affects sleep, family life, and their ability to work, causing

depression and anxiety. Early diagnosis, effective treatment and frequent monitoring are critical for improving clinical symptoms and outcomes of the disease. Ipsen continues to work on solutions that will improve the quality of life of patients living with acromegaly. The Group is currently developing extended-release formulations of Somatuline® that would enable patients to have fewer injections.

Ipsen's long-term commitment to treat adult and pediatric endocrine disorders is supported by its portfolio of growth disorder products. Our therapies for short stature, NutropinAq® and Increlex®, have the potential to treat the continuum of this disabling condition from growth-hormone deficiency to growth-hormone resistance.

PARTNERSHIPS FOR PATIENTS

As part of its mission to be a global advocate for patients affected by rare endocrine disorders, lpsen is engaged with patient groups, key scientific leaders, medical societies and institutions to develop educational projects and initiatives that help physicians manage the treatment of these conditions worldwide. The Group is also involved in supporting the development of networks of experts to promote international dialog between specialists, including several initiatives with the European Society of Endocrinology.

Ipsen actively supports the development of SAGIT (Signs and symptoms, Associated comorbidities; Growth hormone levels; Insulin-like growth factor-1 levels;



MORE RESULTS

and Tumor Size), a tool that has been designed to assist endocrinologists in managing acromegaly in everyday practice. Although still in development, SAGIT is a promising instrument offering the potential to assess the status and evolution of disease in patients with acromegaly and to guide physicians in decision making. In the United States, Ipsen supports IPSEN CARES™ (Coverage, Access, Reimbursement and Education Support), a program that assists patients in overcoming obstacles to start or continue treatment with Somatuline® for gastroenteropancreatic neuroendocrine tumors and acromegaly, Increlex® and Dysport®, including coverage access, distribution and financial concerns. In Europe, the Group has set up INKEP (Ipsen Network of Knowledge Exchange Program), an exchange program for small groups of physicians focusing on pediatric endocrinology which combines scientific presentations, case discussions and interactive sit-in clinic visits. Other initiatives in pediatric endocrinology include APPRI in France, a personalized training program for patients that helps increase their autonomy at home during treatment with the recombinant growth hormone NutropinAq® and the NutropinAq® injection pen, improving compliance with the treatment. Two years after its launch, more than 100 prescribers are using this service in France.

OUR SOLUTIONS

SOMATULINE®, ONE PRODUCT FOR TWO RARE DISEASES

Somatuline® injection is used for the long-term treatment of acromegaly in patients who cannot be treated with surgery or radiation. Somatuline® works by reducing the amount of growth hormone that the body produces. Somatuline® is also used to treat neuroendocrine tumors from the gastrointestinal tract or the pancreas (GEP-NET) that has spread or cannot be removed by surgery. Somatuline® has been proven to deliver sustained control of acromegaly, with more than 80% of patients experiencing more than 50% decline in growth hormone levels from baseline and nearly 60% of patients demonstrating normalized insulin-like growth factor (IGF-1) levels. Somatuline® is a semi-solid



IPSEN'S INNOVATIVE MEDICINES ADDRESS THE UNMET MEDICAL NEEDS OF PATIENTS.

formulation for injection with the active substance controlling the sustained release of the treatment. The new device with a retractable needle enables the full dose of the medicine to be safely administered. The device allows self-injection for certain indications in many countries. Somatuline® is marketed in over 55 countries, including 27 in Europe, for the treatment of acromegaly and neuroendocrine tumors.

INCRELEX®, AN ORPHAN DRUG FOR A RARE GROWTH DISORDER

Increlex® is a recombinant insulin-like growth factor (IGF-1) of human origin that treats growth delay in children who lack it in their bodies.

If IGF-1 is not present in sufficient quantities, the patient will not reach normal stature, despite having normal or high growth-hormone levels. As a result, these children do not respond adequately to growth hormone treatment. Increlex® has obtained orphan drug status based on the low incidence of the disease, which affects fewer than 5 people per 10,000.

/



NUTROPIN AQ®, HELPING PATIENTS WITH GROWTH HORMONE DEFICIENCY

Nutropin Aq® is a liquid formulation of

recombinant human growth hormone administered using the Nutropin Aq $^{\circ}$ Pen. Nutropin Aq $^{\circ}$ was available in more than 20 countries at the end of 2015, notably in Europe and Australia. It is indicated for the treatment of growth failure from various origins.

DECAPEPTYL®, A MULTI-USE THERAPY FOR REPRODUCTIVE SYSTEM CONDITIONS

Decapeptyl® is an injectable hormone therapy

drug with several indications. Because it stimulates the release of hormones produced by the pituitary gland, which in turn controls hormonal secretions by the testicules and ovaries, it is marketed in many countries as a treatment for precocious puberty in boys and girls.

Additional gynecological indications have also been approved, including uterine fibroids, endometriosis and in-vitro fertilization.