**OPINION ON
MEDICINAL
PRODUCTS**

somatrogon

NGENLA 24 mg and 60 mg,

Injectable solution in a pre-filled pen

First assessment

Adopted by the Transparency Committee on 19 October 2022

SUMMARY

The legally binding text is the original French opinion version

Key points

Approval of reimbursement in the treatment of children and adolescents aged three years and over with growth disorders due to insufficient secretion of growth hormone.

Therapeutic improvement?

No therapeutic improvement in relation to management.

Role in therapeutic strategy?

The initiation of treatment for GHD (growth hormone deficiency) requires three conditions to be met:

- A diagnosis of GH deficiency duly proven by appropriate investigations;
- Size ≤ -2 SDS according to the French reference data;
- Growth rate in the past year below normal for age (-1 SDS) or < 4 cm/year.

The search for an organic cause of the deficit (hypophyseal MRI or CT scan) and possible associated pituitary deficits is an important step in the initial management of the patient.

Treatment follow-up

Non-responders exist but can only be identified by follow-up (no predictive factors).

Children treated with recombinant human growth hormone (rhGH) are seen in consultation every three months to clinically assess the efficacy of rhGH and any adverse effects. Once a year, the specialist should reassess the value of continuing the treatment. In order to conclude that the treatment was effective, the growth gain after the first year of treatment must have been at least 2 cm compared to the year before treatment. In the following years, the growth rate should be at least equal to the average for chronological age and/or bone age, and better than before treatment.

Treatment should be permanently discontinued:

- in case of the onset or progression of a tumoural process;
- in the event of the inefficacy of treatment: growth rate under treatment less than 3 cm/year irrespective of age, after the first year;
- when epiphyseal closure occurs, as revealed by X-rays.

When the somatotrophic deficit is secondary to an intracranial lesion, regular investigations should be carried out in collaboration with the oncologists or neurosurgeons in order to detect any progression or relapse.

NGENLA (somatrogen) is a first-line medicinal product for the management of a growth disorder due to a GHD in children aged 3 to 18 years. This is a new treatment option compared to daily rhGH injections.

Committee's conclusions

Clinical Benefit

- Somatotropic deficiency in children is a disease of variable origin (idiopathic or secondary to pituitary damage) which may be isolated or associated with other pituitary deficits. It is manifested by small stature and variable symptoms, which mainly involve weight gain, metabolic risk, asthenia and a deterioration in quality of life.
- The proprietary medicinal product NGENLA (somatrogen) is a symptomatic medicine.
- The efficacy/adverse effect ratio of NGENLA is substantial.
- Alternatives are available, all of which are based on somatropin (cf. Section 5).
- NGENLA (somatrogen) is a first-line treatment.

→ Public health benefit

Considering:

- the severity of the disease and its prevalence estimated at no more than 8,000 patients in France;
- the medical need that is partially covered by the available somatropin-based proprietary medicinal products which are administered daily by subcutaneous route. There remains an unmet medical need for an effective, well-tolerated medicinal product that promotes compliance in the treatment of children and adolescents aged three years and older with growth disorders due to insufficient growth hormone secretion,
- the partial response to the identified need, given:
- a demonstrated additional impact on the patient's care and life pathway by reducing the frequency of administration (improvement in the interference of the treatment with the patient's life), which is particularly important in this paediatric population due to compliance difficulties;
- an expected impact on delivery of care (by carers and nurses), as weekly administration could simplify the logistical constraints of daily administration, especially when patients have to travel;
- and despite the lack of evidence of an additional impact on morbidity-mortality,

NGENLA (somatrogen) is likely to have an additional impact on public health.

Considering all of these elements, the Committee deems that the actual clinical benefit of NGENLA (somatrogen) is substantial in the marketing authorisation indication.

The Committee approves inclusion in the list of proprietary medicinal products qualifying for reimbursement under social security and in the list of proprietary medicinal products approved for community use for the indication and at the dosages of the marketing authorisation.

Recommended reimbursement rate: 65%

Clinical Added Value

Considering:

- the evidence, at 12 months, of the non-inferiority of somatrogen, administered weekly, on the annualised growth rate, compared to the proprietary medicinal product GENOTONORM (somatropin), in daily injection form (clinically relevant comparator);
- the evidence of superiority concerning interference with the patient's life, due to the simplification of administration;
- the fact that the safety profile was comparable to that of somatropin in the studies, except for injection site reactions and immunogenicity, which were more frequent with somatrogen;
- uncertainties relating to long-term safety associated with exposure to increased levels of non-physiological IGF-1, including potential risks of neoplasia (benign and malignant) and impaired glucose tolerance;

the Transparency Committee considers that **NGENLA (somatrogen) provides no clinical added value (CAV V)** in the management strategy for children and adolescents aged three years and over with growth disorders due to inadequate secretion of growth hormone.