Recombinant human growth hormone (rhGH) has been utilized since 1985. Daily rhGH injections have been proven to increase height velocity and improve body composition in growth hormone deficiency, various genetic syndromes and chronic kidney disease. Safety and efficacy are well established.

Long-acting growth hormone (LAGH) analogs have been developed to improve compliance and patient experience. Several LAGH preparations are in development or early commercial use. A recent meta-analysis of seven studies comparing LAGH and daily GH, found no significant difference in height velocity/height standard deviation scores or a significant difference in incidence of adverse effects.

A survey was developed, on behalf of the ESPE Bone & Growth Plate working group. The aim was to evaluate:
• current knowledge,
• perceptions
• reservations of health professionals
With regard to LAGH analog use.

Clinicians were invited by direct email request, society updates and social media post to participate. All respondents completed a questionnaire on current practices and future intentions regarding growth hormone prescription.
All replies were anonymous.

Current practice regarding initiation of daily rhGH treatment, monitoring of efficacy and adverse effects were based on recognized guidelines.
Only one third of respondents, intend to use LAGH analogs at present, 43% were undecided. 23% do not plan to do so at this time.

The benefits and considerations for commencing LAGH analogs are summarised in the graphs above.
The majority of respondents (90%) have been provided with information on LAGH analogs, usually from conference symposia.
The majority would use the same clinical indications, efficacy and safety parameters that are employed for daily rhGH injections.
The majority would prefer increased monitoring (70%) and expect pharmaceutical companies to provide clear dosing guidelines (87%), updated reference ranges for IGF-1/IGF-BP3 (75%) and provision of a surveillance registry (83%)

Introduction of LAGH analogs will require increased information on dosing, comparable cost and provision of surveillance registries to encourage clinician use over daily rhGH therapy.
Clinicians remain concerned about the sustained effect of LAGH analogs compared to physiological GH secretion.


REFERENCES