

Dr Carole Longson
Director, Centre for Health Technology Evaluation

Dear Carole

Many thanks for asking the British Society for Paediatric Endocrinology and Diabetes (BSPED) to comment on the Health Technology Appraisal of Human Growth Hormone for the treatment growth failure in children (review) Appraisal Consultation Document. In general the BSPED are quite happy with the document and only have one or two minor points to make, detailed below. We also recognise the almost universal lack of health-related quality of life data and support the Committee's recommendation that this be addressed in planned research projects across the spectrum of growth hormone prescribing for children (section 6.2). There is currently a UK cohort study examining health related QoL in families prescribed GH for GHD and Turner syndrome but results are not expected until end of 2010.

Comments:

Numbered according to the ACD

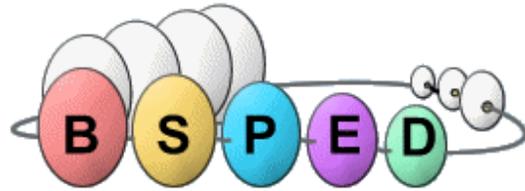
- 1.2 Add...The decision to initiate somatropin should be made by a paediatrician with a specialist expertise in growth hormone disorders (paediatric endocrinologist).

This should ally with section 4.3.4 where the wording should state in the last line '... a physician with specialist experience in growth hormone disorders (endocrinologist).

- 1.3: The wording in this section is different from section 4.3.4. Also it does not clarify what should happen at transition of patients with GHD. The BSPED would recommend changing the wording in section 1.3 to:

Treatment with somatropin should be discontinued if any of the following apply:

- there is an increase in growth velocity of less than 50% from baseline in the first year of treatment
- final height is approached and growth velocity is less than 2 cm total growth in 1 year
- there are insurmountable problems with adherence



Once final height is obtained, treatment should be discontinued only after consultation with patients and/or their carers by a paediatrician with specialist expertise in the management of growth hormone disorders or by an endocrinologist with specialist expertise in the management of growth hormone treatment in adults.

This fits better with section 4.3.4 which states: This guidance recommended that treatment with somatropin should be discontinued if: there is an increase in growth velocity of less than 50% from baseline in the first year of treatment; final height is approached and growth velocity is less than 2 cm total growth in 1 year, or there are insurmountable problems with adherence.

2.5: should say ...below the 2nd percentile for height within their first year and remain so throughout childhood on account of more pronounced deceleration in height velocity.

2.6: The international consensus definition of SGA is below -2 SD for birth weight or length.

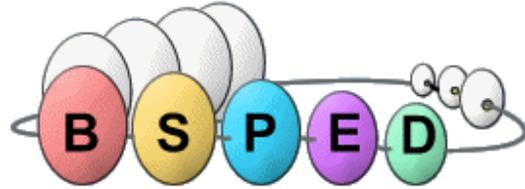
2.8:oxandrolone may be added... The BSPED UK Turner study has demonstrated a positive effect of adjuvant therapy with oxandrolone with growth hormone on final height. This data has been presented at various national and international meetings and is in preparation for publication.

3.3: You have expressed all the doses/kg as mcg/kg/day apart from SHOX deficiency which you have expressed as mg/kg/day. Probably better to keep the same format throughout and therefore SHOX should be 45-50mcg/kg daily.

3.4: The way this paragraph is written suggests that leukaemia is a possible side effect of treating children with GH deficiency with GH. This is not the case and there is no evidence for this. This was based on very old Japanese data which suggested an increased risk of leukaemia relapse in children treated with GH who had previously been treated for leukaemia. This study has never been substantiated in other parts of the world or from the long term post marketing surveillance data. The BSPED feel this sentence should be removed.

4.3.3: Somatropin treatment can therefore play a major role in improving quality of life and may also improve long term cardiovascular health and reduce the risk of diabetes even after discontinuation of treatment.

4.3.4: See note above in relation to 1.2.



4.3.11: last sentence the least costly product that meets the needs of the individual patient and maximises the likelihood of adherence to treatment should be chosen when more than one product is suitable following patient choice.

6.1: 3rd bullet point. There is a controlled cohort study...

Yours sincerely



BSPED

(On behalf of the clinical committee BSPED)