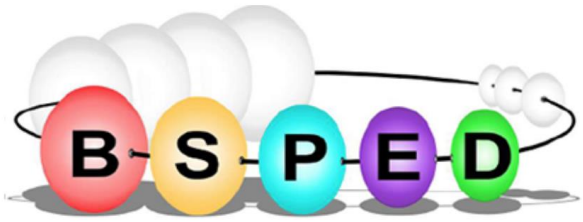

British Society for Paediatric Endocrinology and Diabetes

POSITION STATEMENT – GROWTH HORMONE THERAPY IN SILVER-RUSSELL SYNDROME (SRS) BETWEEN 2 AND 4 YEARS OF AGE

BSPED Growth Disorders Special Interest Group (GD-SIG)

The current licence to treat growth disturbance in short children born small for gestational age (SGA) with recombinant human growth hormone allows treatment from the age of four years (1). In contrast, the US Food and Drug Administration license for the use of growth hormone in short children born SGA allows treatment from the age of two years (2). The rationale behind the later start of growth hormone therapy in this group of children was to prevent unnecessary treatment of children who may exhibit spontaneous catch-up growth between 2 and 4 years of age.

Children with Silver-Russell Syndrome (SRS) are currently treated using the growth hormone license for growth disturbance in short children born small for gestational age. International guidelines on the management of SRS recommend treatment with recombinant human growth hormone from the age of two years (3). Children with SRS have no prospect of catch-up growth between two and four years and so there is no rationale behind delaying treatment beyond the age of two years in this group.

The international task force further recommended growth hormone therapy for SRS to optimise body composition (in line with GH prescribing in Prader Willi syndrome). In some cases, starting somatropin before 2 years of age is recommended to improve severe fasting hypoglycaemia; severe malnutrition (avoiding gastrostomy) and severe muscular hypotonia (3).

The Growth Disorders Special Interest Group of the British Society for Paediatric Endocrinology endorses the international consensus guidelines on SRS that growth hormone treatment should be made available for these children from the age of two years to increase height and to optimise body composition. The treatment should also be made available earlier if there is refractory hypoglycaemia.

We therefore recommend all integrated care boards make this treatment available in line with international guidance.

References:

1. NICE TA188. Human growth hormone (somatropin) for the treatment of growth failure in children. May 2010.

2. Clayton PE, Cianfarani S, Czernichow P, Johannsson G, Rapaport R, Rogol A. Management of the child born small for gestational age through to adulthood: a consensus statement of the International Societies of Pediatric Endocrinology and the Growth Hormone Research Society. *J Clin Endocrinol Metab.* 2007;92:804–810
3. Wakeling, E., Brioude, F., Lokulo-Sodipe, O. *et al.* Diagnosis and management of Silver–Russell syndrome: first international consensus statement. *Nat Rev Endocrinol* **13**, 105–124 (2017). https://doi.org/10.1038/nrendo.2016.138
4. https://www.eurospe.org/clinical-practice/consensus-statements-and-guidelines/espe-consensus-statements-and-guidelines/
5. https://www.eurospe.org/media/1354/diagnosis-and-management-of-silver-russell-syndrome-first-international-consensus-statement.pdf