South East London Integrated Medicines Optimisation Committee
Formulary recommendation

Reference:	**134**
Intervention:	**Fiasp™ insulin (insulin aspart) for the management of diabetes mellitus in children and young people** (Fiasp™ is a fast-acting insulin aspart formulation)
Date of Decision:	**July 2022**
Date of Issue:	**August 2022**
Recommendation:	**Amber 2 – initiation and first prescription from the specialist diabetes team**
Further Information	• Fiasp™ is a newer formulation of the existing fast-acting insulin aspart product NovoRapid™. The addition of nicotinamide (vitamin B3) in Fiasp™ results in a more rapid initial absorption of insulin compared to conventional NovoRapid™. • Fiasp™ is a mealtime insulin for subcutaneous administration up to 2 minutes before the start of the meal, with the option to administer up to 20 minutes after starting the meal. • Fiasp™ is accepted for use in South East London as a **second-line** fast acting insulin option in children and adolescents aged 1 year and above with Type 1 or Type 2 diabetes mellitus where the first line rapid acting insulin analogue does not provide adequate post-prandial plasma glucose (PPG*) control and **only** if one or more of the following criteria apply: - Children and adolescents who find waiting 15-20 mins pre-meal following conventional injections problematic - Children and adolescents on pumps, failing on conventional fast acting insulin - Children with late post prandial hypoglycaemia - Children with high HbA1c (>72mmol/mol) • Patients switched to Fiasp™ must be adequately counselled on the new fast acting insulin by the initiating prescriber. • There should be regular review by the paediatric diabetes specialist team of eligible patients who are switched to Fiasp™ to ensure ongoing effectiveness. • A number of fast-acting insulins are included on the paediatric formulary. Any inadvertent substitution has the potential to impact on patient safety. In view of this, these insulins must be prescribed **BY BRAND** to ensure brand continuity in people with diabetes and to minimise the risk of substitution/medication errors/patient harm. • This recommendation will be subject to review as part of any program to implement biosimilar preparations of insulin aspart in paediatrics across SEL. *PPG is the plasma glucose concentration after eating.
Shared Care/ Transfer of care required:	N/A
Cost Impact for agreed patient group	• It is estimated there will be approximately 85 patients across SEL per annum eligible for treatment with Fiasp™ in this setting (all patients from SEL) • The cost implication from switching patients from either Novorapid™ or Humalog™ would be cost neutral as the prices in their various preparations are identical (in the case of Fiasp™ and Novorapid™) or relatively identical (Fiasp™ and Humalog™) • Biosimilar versions of insulin aspart e.g. Trurapi™ are not currently included in the SEL formulary. If Fiasp™ is used as an alternative to Trurapi™ in 85 patients

	on a dose of 30 units per day, this would equate to approximately £5,700 increased costs for SE London (or ~£300 per 100,000 population).

Usage Monitoring & Impact Assessment	**Acute Trusts:** • Monitor and audit usage of Fiasp™ and report back to the Committee (against this recommendation) upon request of the Committee
	SEL Borough Medicines Optimisation Teams: • Monitor ePACT2 data and exception reports from GPs if inappropriate prescribing requests are made to primary care.
Evidence reviewed	**References (from evidence review)** 1. Nice.org.uk. 2015. Diabetes (type 1 and type 2) in children and young people: diagnosis and management. [online] Available here [Accessed 4 May 2022]. 2. Levitsky, L. and Misra, M., 2021. Epidemiology, presentation, and diagnosis of type 1 diabetes mellitus in children and adolescents. [online] Uptodate.com. Available here [Accessed 4 May 2022]. 3. Diabetes UK. 2022. Testing and your child. [online] Available here [Accessed 4 May 2022]. 4. Russell-Jones D et al. Fast-acting insulin aspart improves glycaemic control in basal-bolus treatment for Type 1 diabetes: Results of a 26-week multicentre, active-controlled, treat-to-target, randomised, parallel-group trial (Onset 1) (2017). Diabetes Care; volume 30: pages 943-950 5. Medicines.org.uk. 2021. Fiasp 100 units/mL Penfill solution for injection in cartridge - Summary of Product Characteristics (SmPC) - (emc). [online] Available here [Accessed 4 May 2022]. 6. Fiasp – Public Assessment Report. Type 2 variation for use in paediatrics. European Medicines Agency. [online] Available here (Accessed 06/05/2022). 7. Bode BW et al. Efficacy and Safety of Fast-Acting Insulin Aspart Compared With Insulin Aspart, Both In Combination With Insulin Degludec, In Children and Adolescents With Type 1 Diabetes (2019). Diabetes Care; volume 42: pages 1255-1262. 8. Bode BW et al. Improved Postprandial Glycaemic Control With Faster-Acting Insulin Aspart In Patients With Type 1 Diabetes Using Continuous Subcutaneous Insulin Infusion (2017). Diabetes Technology and Therapeutics; volume 19(1), pages 25-33. 9. Insulin Aspart (Fiasp). Scottish Medicines Consortium 2017. [online] Available here (Accessed 06/05/2022).

NOTES:

a) SEL IMOC recommendations and minutes are available publicly via the website.

b) This SEL IMOC recommendation has been made on the cost effectiveness, patient outcome and safety data available at the time. The recommendation will be subject to review if new data becomes available, costs are higher than expected or new NICE guidelines or technology appraisals are issued.

c) **Not to be used for commercial or marketing purposes. Strictly for use within the NHS.**