

January 2018

**Octreotide for treatment of certain gastrointestinal indications**

The High Cost Drugs Subgroup discussed the above at its meeting on 24<sup>th</sup> January 2018. The recommendation of this subgroup is as follows:

<b>Recommendation</b>	Octreotide is recommended as a treatment option for certain gastrointestinal conditions in adult patients who meet specific criteria for each condition:		
	Condition	Criteria for initiation	Criteria for continuation
	Entereocutaneous fistula	high-output i.e. >500ml / day	Review at 10-20 days. Expected benefits must include one or more of: <ul style="list-style-type: none"> <li>• Visible progress towards fistula closure (cease treatment on closure)</li> <li>• decreased fistula output (~20% reduction) resulting in improved fluid/electrolyte balance</li> <li>• patient may now be managed in the home setting.</li> </ul>
	High output stoma	Net “secretory” output (generally more than 3 litres/24 hours) despite at least 2 weeks of standard therapy (loperamide, codeine, PPIs etc)	Review within 1 week. To continue, there must be reduced volume of stomal output by 1-2 litres /24hours and reduced parenteral fluid requirements.
	Refractory diarrhoea	Exhausted investigations to identify a clearly targeted remediable cause AND have exhausted other treatments (pharmacological and dietary)	Review after 4 weeks To continue, a reduced frequency and /or volume of stool considered meaningful by both clinician and patient.
<b>Background</b>	Octreotide has a marketing authorisation for <i>Symptomatic control and reduction of growth hormone (GH) and IGF-1 plasma levels in patients with acromegaly who are inadequately controlled by surgery or radiotherapy</i> but not for any of the gastrointestinal uses suggested above. However, it is used when standard treatments have failed and, as such, all these off-label uses should be subject to IFR approval from the commissioner. Since the volume of patients requiring IFRs should they be submitted for all of the above is likely to be in the region of 10-20 per year, a commissioning policy should be produced.		

<p><b>Efficacy and Safety</b></p>	<p>Octreotide has been available as a licensed medicine in the UK since 1999 and the overall safety and tolerability are well described.</p> <p>It is not licensed for the treatment of any of the above and the reasoning for use is presented here:</p> <table border="1" data-bbox="387 394 1477 1072"> <thead> <tr> <th data-bbox="387 394 935 443">Indication</th> <th data-bbox="935 394 1477 443">Rationale</th> </tr> </thead> <tbody> <tr> <td data-bbox="387 443 935 640">Entero-cutaneous fistula</td> <td data-bbox="935 443 1477 640">ASPEN-FELANPE Clinical Guidelines recommends the use of somatostatin analogue in adult patients with an entero-cutaneous fistula as a method to reduce effluent drainage and enhance spontaneous closure .<sup>1</sup></td> </tr> <tr> <td data-bbox="387 640 935 748">High output stoma</td> <td data-bbox="935 640 1477 748">British Society of Gastroenterology Guidelines for management of patients with a short bowel.<sup>2</sup></td> </tr> <tr> <td data-bbox="387 748 935 1072">Refractory diarrhoea</td> <td data-bbox="935 748 1477 1072">Stimulates water and electrolyte absorption and inhibition of hormone secretion (gastrin, cholecystokinin, secretin, insulin, glucagon and vasoactive intestinal peptide), exocrine secretory responses (gastric acid secretion and exocrine pancreatic secretion) and motor activity (gastric emptying and gall bladder contraction).<sup>3</sup> Some limited clinical evidence.<sup>4</sup></td> </tr> </tbody> </table> <p>The most frequent adverse reactions reported during octreotide therapy include gastrointestinal disorders, nervous system disorders, hepatobiliary disorders, and metabolism and nutritional disorders. Injection site pain is also common.</p> <p>Limited data suggests that octreotide can induce a significant and durable response in some patients with the above conditions. Gastroenterologists support review at the stated intervals which are in line with NICE's review criteria for other drugs in other GI conditions e.g. eluxadoline in IBS.</p>	Indication	Rationale	Entero-cutaneous fistula	ASPEN-FELANPE Clinical Guidelines recommends the use of somatostatin analogue in adult patients with an entero-cutaneous fistula as a method to reduce effluent drainage and enhance spontaneous closure . <sup>1</sup>	High output stoma	British Society of Gastroenterology Guidelines for management of patients with a short bowel. <sup>2</sup>	Refractory diarrhoea	Stimulates water and electrolyte absorption and inhibition of hormone secretion (gastrin, cholecystokinin, secretin, insulin, glucagon and vasoactive intestinal peptide), exocrine secretory responses (gastric acid secretion and exocrine pancreatic secretion) and motor activity (gastric emptying and gall bladder contraction). <sup>3</sup> Some limited clinical evidence. <sup>4</sup>
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<p><b>Cost Effectiveness/ Affordability</b></p>	<p>The NHS list price for octreotide 50microgram pre-filled syringes is £18.85 for 5. At a typical dose of 50mcg three times daily e.g. in high output stoma, a month's treatment (30 days) would cost £339.30. The dose may be increased to 100mcg three times a day in entero-cutaneous fistula (£30.34 for 5x 100mcg pre-filled syringes so £546.12 for 30 days) and 200mcg three times a day in refractory diarrhoea at £1092 per 30 days.</p> <p><b>Commissioning Arrangements:</b> octreotide is a high cost PbR excluded drug. CCGs are the responsible commissioner for octreotide when used to treat gastrointestinal conditions.</p> <p>If the criteria for continuation / success are met, the following may be anticipated:</p> <ul style="list-style-type: none"> <li>• Reduced length of hospital stays</li> <li>• Reduce parenteral fluid requirements</li> <li>• Improved quality of life for the patient</li> </ul> <p>As review will be at a maximum of 4 weeks after commencing treatment, treatment with no meaningful response will be quickly stopped.</p> <p>Anticipated numbers of patients for <b>each</b> of the above conditions is in the region of 5 per year across Greater Manchester.</p>								

<b>Monitoring</b>	Where Blueteq has been introduced to the trust as part of the contractual arrangements, a form should be completed and on-going funding approval will be made by meeting the criteria outlined on completion and submission of a Blueteq form.
<b>Patient perspective</b>	Routine commissioning for this indication will mean that patients can quickly access an accepted treatment without any the need for an individual funding request to be processed.

## References

1. ASPEN-FELANPE Clinical Guidelines: Nutrition Support of Adult Patients With Enterocutaneous Fistula. Kumpf VJ, de Aguilar-Nascimento JE, Diaz-Pizarro Graf JI, Hall AM, McKeever L, Steiger E, Winkler MF, and Comphe CW. *Journal of Parenteral and Enteral Nutrition* 2017; 41(1):104-112
2. Guidelines for management of patients with a short bowel. Nightingale J, Woodward JM. *Gut* 2006; 55(Suppl IV):iv1–iv12. doi: 10.1136/gut.2006.091108
3. Role of somatostatin-14 and its analogues in the management of gastrointestinal fistulae. Hesse U, Ysebaert D and de Hemptinne B. *Gut* 2001; 49 (Suppl IV): iv11-iv20
4. Octreotide in the treatment of refractory diarrhoea and intestinal fistulae. Farthing MJG. *Gut* 1994; supplement 3: S5-S10