NICE National Institute for Health and Care Excellence

Putting NICE guidance into practice

Resource impact report:
Xeomin (botulinum neurotoxin type A) for treating chronic sialorrhoea (TA605)

Published: October 2019

Summary

NICE has recommended Xeomin (botulinum neurotoxin type A) for treating chronic sialorrhoea.

We estimate that:

- 34,100 people with chronic sialorrhoea are eligible for treatment with Xeomin
- 30,700 people will have Xeomin from year 2023/24 onwards once uptake has reached 90% as shown in table 1.

Table 1 Estimated number of people in England having Xeomin

	2019/20	2020/21	2021/22	2022/23	2023/24
Population having Xeomin each year	1,900	10,200	17,100	23,900	30,700

This report is supported by a local resource impact template because the list price of Xeomin has a discount that is commercial in confidence. The discounted price of Xeomin can be put into the template and other variables may be amended.

This technology is commissioned by clinical commissioning groups. Providers are NHS hospital trusts.

1 Xeomin (botulinum neurotoxin type A)

1.1 NICE has recommended Xeomin (botulinum neurotoxin type A) within its marketing authorisation, as an option for treating chronic sialorrhoea caused by neurological conditions in adults.

1.2 Botulinum neurotoxin type A products are currently given (outside of their marketing authorisations) as a second or third-line treatment option for sialorrhoea to people with Motor Neurone Disease (MND) (NG42), people with Parkinson's Disease (NG71), and people with Cerebral Palsy (NG62).

1.3 First line treatment includes non-pharmacological treatment such as bibs, speech and language therapy, occupational therapy (standard care) and pharmacological treatments such as anticholinergics, of which glycopyrronium bromide is the most commonly used.

1.4 Clinical experts highlighted a need for a targeted treatment such as Xeomin that avoids the side effects of anticholinergics. The mechanism of action of botulinum neurotoxin type A products alter the production of saliva rather than current treatments which can cause a dry mouth in a population who are likely to have swallowing difficulties. Current treatments may also cause cognitive difficulties, therefore current uptake of anticholinergics is low.

2 Resource impact of the guidance

2.1 We estimate that:

- 34,100 people with chronic sialorrhoea are eligible for treatment with Xeomin each year. This includes people who have Parkinson's disease, cerebral palsy, traumatic brain injury, motor neurone disease, stroke and multiple sclerosis.

- 30,700 people will have Xeomin from year 2023/24 onwards once uptake has reached 90%.

2.2 The current treatment and future uptake figure assumptions are based on clinical expert opinion and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to have Xeomin by financial year.

Table 2 Estimated number of people having Xeomin using NICE assumptions

	2019/20	2020/21	2021/22	2022/23	2023/24
Population having Xeomin each year	1,900	10,200	17,100	23,900	30,700

2.3 This report is supported by a local resource impact template. The company has a commercial arrangement (simple discount patient access scheme). This makes Xeomin available to the NHS with a discount. It is the company's responsibility to let relevant NHS organisations know details of the discount. The discounted price of Xeomin can be put into the template and other variables may be amended. For enquiries about the patient access scheme please contact Medical.Information@merz.com.

3 Implications for commissioners and providers

3.1 This technology is commissioned by clinical commissioning groups (CCGs). Providers are NHS hospital trusts.

3.2 Ultrasound imaging is sometimes used to guide the needle into the correct injection site for administration of Xeomin. Although clinical experts from the committee stated the use of ultrasound was infrequent, locating the gland requires expertise and training. The summary of product characteristics for Xeomin states ultrasound guided application demonstrated superior results than the anatomical landmarks method.

3.3 Commissioners and providers may need to consider the impact that implementation of this technology may have. There is an expected increase in demand for access to ultrasound scanning to support treatment with Xeomin.

3.4 The adoption of this technology is estimated to result in an additional 3.25 outpatient appointments per year per patient.

3.5 Xeomin falls within the programme budgeting category '7X Neurological problems – other'.

4 How we estimated the resource impact

The population

4.1 People may develop sialorrhoea because of many different conditions. These include Parkinson's disease, motor neurone disease, stroke or cerebral palsy, in addition to traumatic or acquired brain injury. It can also be a side effect of taking some types of drugs. Based on the company submission, expert opinion and population data (included in table 3 below) around 17,400 people who have Parkinson's disease and around 16,700 people who have other neurological conditions may be eligible for treatment.

Table 3 Number of people eligible for treatment in England

Population	Parkinson's disease related - proportion of previous row (%)	Other conditions related (%)	Number of people
Adult population			43,752,473
Prevalence of Parkinson's disease[1]	0.28		121,900
People with Parkinson's disease who have sialorrhoea[2]	22.50		27,400
People who have Parkinson's disease who require treatment[2] (a)	63.5		17,400
People who have other conditions who require treatment (proportion of adult population)[3] (b)		0.038	16,700
Total number of people eligible for treatment with Xeomin (a + b)			34,100
Total number of people estimated to have Xeomin each year from year 2023/24[4]	90	90	30,700

[1] Source: Prevalence of Parkinson's disease 2018.

[2] Source: Company submission - based on clinical opinion.

[3] Source: The data from the SIAXI trial shows 79.4% of people with chronic sialorrhoea are people who have Parkinson's disease. This has been used to derive the total population as follows: 17,400 people with Parkinson's disease requiring treatment / 79.4% = 21,900 total population. The company estimates the total population to be around 46,300 people. Mid-point taken, therefore 34,100 people who may receive treatment. People with other conditions = 34,100 minus people who have Parkinson's disease 17,400 = 16,700 or around 0.038% of the adult population in England.

[4] Source: Company submission.

Assumptions

4.2 The resource impact template assumes that:

- The number of people who have conditions causing sialorrhoea who took part in the SIAXI trial are proportional to those seen in clinical practice. This is based on clinical expert opinion.

- 20% of people with chronic sialorrhoea currently have glycopyrronium bromide. This includes:

    - 7% of people with Parkinson's disease who have treatment for chronic sialorrhoea because this is the proportion of people aged under 65 years.

    - Around one third of people with other conditions (such as cerebral palsy, traumatic brain injury, motor neurone disease, stroke, MS) who have treatment for chronic sialorrhoea based on clinical opinion.

- Glycopyrronium bromide and other anticholinergics are expected to be mainly used by people under 65 years old because chronic use of these treatments may cause cognitive difficulties.

- There is minimal use of other anticholinergics (atropine sulphate 1%; hyoscine hydrobromide 1%).

- There are no administration costs associated with current treatment options.

- Around 38% of people discontinue anticholinergics treatment (company data). It is assumed that, currently, all these people have botulinum neurotoxin A type products as a second-line treatment. This is in line with NICE guidelines NG42 on MND; NG71 on Parkinson's disease and NG62 on Cerebral Palsy in under 25s.

- All people have standard care along with active treatments, with around 78% of people currently having standard care alone. Costs of standard care are therefore excluded from the resource impact template.

- Future uptake is estimated to be 90%. This is based on company estimates supported by clinical opinion which take into account that a large proportion of people are not able to tolerate anticholinergics.

- Xeomin administration requires an outpatient appointment at a cost of £100 (National tariff 2019/20, General Medicine code 300, WF01A follow-up attendance - single professional).

- The cost of an ultrasound scan is £39 (National tariff 2019/20, RD40Z Ultrasound scan < 20 minutes without contrast). 55% of people have an ultrasound scan to guide administration of Xeomin (data from SIAXI trial).

- These administration costs are applied over a 16-week treatment cycle, which is an average 3.25 times a year.

About this resource impact report

This resource impact report accompanies the NICE guidance on Xeomin (botulinum neurotoxin type A) Technology Appraisal 605 and should be read with it.