NICE National Institute for Health and Care Excellence

Putting NICE guidance into practice

Resource impact report:
Brolucizumab for wet, age-related macular degeneration TA672

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Summary

NICE has recommended brolucizumab for wet age-related macular degeneration.

We estimate that:

- 295,000 people (261,000 prevalent and 34,000 incident) with wet age-related macular degeneration are eligible for treatment with brolucizumab, 27% of people will require treatment in both eyes.
- 27% people require treatment in their second eye giving 375,000 eyes (332,000 prevalent and 42,000 incident) for treatment.
- 11,900 people from the incident population will have brolucizumab from year 5 onwards once uptake has reached 35% as shown in table 1.

Table 1 Estimated number of people in the incident populations in England treated with brolucizumab

	2020/21	2021/22	2022/23	2023/24	2024/25
Incident uptake rate for brolucizumab (%)	7	14	21	28	35
Population having brolucizumab each year	2,400	4,800	7,100	9,500	11,900

If 5% of people in the prevalent population currently on aflibercept or ranibizumab switch to brolucizumab this would be around 13,000 people in year 1 and 9,000 people in year 5, there is uncertainty around the number of people who will switch so this is left for local input in the template.

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

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

1 Brolucizumab

1.1 NICE has recommended brolucizumab.

1.2 Current treatment for wet age-related macular degeneration is intravitreal injections with either aflibercept or ranibizumab. Brolucizumab is an additional treatment option for this population.

1.3 Information supplied by the company and information from the committee appraisal modelling shows that brolucizumab requires fewer injections per year and fewer monitoring appointments which can free up capacity in providers.

2 Resource impact of the guidance

2.1 We estimate that:

- 295,000 people (261,000 prevalent and 34,000 incident) with wet age-related macular degeneration are eligible for treatment with brolucizumab
- 27% people require treatment in their second eye giving 375,000 eyes (332,000 prevalent and 42,000 incident) for treatment.
- 11,900 people from the incident population will have brolucizumab from year 5 onwards once uptake has reached 35%.

2.2 The proportion of people in the prevalent population currently treated with either aflibercept or ranibizumab who will switch to brolucizumab is uncertain so the template does not include an assumption about this, users can input their own local assumption. Table 2 shows the number of people who would switch based on 5% switching for illustrative purposes. The impact of people switching from either aflibercept or ranibizumab will be determined by the number of injections of brolucizumab required when the switch takes place.

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

Table 2 Estimated number of people in the prevalent and incident populations treated with brolucizumab using NICE assumptions

	2020/21	2021/22	2022/23	2023/24	2024/25
Prevalent population switching to brolucizumab (%)	5	5	5	5	5
Prevalent population having brolucizumab each year	13,100	11,900	10,900	10,000	9,100
Incident uptake rate for brolucizumab (%)	7	14	21	28	35
Population having brolucizumab each year	2,400	4,800	7,100	9,500	11,900
Total population having brolucizumab each year	15,500	16,700	18,000	19,500	21,000

2.4 This report is supported by a local resource impact template. Brolucizumab has an agreed patient access scheme which makes it available with a commercial-in-confidence discount to the list price. The discounted price of brolucizumab can be put into the template and other variables may be amended.

Savings and benefits

2.5 Treatment with brolucizumab requires fewer intravitreal injections per year and fewer monitoring appointments per year when compared with aflibercept and ranibizumab. This means fewer hospital attendances for people receiving treatment and increased capacity for providers.

Table 3 Estimated number of injections per year by drug

	Injections per year		
Drug	**Year 1**	**Year 2**	**Year 3**
Brolucizumab	6.6	4.8	4.0
Aflibercept	8.8	6.9	4.0
Ranibizumab	9.2	7.9	4.0

3 Implications for commissioners

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

3.2 Brolucizumab falls within the programme budgeting category 08X, problems of vision.

4 How we estimated the resource impact

The population

4.1 There are around 307,000 people in England with wet, age-related macular degeneration and a further 40,000 people are diagnosed each year. Of these people around 85% are eligible for treatment with brolucizumab.

Table 4 Number of people eligible for treatment in the prevalent and incident populations in England

	Population	Proportion of previous row (%)	Number of people
a	Total population		56,286,961
b	Population aged 50 or over		21,043,663
c	Prevalence of wet, age-related macular degeneration[1]	1.46	307,000
d	Proportion of people eligible for treatment[2]	85	261,000
e	Incidence of wet, age-related macular degeneration[1]	0.19 of b	40,000
f	Proportion of people eligible for treatment[2]	85	34,000
g	Number of people in the incident population estimated to have brolucizumab each year	35	11,900
	[1] Source: Owen CG, Jarrar Z, Wormald R, et al. The estimated prevalence and incidence of late stage age related macular degeneration in the UK. Br J Ophthalmol 2012;96:752-756. [2] Source: NICE guideline, Age related macular degeneration NG82 (2018)		

Assumptions

4.2 The resource impact template assumes that:

- The tariff price of a consultant follow-up outpatient attendance (WF01A, TFC 130) is used for the administration cost for all 3 drugs.
- The tariff price of retinal tomography, 19 years and over (BZ88A) is used for the monitoring cost of each drug.
- The tariff prices are based on the 2020/21 National Tariff Payment System: national prices and prices for blended payments.
- Based on information from the company, the discontinuation rate for people treated with brolucizumab, aflibercept and ranibizumab are 7.86%, 8.95% and 7.89% respectively.
- The number of people in the prevalent population who may switch treatment is not known. The model allows for local input.

- For all 3 drugs it is assumed that a single vial or pre-filled syringe contains a single dose.

About this resource impact report

This resource impact report accompanies the NICE guidance on brolucizumab for wet, age-related macular degeneration and should be read with it.