

## Putting NICE guidance into practice

### **Resource impact report: Pertuzumab for adjuvant treatment of HER2-positive early stage breast cancer (TA569)**

Published: March 2019

## Summary

NICE has recommended pertuzumab with trastuzumab and chemotherapy for adjuvant treatment of early HER2-positive breast cancer with lymph node involvement.

We estimate that:

- 1,400 people with HER2-positive breast cancer with lymph node involvement are eligible for treatment with pertuzumab
- 1,300 people will have pertuzumab from year 2 onwards once uptake has reached 90% as shown in table 1.

**Table 1 Estimated number of people in England having pertuzumab**

	2019/20	2020/21	2021/22	2022/23	2023/24
Population having pertuzumab each year	730	1,300	1,300	1,300	1,300

This report is supported by a local resource impact template because the list price of pertuzumab has a discount that is commercial in confidence. The discounted price of pertuzumab can be put into the template and other variables may be amended. Contact [Welwyn.rx\\_bdop@roche.com](mailto:Welwyn.rx_bdop@roche.com) for details of the discount.

This technology is commissioned by NHS England. Providers are NHS hospital trusts.

# 1 Pertuzumab

- 1.1 NICE has recommended pertuzumab with trastuzumab and chemotherapy for the adjuvant treatment of HER2-positive early breast cancer with lymph node involvement.
- 1.2 Current practice in the adjuvant setting is for women to be treated with trastuzumab and chemotherapy (usually docetaxel). NICE recommended pertuzumab with trastuzumab and chemotherapy for the neoadjuvant treatment of HER2-positive breast cancer in [TA424](#) and around 40% of women currently receive neoadjuvant treatment.

## 2 Resource impact of the guidance

- 2.1 We estimate that:
- 1,400 people with HER2-positive early breast cancer with lymph node involvement are eligible for treatment with pertuzumab each year
  - 1,300 people will have pertuzumab from year 2 onwards once uptake has reached 90%.
- 2.2 The current treatment and future uptake figure assumptions are based on a range of opinions including clinical experts, commissioners and the manufacturer and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to have pertuzumab by financial year.

**Table 2 Estimated number of people having pertuzumab using NICE assumptions**

	2019/20	2020/21	2021/22	2022/23	2023/24
Population having pertuzumab each year	730	1,300	1,300	1,300	1,300

- 2.3 This report is supported by a local resource impact template. pertuzumab has a commercial access arrangement which makes it available with a commercial-in-confidence discount to the list price. The discounted price of pertuzumab can be put into the template and other variables may be amended.

### **3 Implications for commissioners**

- 3.1 This technology is commissioned by NHS England. Providers are NHS hospital trusts.
- 3.2 Pertuzumab falls within the programme budgeting category 02F Cancer, breast.

### **4 How we estimated the resource impact**

#### ***The population***

- 4.1 There are around 45,600 breast cancer diagnoses each year in England. About 14% (6,500) of women with breast cancer will have HER2-positive disease and of these around 66% (4,300) will have treatment. Of women who have treatment, around 90% (3,900) will be well enough for HER2-targeted therapy and of these women around 1,400 will have lymph node involvement.

**Table 3 Number of people eligible for treatment in England**

	Population	Proportion of previous row (%)	Number of people
	Total population		54,786,327
	Adult female population		22,352,862
	Incidence of breast cancer <sup>1</sup>	0.204	45,600
	Women with HER2-positive disease <sup>2</sup>	14.3	6,500
	Women who have treatment for their disease	66.0	4,300
a	Women who are fit enough for targeted HER2 therapy	90	3,870
b	Women who commence treatment with surgery	61	2,360
c	Proportion of women with lymph node involvement	25	590
d	Women who have neoadjuvant treatment	39 of a	1,510
e	Women who have pertuzumab neoadjuvantly	82	1,240
f	Proportion of women with lymph node involvement	69	850
	Total number of people eligible for treatment with pertuzumab	c+f	1,440
	Total number of people estimated to have pertuzumab each year from year 2	90	1,300
	<sup>1</sup> Source: <a href="#">ONS Cancer registration statistics, 2016: final</a>		
	<sup>2</sup> Source: Company submission		

## **Assumptions**

4.2 The resource impact template assumes that:

- Treatment with pertuzumab will be in combination with trastuzumab and chemotherapy
- Women who have treatment but do not have pertuzumab will have trastuzumab and chemotherapy duotherapy
- Maximum number of cycles for pertuzumab treatment is 18, 4 cycles are assumed in neoadjuvant therapy so for women who have neoadjuvant pertuzumab, the number of adjuvant cycles is limited to 14

- Biosimilar trastuzumab will be available as an intravenous infusion and the price can be added locally in the resource impact template
- As pertuzumab is an IV infusion, it is assumed that women who have pertuzumab will have the biosimilar trastuzumab but women who have trastuzumab with chemotherapy duotherapy will have the standard subcutaneous trastuzumab.

## About this resource impact report

This resource impact report accompanies the NICE guidance Pertuzumab for adjuvant treatment of HER2-positive early stage breast cancer and should be read with it.

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