NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Appraisal consultation document

Ibrutinib for treating Waldenstrom's macroglobulinaemia

The Department of Health has asked the National Institute for Health and Care Excellence (NICE) to produce guidance on using ibrutinib in the NHS in England. The appraisal committee has considered the evidence submitted by the company and the views of non-company consultees and commentators, clinical experts and patient experts.

This document has been prepared for consultation with the consultees. It summarises the evidence and views that have been considered, and sets out the recommendations made by the committee. NICE invites comments from the consultees and commentators for this appraisal and the public. This document should be read along with the evidence (see the committee papers).

The appraisal committee is interested in receiving comments on the following:

- Has all of the relevant evidence been taken into account?
- Are the summaries of clinical and cost effectiveness reasonable interpretations of the evidence?
- Are the recommendations sound and a suitable basis for guidance to the NHS?
- Are there any aspects of the recommendations that need particular consideration to ensure we avoid unlawful discrimination against any group of people on the grounds of race, gender, disability, religion or belief, sexual orientation, age, gender reassignment, pregnancy and maternity?

Note that this document is not NICE's final guidance on this technology. The recommendations in section 1 may change after consultation.

After consultation:

- The appraisal committee will meet again to consider the evidence, this appraisal consultation document and comments from the consultees.
- At that meeting, the committee will also consider comments made by people who are not consultees.
- After considering these comments, the committee will prepare the final appraisal determination (FAD).
- Subject to any appeal by consultees, the FAD may be used as the basis for NICE's guidance on using ibrutinib in the NHS in England.

For further details, see NICE's guide to the processes of technology appraisal.

The key dates for this appraisal are:

Closing date for comments: 2 November 2016

Second appraisal committee meeting: 15 November 2016

Details of membership of the appraisal committee are given in section 6.

1 Recommendations

1.1 Ibrutinib is not recommended within its marketing authorisation for treating Waldenstrom's macroglobulinaemia in adults who have had at least one prior therapy or as first-line treatment when chemo-immunotherapy is unsuitable.

1.2 This guidance is not intended to affect the position of patients whose treatment with ibrutinib was started within the NHS before this guidance was published. Treatment of those patients may continue without change to whatever funding arrangements were in place for them before this guidance was published until they and their NHS clinician consider it appropriate to stop.

2 The technology

Description of the technology	Ibrutinib (Imbruvica, Janssen) inhibits a protein called Bruton's tyrosine kinase, stopping B-cell (lymphocyte) proliferation and promoting cell death.
Marketing authorisation	Ibrutinib has a marketing authorisation in the UK for treating adults with Waldenstrom's macroglobulinaemia: • who have had at least one prior therapy, or • as first-line treatment in patients for whom chemo-immunotherapy is unsuitable.
Adverse reactions	The most common adverse reactions associated with ibrutinib include diarrhoea, musculoskeletal pain, upper respiratory tract infection, haemorrhage, bruising, rash, and nausea. For full details of adverse reactions and contraindications, see the summary of product characteristics.
Recommended dose and schedule	Ibrutinib is taken orally (3×140-mg capsules) once daily, until the disease progresses or there is unacceptable toxicity.
Price	Ibrutinib is available at the list price of £4,599.00 for 90×140-mg capsules (£51.10 per capsule) and £6,132.00 for 120×140-mg capsules (£51.10 per capsule; excluding VAT, British national formulary [BNF] June 2016). The company has agreed a patient access scheme with the Department of Health. If ibrutinib had been recommended, this scheme would provide a simple discount to the list price of ibrutinib with the discount applied at the point of purchase or invoice. The level of the discount is commercial in confidence. The Department of Health considered that this patient access scheme would not constitute an excessive administrative burden on the NHS.

3 Evidence

3.1 The appraisal committee (section 6) considered evidence submitted by Janssen and a review of this submission by the evidence review group (ERG). See the committee papers for full details of the evidence.

4 Committee discussion

4.1 The appraisal committee reviewed the data available on the clinical and cost effectiveness of ibrutinib, having considered evidence on the nature

of Waldenstrom's macroglobulinaemia and the value placed on the benefits of ibrutinib by people with the condition, those who represent them, and clinical experts. It also took into account the effective use of NHS resources.

Clinical effectiveness

Clinical management of Waldenstrom's macroglobulinaemia

4.2 The committee heard from the clinical experts that there is no established standard of care and no previously licensed treatments specifically for treating Waldenstrom's macroglobulinaemia. Ibrutinib is therefore the first technology with a specific licence for treating this rare condition. The committee understood that the most common options currently used for treating Waldenstrom's macroglobulinaemia are a range of single and combination therapies that were developed for treating other lymphoproliferative diseases. Common combination chemo-immunotherapies include alkylating agents (such as cyclophosphamide), nucleoside analogues (cladribine or fludarabine) in combination with rituximab. In people for whom chemo-immunotherapy is unsuitable, treatment options include rituximab or chlorambucil. The committee heard from the patient experts that treatment options have been further limited by the removal of bortezomib from the Cancer Drugs Fund and by the restriction of funding for stem cell transplantation, which the clinical expert stated is now only available on an individual funding basis. The choice of treatment depends on the severity of the disease and on patient and clinician choice, because there is no treatment regimen that has been shown to be the most effective. The committee concluded that there is no standard of care for treating Waldenstrom's macroglobulinaemia and that treatment tends to combine rituximab with a range of chemotherapy options.

Clinical need of patients with Waldenstrom's macroglobulinaemia

4.3 The committee noted that Waldenstrom's macroglobulinaemia is an incurable cancer of the lymphatic system, a form of non-Hodgkin's lymphoma. It understood that Waldenstrom's macroglobulinaemia meets the European Medicines Agency's prevalence criteria for rare disease, with around 330 people in England newly diagnosed with the condition each year. It also understood that Waldenstrom's macroglobulinaemia has a long disease trajectory, with median overall survival ranging from less than 4 years to 12 years, and that nearly half of people diagnosed with Waldenstrom's macroglobulinaemia will die from causes unrelated to the disease. The committee was aware that Waldenstrom's macroglobulinaemia is associated with major disease-related symptoms such as neutropenia leading to infections, weakness, extreme fatigue and breathlessness. It also read submissions from patients, and heard the patient experts' individual personal accounts, of the severe symptoms of Waldenstrom's macroglobulinaemia including severe bone, joint and eye pain. The effects of Waldenstrom's macroglobulinaemia may make normal life impossible and force people to stop working. Patients highlighted to the committee that current treatments can cause severe adverse reactions (including peripheral neuropathy and digestive tract dysfunction) that can be unbearable, and they described the particularly debilitating effects of stem cell transplantation. Even though patients may have a good response to first-line therapy, the constant threat of relapse can put a huge burden on patients and families. The committee also heard from the patient and clinical experts that patients are restricted in the number of lines of chemotherapy they can have, because of cumulative toxicity. For people presenting with the disease at an earlier age treatment options can rapidly become exhausted, leaving no effective therapies available to them. The committee concluded that Waldenstrom's macroglobulinaemia is a rare and debilitating disease that is associated with a high unmet clinical need for new effective therapies.

4.4 The committee heard from the clinical experts that ibrutinib is a novel treatment with a completely different mechanism of action to existing treatments. It understood that around 90% of people with Waldenstrom's macroglobulinaemia have the MYD88 L265P somatic gene mutation with specific biological and clinical features, and that ibrutinib targets cell death in this particular mutation. The clinical experts highlighted to the committee that ibrutinib would be particularly valuable for patients with disease that was refractory to first-line treatment or who relapsed following successful first-line therapy. The committee heard from the patient experts that it is very important to have a number of lines of therapy available to postpone the point at which all treatment options are exhausted, and the outcome is likely to be death from the disease. Both the patient and clinical experts emphasised that ibrutinib is highly effective compared with existing treatments, and very well tolerated. The convenience of an oral therapy is also greatly valued by patients because it allows them to take the treatment at home, with no need for hospital visits or infusions. A patient expert explained that they had been having ibrutinib for several years and found it to be a life-transforming drug that had dramatically improved their quality of life, allowing them to participate in general day-to-day activities and very quickly return to their normal life. The effect on their Waldenstrom's macroglobulinaemia symptoms was almost immediate on starting ibrutinib, and the symptoms quickly came back if treatment was stopped. The committee concluded that the availability of a targeted, effective and well tolerated oral therapy is highly valued by patients and addresses a significant unmet need among people with Waldenstrom's macroglobulinaemia.

Clinical trial evidence

4.5 The committee noted that the clinical evidence for ibrutinib came from one single-arm, open-label trial in the US (PCYC-1118E). This included 63 adults with Waldenstrom's macroglobulinaemia who had had at least one prior therapy. The committee understood that there are no studies of

ibrutinib for Waldenstrom's macroglobulinaemia in adults who have not received prior therapy and for whom chemo-immunotherapy is unsuitable (a population covered by the marketing authorisation and included in the NICE scope) and it considered that this is a limitation of the evidence base.

4.6 The committee noted the ERG's comments that PCYC-1118E was generally well reported and that, because it was an open-label single arm study without a control group, there were a number of potential biases. It also noted the ERG's comments that the outcome measures in the study were generally valid and reliable but that the response criteria for the primary outcome were modified from internationally accepted measures. However, the committee accepted comments from the clinical experts that the response criteria used in the trial reflected clinical practice. The committee also heard from the clinical experts that the trial was generalisable to a UK clinical setting and that it was usual for patients in clinical trials to be younger and fitter than those who might routinely present in clinical practice. The committee concluded that the study was of a reasonable quality and generalisable to UK clinical practice, but was limited by the lack of a comparison against a treatment used in the UK.

Clinical trial results

4.7 The committee noted that, at 24 month's follow up, the overall response rate in PCYC-1118E was 90.5% (95% confidence interval [CI] 80.4 to 96.4) and that median progression-free survival and overall survival had not been reached, indicating that more than 50% of patients were still alive. The rate of progression-free survival was 69.1% (95% CI 53.2 to 80.5) and the rate of overall survival was 95.2% (95% CI 86.0 to 98.4). The committee concluded that the results from PCYC-1118E suggest that ibrutinib is associated with high response rates and high progression-free survival and overall survival rates at 2 years. However, it also concluded that the longer-term effects on progression and survival are uncertain because no data is available.

Indirect comparison

4.8 The committee was aware that the company had presented an indirect comparison of ibrutinib against existing treatments for Waldenstrom's macroglobulinaemia. This used the results from a Europe-wide chart review study; a retrospective observational study that generated data on epidemiology, treatment and efficacy outcomes for treatment-naïve and relapsed Waldenstrom's macroglobulinaemia patients over 10 years. The committee noted that the company had created a matched cohort to the PCYC-1118E population by selecting a subset of the European chart-review cohort who had had similar lines of therapy to the patients in PCYC-1118E. Patients in PCYC-1118E who had 5 lines of therapy were excluded from the analysis because there were no matched patients in the European chart review. The committee understood that the analysis suggested a substantial reduction in the risk of disease progression with ibrutinib compared with existing Waldenstrom's macroglobulinaemia therapies. However it was also aware that the ERG had several concerns with the company's approach, including that the methods used to select patients in the matched cohort were unclear and that an alternative matched cohort produced a smaller reduction in the risk of progression for ibrutinib compared with existing treatments. The committee concluded, based on the testimonies from patients and clinical experts, that ibrutinib appears to be more clinically effective than existing treatments but there is considerable uncertainty about the size of the benefit.

Cost effectiveness

Company's economic model

4.9 The committee noted that the company had developed a Markov state transition model with 5 health states comparing ibrutinib with treatment of physician's choice to reflect the distribution of therapies used in UK clinical practice. The committee understood that the model included patients with relapsed or refractory Waldenstrom's macroglobulinaemia

who had one prior therapy, but not treatment-naïve patients for whom chemo-immunotherapy was considered unsuitable. It concluded that, because no evidence had been presented, it could not reliably assess the cost effectiveness of ibrutinib in this group of patients.

4.10 The committee heard from the ERG that the sequencing used in the company's model was inconsistent with the data and population in PCYC-1118E and that many patients in PCYC-1118E had more than one prior therapy. The committee was mindful of the limitations within the model structure but concluded that it was acceptable for decision making.

Modelling mortality

4.11 The committee considered the estimates of pre-progression mortality and noted the ERG's comments that the company had potentially used unsuitable data to inform the pre-progression mortality for the comparator group (physician's choice). It heard from the ERG that it was unclear whether the model used data on all deaths, or only those occurring before progression, to model pre-progression mortality in the comparator arm. The committee was not satisfied that this issue was resolved following the explanation given by the company in the meeting. The committee understood that if there was an inflated risk of death prior to progression in the comparator arm when compared with ibrutinib, this would lead to an overestimate of the relative effectiveness of ibrutinib and an underestimate of the incremental cost effectiveness ratio (ICER). It concluded that it could not determine how pre-progression mortality in the comparator arm was estimated, and that this uncertainty impacted on the cost-effectiveness estimates produced in the economic model.

4.12 The committee noted that the company had assumed general population mortality rates for ibrutinib, with the rationale that only 3 people died within the 24-month follow-up period of PCYC-1118E. The committee considered concerns expressed by the ERG that the observed death rate within PCYC-1118E was higher than that for the age- and sex-matched

general population and questioned the use of general population mortality rates. The committee recalled that median overall survival had not been reached in PCYC-1118E and it noted comments from the clinical experts that pre-progression mortality estimates were unclear, because almost half of patients with Waldenstrom's macroglobulinaemia die from unrelated causes. In the clinical expert's view, death in the progression-free state is most likely to be from an unrelated cause. The committee noted the ERG's concern that the assumption used by the company could bias the ICER in favour of ibrutinib. One of the ERG's exploratory analyses incorporated an assumption of equivalent pre-progression mortality for the ibrutinib and comparator groups, which resulted in a substantially higher ICER than presented by the company. The committee appreciated that there was considerable uncertainty around the estimation of overall survival but concluded that the issue of pre-progression mortality was a concern that merited further consideration.

Most plausible incremental cost-effectiveness ratio

4.13 The committee noted that the company's base-case ICER was £58,600 per quality-adjusted life year (QALY) gained and that the ICER was greater than £47,000 per QALY gained in all the sensitivity analyses. It also noted that the ERG's amended base-case ICER (re-estimating drug acquisition and administration costs, correcting errors on follow-up costs and using pre-progression mortality data from PCYC-1118E instead of general population mortality rates) was £61,100 per QALY gained. The committee was aware that the ERG's other exploratory analyses did not produce markedly different ICERs, with the exception of the scenario where equivalent pre-progression mortality was assumed in the ibrutinib and comparator groups, which increased the ICER substantially (see section 4.12). The committee recalled its earlier conclusions (see sections 4.11 and 4.12) that there are unresolved uncertainties in the modelling of pre-progression mortality. Taking into account these uncertainties the committee concluded that it could not identify the most

plausible ICER, but that all the company's ICERs were substantially above the range considered a cost-effective use of NHS resources (that is, between £20,000 and £30,000 per QALY gained).

Innovation

4.14 The committee discussed the innovative aspects of ibrutinib. It accepted that the treatment has several benefits for people including oral administration, manageable adverse reactions and low toxicity. The committee concluded that ibrutinib could be considered a step change in managing Waldenstrom's macroglobulinaemia. However, it did not consider that any additional health-related benefits, that had not been captured fully in the QALY calculation, would be enough to lower the ICER to within the range normally considered cost effective. Therefore, the committee was unable to recommend ibrutinib for treating Waldenstrom's macroglobulinaemia.

Cancer Drugs Fund

4.15 The committee considered whether it would be appropriate to recommend ibrutinib for inclusion in the Cancer Drugs Fund. If an appraisal committee concludes that the uncertainty in the clinical and cost-effectiveness data is too great to recommend the drug for routine use, it can consider a recommendation for use within the Cancer Drugs Fund if the ICERs presented have the plausible potential for satisfying the criteria for routine use, and if it is possible that the clinical uncertainty can be addressed through collection of outcome data from patients treated in the NHS, normally within 2 years. The committee noted that the ICER presented by the company in its base case was well above the level which could be accepted as a cost-effective use of NHS resources, and did not have the plausible potential for satisfying the criteria for routine use. The committee considered the potential for additional data collection and understood that there is an ongoing trial (iNNOVATE) in people with Waldenstrom's macroglobulinaemia that includes a small open-label sub-study of ibrutinib

monotherapy, with interim results expected in early 2017. It also understood that the company intends to collect additional efficacy and resource-use data as an add-on to an existing national registry of people with Waldenstrom's macroglobulinaemia. The committee welcomed the efforts being made to collect data on this rare condition and its treatment. However it heard from the clinical experts that although an additional 2 years of data collection would provide more robust data on response rates, and further genomic information, it was unlikely to be long enough to collect meaningful progression or survival data because of the long natural history of the disease. The committee therefore accepted that it was unlikely that further data collection would lead to a more favourable cost-effectiveness estimate for ibrutinib. It concluded that ibrutinib for treating Waldenstrom's macroglobulinaemia does not have the plausible potential to be cost effective in routine commissioning and cannot be recommended for inclusion in the Cancer Drugs Fund.

Potential equality issues

4.16 The committee noted the potential equality issue raised by the company that Waldenstrom's macroglobulinaemia is a condition with a greater prevalence in older people. It heard from the patient experts that existing treatments for Waldenstrom's macroglobulinaemia have high levels of toxicity and adverse reactions and that these are less likely to be tolerated by older people. The committee acknowledged that access to ibrutinib may be particularly beneficial for older people, but it was unable to recommend ibrutinib because it could not be considered a cost-effective use of NHS resources.

Pharmaceutical Price Regulation Scheme (PPRS) 2014

4.17 The committee was aware of NICE's position statement on the Pharmaceutical Price Regulation Scheme (PPRS) 2014, and in particular the PPRS payment mechanism. It accepted the conclusion 'that the 2014 PPRS payment mechanism should not, as a matter of course, be

regarded as a relevant consideration in its assessment of the cost effectiveness of branded medicines'. The committee heard nothing to suggest that there is any basis for taking a different view about the relevance of the PPRS to this appraisal. It therefore concluded that the PPRS payment mechanism was not relevant in considering the cost effectiveness of the technology in this appraisal.

Summary of appraisal committee's key conclusions

TAXXX	**Appraisal title:**	**Section**
Key conclusion		
Ibrutinib is not recommended within its marketing authorisation for treating Waldenstrom's macroglobulinaemia in adults who have had at least one prior therapy or as first-line treatment when chemo-immunotherapy is unsuitable. The committee concluded that the availability of a targeted, effective and well tolerated oral therapy is highly valued by patients and addresses a significant unmet need among people with Waldenstrom's macroglobulinaemia. However, no cost-effectiveness evidence had been presented in treatment naïve patients in whom chemo-immunotherapy was considered unsuitable. Also, in patients who had received at least one prior therapy there is significant uncertainty in the modelling of pre-progression mortality. The ICERs presented by the company, incorporating the confidential patient access scheme, were substantially above the range normally considered a cost effective use of NHS resources. The committee accepted that it is unlikely that further data collection would lead to a more favourable cost-effectiveness estimate for ibrutinib, and that ibrutinib for treating Waldenstrom's macroglobulinaemia does not have the plausible potential to be cost		1.1, 4.4, 4.9, 4.11, 4.12, 4.13, 4.15

effective in routine commissioning and therefore cannot be recommended for inclusion in the Cancer Drugs Fund.		
Current practice		
Clinical need of patients, including the availability of alternative treatments	The committee concluded that there is no standard of care for treating Waldenstrom's macroglobulinaemia and that targeted therapy is highly valued by patients and addresses a significant unmet need.	4.2, 4.4
The technology		
Proposed benefits of the technology How innovative is the technology in its potential to make a significant and substantial impact on health-related benefits?	The committee accepted that ibrutinib has several benefits for people including oral administration, manageable adverse reactions and low toxicity. It concluded that ibrutinib could be considered a step change in managing Waldenstrom's macroglobulinaemia.	4.14
What is the position of the treatment in the pathway of care for the condition?	The committee heard that ibrutinib would be particularly valuable for people with disease that is refractory to first line treatment or who relapsed following successful first line therapy.	4.4
Adverse reactions	The committee concluded that ibrutinib is a well-tolerated therapy.	4.4
Evidence for clinical effectiveness		
Availability, nature	The committee noted that there was one trial	4.5, 4.6,

and quality of evidence	of patients with Waldenstrom's macroglobulinaemia who had received at least one prior therapy (PCYC-1118E). It understood that the study was generally well reported but there were a number of potential biases because this was an open-label single arm study without a control group. The committee understood that there are no studies of ibrutinib for Waldenstrom's macroglobulinaemia in adults who have not received prior therapy and for whom chemo-immunotherapy is unsuitable (a population covered by the marketing authorisation and included in the NICE scope) and it considered that this is a limitation of the evidence base.	4.8
Relevance to general clinical practice in the NHS	The committee concluded that PCYC-1118E is of a reasonable quality and generalisable to UK clinical practice, but is limited by the lack of a comparison against a treatment used in the UK.	4.6

Uncertainties generated by the evidence	The committee concluded that the longer term effects of ibrutinib on progression and survival are uncertain because no data is available. The committee was aware that the company's indirect comparison suggested a substantial reduction in the risk of disease progression with ibrutinib compared with existing Waldenstrom's macroglobulinaemia therapies but that the ERG had a number of concerns with the company's approach. It concluded that based on the testimonies from patients and clinical experts, ibrutinib appeared to be more clinically effective than existing treatments but that there was considerable uncertainty about the size of the benefit.	4.7, 4.8
Are there any clinically relevant subgroups for which there is evidence of differential effectiveness?	Not clinically relevant subgroups were identified.	-
Estimate of the size of the clinical effectiveness including strength of supporting evidence	The committee concluded that the results from PCYC-1118E suggest that treatment with ibrutinib is associated with high response rates (90.5%) and high progression-free survival and overall survival rates (69.1% and 95.2%) at 2 years.	4.7
Evidence for cost effectiveness		

Availability and nature of evidence	The committee understood that the company's model included patients with relapsed or refractory Waldenstrom's macroglobulinaemia who had received one prior therapy, and not treatment naïve patients in whom chemo-immunotherapy was considered unsuitable. It concluded that, because no evidence had been presented, it could not reliably assess the cost effectiveness of ibrutinib in this group of patients. The committee was mindful of the limitations within the model structure but concluded that it was acceptable for decision making.	4.9, 4.10
Uncertainties around and plausibility of assumptions and inputs in the economic model	The committee concluded that it could not determine how pre-progression mortality in the comparator arm was estimated. The committee appreciated that there was considerable uncertainty around the estimation of overall survival but concluded that the issue of pre-progression mortality was a concern that merited further consideration.	4.11, 4.12

Incorporation of health-related quality-of-life benefits and utility values Have any potential significant and substantial health-related benefits been identified that were not included in the economic model, and how have they been considered?	The committee did not consider that any additional health-related benefits that had not been captured fully in the QALY calculation would be enough to lower the ICER to within the range normally considered cost effective.	4.14
Are there specific groups of people for whom the technology is particularly cost effective?	The committee made no specific recommendations for any subgroups.	-
What are the key drivers of cost effectiveness?	The committee concluded that uncertainty around how pre-progression mortality was estimated impacted on the cost-effectiveness estimates produced in the economic model.	4.11, 4.12

Most likely cost-effectiveness estimate (given as an ICER)	Taking into account these uncertainties the committee concluded that it could not identify the most plausible ICER, but that all the company's ICERs were substantially above the range considered a cost-effective use of NHS resources.	4.13
Additional factors taken into account		
Cancer Drugs Fund	The committee accepted that it was unlikely that further data collection would lead to a more favourable cost-effectiveness estimate for ibrutinib. It concluded that ibrutinib for treating Waldenstrom's macroglobulinaemia does not have the plausible potential to be cost effective in routine commissioning and cannot be recommended for inclusion in the Cancer Drugs Fund.	4.15
Patient access schemes (PPRS)	The company has agreed a patient access scheme with the Department of Health. The level of the discount is commercial in confidence.	4.17
End-of-life considerations	Not applicable.	
Equalities considerations and social value judgements	The committee acknowledged that access to ibrutinib may be particularly beneficial in older people, but it was unable to recommend ibrutinib because it could not be considered a cost-effective use of NHS resources.	4.16

5 Proposed date for review of guidance

5.1 NICE proposes that the guidance on this technology is considered for review by the guidance executive 3 years after publication of the guidance. NICE welcomes comment on this proposed date. The guidance executive will decide whether the technology should be reviewed based on information gathered by NICE, and in consultation with consultees and commentators.

Jane Adam
Chair, appraisal committee
October 2016

6 Appraisal committee members and NICE project team

Appraisal committee members

The 4 technology appraisal committees are standing advisory committees of NICE. This topic was considered by committee A.

Committee members are asked to declare any interests in the technology to be appraised. If it is considered there is a conflict of interest, the member is excluded from participating further in that appraisal.

The minutes of each appraisal committee meeting, which include the names of the members who attended and their declarations of interests, are posted on the NICE website.

Committee members are asked to declare any interests in the technology to be appraised. If it is considered there is a conflict of interest, the member is excluded from participating further in that appraisal.

NICE project team

Each technology appraisal is assigned to a team consisting of 1 or more health technology analysts (who act as technical leads for the appraisal), a technical adviser and a project manager.

Henry Edwards
Technical Lead

Zoe Charles
Technical Adviser

Liv Gualda
Project Manager

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