NICE National Institute for Health and Care Excellence

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Interventional procedures

Patient Organisation Submission

bipolar radiofrequency ablation for treating biliary obstruction IP1031/3 Endoscopic caused by cancer

Thank you for agreeing to give us your views on this procedure or operation and how it could be used in the NHS.

When we are developing interventional procedures guidance we are looking at how well a procedure or operation works and how safe it is for patients to have.

Patient and carer organisations can provide a unique perspective on conditions and their treatment that is not typically available from other sources. We are interested in hearing about:

- the experience of having the condition or caring for someone with the condition
- the experience of having the procedure or operation
- the outcomes of the procedure or operation that are important to patients or carers (which might differ from those measured in clinical studies, and including health-related quality of life)
- the impact of the procedure or operation on patients and carers. (What are the benefits to patients and their families, how does it affect quality of life, and what are the side effects after the procedure or operation.)
- the expectations about the risks and benefits of the procedure or operation.

To help you give your views, we have provided this template, and ask if you would like to attend as a patient expert at the bottom of the form. You do not have to answer every question — they are there as prompts. The text boxes will expand as you type, the length of your response should not normally exceed 10 pages.

Please note, all submissions will be published on the NICE website alongside all evidence the committee reviewed. Identifiable information will be redacted.

About you	
1. Your name	**Peter De Rosa**
2. Name of organisation	Pancreatic Cancer UK
3. Job title or position	Senior Policy and Health Improvement Manager
4. Brief description of the organisation (e.g. who funds the organisation? How many members does the organisation have?)	Pancreatic Cancer UK is a registered Charity No. 1112708. Our vision for the future is a world where everyone with pancreatic cancer survives to live long and well. Pancreatic Cancer UK relies entirely on voluntary funding from supporters and funders.

5. How did you gather the information about the experiences of patients and carers to help your submission?

   (For example, information may have been gathered from one to one discussions with colleagues, patients or carers, telephone helplines, focus groups, online forums, published or unpublished research or user-perspective literature.)

NICE guidance currently limits the use of Endoscopic bipolar radiofrequency ablation to research studies, therefore patient perspectives are not readily available among our beneficiaries, or via health professionals. As a result, we have gathered the information for this submission from a literature review of the available evidence and consultation with gastroenterologists and specialist pancreatic cancer nurses.

Living with the condition

6. What is it like to live with the condition or what do carers experience when caring for someone with the condition?

Pancreatic cancer is the deadliest and quickest killing cancers - it progresses rapidly, with more than half of people diagnosed with pancreatic cancer dying within three months

Pancreatic cancer is also tough to detect and often diagnosed late. Only 20% are diagnosed early (stage 1 and stage 2), while 80% of people are diagnosed late, at stage 3 and 4.

And even once pancreatic is spotted, people can go on to face potentially huge obstacles: from getting a diagnosed quickly, accessing treatment and having the support they need to manage symptoms. People face a postcode lottery of

care depending on where they live in the UK and all these factors impact people with pancreatic cancer's quality of life and chance of survival.

Currently, 70% of people with pancreatic cancer do not receive any form of active treatment. This is the lowest proportion of treatment access of all cancers. Treatment options for pancreatic cancer are limited and can have significant and toxic side effects.

In addition to this, people with pancreatic cancer commonly experience a range of complex and severe symptoms including pain, nausea, vomiting, bloating, reflux, altered bowel habits, fatigue, cachexia and psychological distress. Due to the close proximity of the pancreas to the bile duct, another common symptom of pancreatic cancer is a blocked bile duct. Biliary obstruction occurs in approximately 70–90 % of all cases of people with pancreatic cancer and can cause jaundice.

A blocked bile duct requires biliary drainage which can be achieved by inserting a biliary stent. Biliary stents can be inserted through different procedures. Through our work with health professionals and people with lived experience, we know there are a lack of standardised pathways for managing people with pancreatic cancer who have a blocked bile duct and significant variation in care across the UK.

Given the limited treatment options for pancreatic cancer, the lack of standardised pathways for treating a blocked bile duct and the poor prognosis of this disease, more, high quality treatment and care options, including more options for treating and managing blocked bile duct, are desperately needed for people with pancreatic cancer, to improve their quality of life and give them the best chance of survival.

Advantages of the procedure or operation

7. What do patients (or carers) think the advantages of the procedure or operation are? Why do you consider it be to be innovative?

NICE guidance currently limits the use of Endoscopic bipolar radiofrequency ablation to research studies, therefore patient perspectives are not readily available among our beneficiaries.

Biliary obstruction is known to occur in approximately 70–90 % of all cases of people with pancreatic cancer and the current standard of care for biliary obstruction is stenting to relieve the biliary obstruction, thus reducing related symptoms such as jaundice.

However, stents are associated with complications and frequently need to be replaced, requiring repeated hospital admissions and morbidity for patients. Therefore, any procedure that can improve duration of stents and reduce the rate of repeated admissions and interventions would be beneficial for people with pancreatic cancer and have the potential to improve their quality of life.

The 2018 NICE IP1031/3 guidance currently limits the use of Endoscopic bipolar radiofrequency ablation to research studies and randomised control trials. The guidance also recommended that research focus on patient selection, relief of biliary obstruction, quality of life and survival.

Since the last review of the guidance, there have been two systematic reviews of the use of endoscopic bipolar radiofrequency ablation which sought to assess the clinical effectiveness and outcomes for quality of life and survival. [1] [2]

These systematic reviews have found that found that:

- endoscopic bipolar radiofrequency ablation (RFA) appears to have a positive effect on survival, particularly for primary RFA,
- RFA is likely to be cost-effective,
- there was no increased risk of cholangitis or pancreatitis following RFA, but possibly an increased risk of cholecystitis compared to stent alone.

However, there remain limitations in the data available for this procedure:

- for both primary and secondary RFA, there were insufficient data to determine the effect of RFA on quality of life,
- for secondary RFA, the evidence was far more limited, with no prospective randomised studies,
- there was a lack of specific data for pancreatic cancer.

Therefore, while there is emerging evidence on the survival benefit, safety profile and cost effectiveness of primary RFA, there is not sufficient evidence to recommend changing the NICE IP1031/3 guidance from the current ‘only in research’ recommendation to ‘special arrangements’ or as ‘standard arrangements’.

We recommend that within the revised NICE IP1031/3 guidance, NICE set out the following recommendations for future research as set out *Beyer F et al 2023*:

- prospective RCTs of primary RFA should be conducted, with a specific focus on quality of life and accurate reporting of AEs in each group,
- patients with pancreatic cancers should be classified separately from patients with bile duct cancers, to determine the effects of RFA in each group,
- prospective RCTs of secondary RFA should be carried out to determine whether or not there is benefit to survival and quality of life, including accurate reporting of AEs.

8. Does this procedure have the potential to change the current pathway or patient outcomes? Could it lead, for example, to improved outcomes, fewer hospital visits or less invasive treatment?

The current standard of care for biliary obstruction is stenting to relieve the biliary obstruction, thus reducing related symptoms such as jaundice. However, stents are associated with complications and frequently need to be replaced, requiring repeated hospital admissions and morbidity for patients. Therefore, any procedure that can improve duration of stents and reduce the rate of repeated admissions and interventions would be beneficial for people with pancreatic cancer and have the potential to improve their quality of life.

However, as outlined above, there is limited data on outcomes such as reintervention rates, re-admission rates and quality of life. Therefore, more research is needed to identify the benefits of the procedure, on patient outcomes, re-admission rate and quality of life.

In addition, primary Endoscopic bipolar radiofrequency ablation (RFA) appears to have a positive effect on survival, although there was a limited number of studies available *(Beyer F et al 2023).* Given the poor prognosis and lack of treatment options for people with unresectable pancreatic cancer, any procedure or treatment than confers an increase in survival should be further explored and as such further RCTs should be undertaken to build the evidence base.

[1] https://discovery.ucl.ac.uk/id/eprint/10170851/1/3042312.pdf
[2] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8529920/

Disadvantages of the procedure or operation
9. What do patients (or carers) think the disadvantages of the procedure or operation are? As outlined in the systematic reviews above, there are limitations in the data relating to this procedure and more evidence is needed to fully understand its advantages and disadvantages. To better understand the advantages and disadvantages for RFA in pancreatic cancer, NICE should set out the following recommendations for future research: ▪ prospective RCTs of primary RFA should be conducted, with a specific focus on quality of life and accurate reporting of AEs in each group, ▪ patients with pancreatic cancers should be classified separately from patients with bile duct cancers, to determine the effects of RFA in each group, ▪ prospective RCTs of secondary RFA should be carried out to determine whether or not there is benefit to survival and quality of life, including accurate reporting of AEs.

Patient population

10. Are there any groups of patients who might benefit either more or less from the procedure or operation than others? If so, please describe them and explain why.

Pancreatic Cancer UK welcomes the availability of additional treatment options that could improve the quality of life for pancreatic cancer patients. Due to the poor prognosis of many pancreatic cancer patients and the limited treatment options available, it is vital that pancreatic cancer patients have access to a broad range of options for treating severe symptoms in order for them to improve their quality of life. It is also important that patients have rapid access to these interventions, wherever they live in the UK.

Biliary obstruction occurs in approximately 70–90 % of all cases of people with pancreatic cancer, therefore, bipolar radiofrequency ablation for treating biliary obstruction could benefit most of the patient cohort with pancreatic cancer.

80% of people are diagnosed at an advanced stage and unable to receive surgery. For these people, most will only receive palliative and best supportive care and survival is often only a few months. Current standard of care for people with unresectable pancreatic cancer and biliary obstruction is endoscopic metal stents. However, stents are associated with complications and frequently need to be replaced, requiring repeated hospital admissions and morbidity for patients. Therefore any new procedure or treatment that could reduce complications and admissions for people with unresectable pancreatic cancer could have a significant impact on the quality of life for this group of patients.

20% of people of with pancreatic cancer are diagnosed at an early stage and only 10% have surgery. For people with resectable pancreatic cancer and biliary obstruction, the current NICE NG85 guidance is to offer resectional surgery rather than preoperative biliary drainage. However, for resectable patients there is further need better understand the role for pre-operative biliary drainage compared to straight to surgery and how and when pre-operative biliary drainage should be given – particularly in the context of increasing use of neo-adjuvant chemotherapy. i

In conclusion, bipolar radiofrequency ablation has potential benefit for people with unresectable pancreatic cancer, while for resectable patients we need further evidence to understand the impact of biliary drainage compared to a straight to surgery and how and when pre-operative biliary drainage should be given.

Through our work with health professionals and people with lived experience, we know that biliary drainage practices and pathways vary across the UK. We need to establish and standardise management and investigations of people with jaundice and people with biliary obstruction.

Safety and efficacy
11. What are the uncertainties about how well this procedure works and how safe it is? As discussed above, there remain limitations in the data available for this procedure including: ▪ for both primary and secondary RFA, there were insufficient data to determine the effect of RFA on quality of life, ▪ for secondary RFA, the evidence is far more limited, with no prospective randomised studies, ▪ there was a lack of specific data for pancreatic cancer on the outcomes for RFA. To better understand the uncertainty for RFA in pancreatic cancer NICE should recommend further research and randomised controlled trials in Endoscopic bipolar radiofrequency ablation, to identify whether this procedure can safely be offered to a broader range of patients with pancreatic cancer.
Equality
10. Are there any potential equality issues that should be taken into account when considering this topic?
Other issues
11. Are there any other issues that you would like the Committee to consider? Through our work with health professionals and people with lived experience, we know that people with pancreatic cancer who experience biliary obstruction often face delays in accessing the care they need to treat and manage this symptom, which can also leads to delays to receiving potentially curative surgery. Through our work with health professionals and people with lived experience we have found that: ▪ there are a lack of standardised pathways for managing people with pancreatic cancer who have a blocked bile duct among both unresectable and resectable patients, ▪ there is a lack of agreement and evidence to understand what an optimal pathway looks like for the management of a blocked bile duct.

This variation in management and treatment of biliary obstruction across the UK also makes systematic reviews and meta-analysis on the impact of RFA in pancreatic cancer difficult to undertake as it is hard to compare outcomes between different centres.

To address these issues, we need to establish and standardise management and investigations of people with jaundice and people with biliary obstruction and generate more real-world evidence is needed to understand the impact of different biliary drainage pathways.

Key messages
12. In no more than 5 bullet points, please summarise the key messages of your submission. 1. Given the limited treatment options for pancreatic cancer, the lack of standardised pathways for treating a blocked bile duct and the poor prognosis of this disease, more, high quality treatment and care options, including more options for treating and managing blocked bile duct, are desperately needed for people with pancreatic cancer, to improve their quality of life and give them the best chance of survival. 2. Recent systematic reviews of endoscopic bipolar radiofrequency ablation suggest this intervention could improve survival of people with pancreatic cancer. It also found that this intervention is likely to be cost effective. 3. More evidence into clinical effectiveness and impact on quality of life of primary and secondary endoscopic bipolar radiofrequency ablation for people with pancreatic cancer is needed. 4. For this reason, NICE must recommend further research into randomised controlled trials in endoscopic bipolar radiofrequency ablation, to identify whether this procedure could offer benefits and additional options for patients with pancreatic cancer. 5. We need to establish and standardise management and investigations of people with jaundice and people with biliary obstruction and generate more real-world evidence to understand the impact of different biliary drainage pathways.
Committee meeting
13. Would you be willing to attend the interventional procedures committee meeting to provide the view from your organisation in person? Yes, someone representing people affected by pancreatic cancer or a patient should be present.

Thank you for your time.

Please return your completed submission to helen.crosbie@nice.org.uk and ip@nice.org.uk.