NICE National Institute for Health and Care Excellence

Professional Expert Questionnaire

Technology/Procedure name & indication: **IP839/2 Focal therapy using high-intensity focused ultrasound for localised prostate cancer**

Your information

Name:	Amr Emara
Job title:	Consultant Urologist
Organisation:	Hampshire Hospitals FT
Email address:	[redacted]
Professional organisation or society membership/affiliation:	Royal College of surgeons, British Association of Urological Surgeons
Nominated/ratified by (if applicable):	Click here to enter text.
Registration number (e.g. GMC, NMC, HCPC)	7008426

How NICE will use this information: the advice and views given in this questionnaire will form part of the information used by NICE and its advisory committees to develop guidance or a medtech innovation briefing on this procedure/technology. Information may be disclosed to third parties in accordance with the Freedom of Information Act 2000 and the Data Protection Act 2018, complying with data sharing guidance issued by the Information Commissioner's Office. Your advice and views represent your individual opinion and not that of your employer, professional society or a consensus view. Your name, job title, organisation and your responses, along with your declared interests will also be published online on the NICE website as part of the process of public consultation on the draft guidance, except in circumstances but not limited to, where comments are considered voluminous, or publication would be unlawful or inappropriate.

For more information about how we process your data please see our privacy notice.

☒ I give my consent for the information in this questionnaire to be used and may be published on the NICE website as outlined above. If consent is NOT given, please state reasons below:

Click here to enter text.

Please answer the following questions as fully as possible to provide further information about the procedure/technology and/or your experience.

Please note that questions 10 and 11 are applicable to the Medical Technologies Evaluation Programme (MTEP). We are requesting you to complete these sections as future guidance may also be produced under their work programme.

1	Please describe your level of experience with the procedure/technology, for example: Are you familiar with the procedure/technology?	I use HIFU since 2010 for both focal, and salvage prostate cancer treatment as per relative indication, I have been involved in most HIFU related clinical trials and contributed to many peer reviewed research/publications over my years of experience with this technology.
	Have you used it or are you currently using it? – Do you know how widely this procedure/technology is used in the NHS or what is the likely speed of uptake?	HIFU is currently adapted in limited numbers of NHS centres. There is growing interest in many other centres to use focal HIFU especially with higher confidence in diagnostic accuracy of prostate cancer.
	– Is this procedure/technology performed/used by clinicians in specialities other than your own?	In Urology there was trials to use the same technology for renal tumours but not yet widely adopted– in other speciality it can be used in the field of cosmetics
	– If your specialty is involved in patient selection or referral to another specialty for this procedure/technology, please indicate your experience with it.	My Centre offer Focal HIFU treatment – I am directly involved in patient diagnostics/decisions making and treatment delivery with ongoing contribution to national data registry and relative clinical trials.

2	– Please indicate your research experience relating to this procedure (please choose one or more if relevant):	I have done clinical research on this procedure involving patients as per trial inclusion cirteria. I have published this research.
3	How innovative is this procedure/technology, compared to the current standard of care? Is it a minor variation or a novel approach/concept/design? Which of the following best describes the procedure (please choose one):	Established practice and no longer new.
4	Does this procedure/technology have the potential to replace current standard care or would it be used as an addition to existing standard care?	Focal HIFU has the potential to be added to existing standard of care.

Current management

5	Please describe the current standard of care that is used in the NHS.	For localised prostate cancer standard of care is either Radical prostatectomy or radiotherapy + Hormonal treatment with different approaches

6	Are you aware of any other competing or alternative procedure/technology available to the NHS which have a similar function/mode of action to this? If so, how do these differ from the procedure/technology described in the briefing?	There are other ablative technologies applying targeted focal treatment concept including: Cryotherapy, electroporation, laser focal ablations and photodynamic therapy, These different technologies are utilising different forms of energy with complementary indications to apply for focal treatment, anatomical site has significant role in choosing different focal treatment modality/energy source.

Potential patient benefits and impact on the health system

7	What do you consider to be the potential benefits to patients from using this procedure/technology?	Focal treatment concept carries many potential benefits. In general organ preserving cancer control is becoming the treatment of choice in different medical specialties and the preferred option as long it does not affect oncological control or jeopardise patient safety, In prostate there are known significant morbidities with possible long term negative impact on quality of life directly related to standard radical options. By using Focal HIFU in properly diagnosed focal cancer within intermediate risk category there is proven benefit in avoiding know radical treatment related comorbidities and long-term side effects and adding the benefit of minimally invasive approach with minimising hospital stay and less readmissions.
8	Are there any groups of patients who would particularly benefit from using this procedure/technology?	1.primary prostate cancer diagnoses patients with unilateral clinically significant disease diagnosis of the intermediate risk group (ISUP 2 & 3) with accessible distance for HIFU range of energy efficacy. 2.Any risk group localised disease if patient not a candidate for other radical treatment options. 3.Salvage treatment for radio-recurrent prostate cancer.
9	Does this procedure/technology have the potential to change the current pathway or clinical outcomes to benefit the healthcare system? Could it lead, for example, to improved outcomes, fewer hospital visits or less invasive treatment?	Yes, there is a great potential to change current pathways with less in-patient hospital stay as this is usually a day-case procedure with less invasive treatment.
10 - MTEP	Considering the care pathway as a whole, including initial capital and possible future costs avoided, is the procedure/technology likely to cost more or less than current standard care, or about the same? (in terms of staff, equipment, care setting etc)	Although there is a capital investment included to use HIFU, but compared to current standard of care it is cheaper and also re-imbursement is improving and taking into consideration this is performed as day-case procedure and minimal risk of re-admissions compared to radical treatment the overall cost is very competitive to current practice, however more accurate business case and overall cost studies is required to verify this.
11 - MTEP	What do you consider to be the resource impact from adopting this procedure/technology (is it likely to cost more or less than standard care, or about	It is likely to cost less than the standard of care.

	same-in terms of staff, equipment, and care setting)?	
12	What clinical facilities (or changes to existing facilities) are needed to do this procedure/technology safely?	No major requirement or need to change clinical facilities needed, however staff training is required for using this technology and reasonable capital investment in the HIFU platform.
13	Is any specific training needed in order to use the procedure/technology with respect to efficacy or safety?	Relative training is required for both surgeons and supporting staff (short learning curve)

Safety and efficacy of the procedure/technology

14	What are the potential harms of the procedure/technology? Please list any adverse events and potential risks (even if uncommon) and, if possible, estimate their incidence: Adverse events reported in the literature (if possible, please cite literature) Anecdotal adverse events (known from experience) Theoretical adverse events	HIFU plateform has high safety standards to deliver the required energy to designated area and even if rectal mucosa is near the field of delivered energy, it will be automatically pause treatment to avoid inappropriate energy delivery. The known risks (side effects) for HIFU are ED/ ejaculatory dysfunction/ infection/scarring – strictures/ minimal risk of incontinence/ theoretical risk of urethra-rectal fistula which is recognised more in salvage scenario post radiotherapy rather than primary focal treatment. All these risks are significantly less compared with standard approaches.
15	Please list the key efficacy outcomes for this procedure/technology?	Cancer control with minimal side effects profile compared to standard approaches with short post-operative recover and short hospital stay.
16	Please list any uncertainties or concerns about the efficacy and safety of this procedure/?	No major concerns or safety issues and recent large volume study with Intermediate outcomes published confirming no safety concerns
17	Is there controversy, or important uncertainty, about any aspect of the procedure/technology?	Within the good patient choice and within appropriate indicated use of HIFU platform, I can see no controversy or uncertainty.

18	If it is safe and efficacious, in your opinion, will this procedure be carried out in (please choose one):	Cannot predict at present.

Abstracts and ongoing studies

19	Please list any abstracts or conference proceedings that you are aware of that have been recently presented / published on this procedure/technology (this can include your own work). Please note that NICE will do a comprehensive literature search; we are only asking you for any very recent abstracts or conference proceedings which might not be found using standard literature searches. You do not need to supply a comprehensive reference list but it will help us if you list any that you think are particularly important.	All relative publications are available on standard scientific research platforms.
20	Are there any major trials or registries of this procedure/technology currently in progress? If so, please list.	HEAT registry ATLANTA trial

Other considerations

21	Approximately how many people each year would be eligible for an intervention with this procedure/technology, (give either as an estimated number, or a proportion of the target population)?	For **intermediate risk unilateral localised prostate cancer group** 70-75% of this selected group would be eligible for this treatment (mainly excluding large prostates with out of focus tumours)

22	Are there any issues with the usability or practical aspects of the procedure/technology?	Within the previously mentioned indications and as long patient can have trans-rectal approach (for example - patient with previous recto-anal resection cannot have this procedure)
23	Are you aware of any issues which would prevent (or have prevented) this procedure/technology being adopted in your organisation or across the wider NHS?	We are already using HIFU in our organisation for over 10 years with no issues
24	Is there any research that you feel would be needed to address uncertainties in the evidence base?	Randomised controlled studies will be beneficial – PART trial had the feasibility studies conducted and awaiting main study or similar.
25	Please suggest potential audit criteria for this procedure/technology. If known, please describe: − Beneficial outcome measures. These should include short- and long-term clinical outcomes, quality-of-life measures and patient-related outcomes. Please suggest the most appropriate method of measurement for each and the timescales over which these should be measured. Adverse outcome measures. These should include early and late complications. Please state the post procedure timescales over which these should be measured:	Beneficial outcome measures: Oncological control (DFS/ OS ..etc) QOL measure (urinary control/erectile function) Post-operative recovery period Adverse outcome measures: Early up to 4 weeks reporting all side effects/ post-operative complications. Late complications: Incontinence / ED / Ejaculatory function/Rectal complications
26	Is there any other data (published or otherwise) that you would like to share with the committee?	NA

Further comments

26	Please add any further comments on your particular experiences or knowledge of the procedure/technology,	

NICE National Institute for Health and Care Excellence

Declarations of interests

Please state any potential conflicts of interest relevant to the procedure/technology (or competitor technologies) on which you are providing advice, or any involvements in disputes or complaints, in the previous **12 months** or likely to exist in the future. Please use the NICE policy on declaring and managing interests as a guide when declaring any interests. Further advice can be obtained from the NICE team.

Type of interest *	Description of interest	Relevant dates	
		Interest arose	Interest ceased
Choose an item.			
Choose an item.			
Choose an item.			

☒ I confirm that the information provided above is complete and correct. I acknowledge that any changes in these declarations during the course of my work with NICE, must be notified to NICE as soon as practicable and no later than 28 days after the interest arises. I am aware that if I do not make full, accurate and timely declarations then my advice may be excluded from being considered by the NICE committee.

Please note, all declarations of interest will be made publicly available on the NICE website.

Print name:	**Amr Emara**
Dated:	**19/06/2022**

NICE National Institute for Health and Care Excellence

Professional Expert Questionnaire

Technology/Procedure name & indication: **IP839/2 Focal therapy using high-intensity focused ultrasound for localised prostate cancerIP839/2 Focal therapy using high-intensity focused ultrasound for localised prostate cancer**

Your information

Name:	Benjamin Lamb
Job title:	Consultant Urological and Robotic Surgeon
Organisation:	Cambridge University Hospitals NHS Foundation Trust
Email address:	[redacted]
Professional organisation or society membership/affiliation:	British Association of Urological Surgeons
Nominated/ratified by (if applicable):	British Association of Urological Surgeons
Registration number (e.g. GMC, NMC, HCPC)	6130045

How NICE will use this information: the advice and views given in this questionnaire will form part of the information used by NICE and its advisory committees to develop guidance or a medtech innovation briefing on this procedure/technology. Information may be disclosed to third parties in accordance with the Freedom of Information Act 2000 and the Data Protection Act 2018, complying with data sharing guidance issued by the Information Commissioner's Office. Your advice and views represent your individual opinion and not that of your employer, professional society or a consensus view. Your name, job title, organisation and your responses, along with your declared interests will also be published online on the NICE website as part of the process of public consultation on the draft guidance, except in circumstances but not limited to, where comments are considered voluminous, or publication would be unlawful or inappropriate.

For more information about how we process your data please see our privacy notice.

☒ I give my consent for the information in this questionnaire to be used and may be published on the NICE website as outlined above. If consent is NOT given, please state reasons below:

Click here to enter text.

Please answer the following questions as fully as possible to provide further information about the procedure/technology and/or your experience.

Please note that questions 10 and 11 are applicable to the Medical Technologies Evaluation Programme (MTEP). We are requesting you to complete these sections as future guidance may also be produced under their work programme.

1	Please describe your level of experience with the procedure/technology, for example: Are you familiar with the procedure/technology? Have you used it or are you currently using it? − Do you know how widely this procedure/technology is used in the NHS or what is the likely speed of uptake? − Is this procedure/technology performed/used by clinicians in specialities other than your own? − If your specialty is involved in patient selection or referral to another specialty for this	I am familiar with the procedure/technology. I have not previously undertaken the procedure. I have counselled patients about the procedure as a treatment for prostate cancer, and referred patients to colleagues who undertake the procedure for the procedure. I have previously trained in a department where the procedure is undertaken and have participated in governance meetings where the outcomes of the procedure have been presented. I have read scientific articles and guidelines pertaining to the procedure. I know that currently, NICE classifies this procedure as an 'experimental' treatment for prostate cancer. The procedure is available to patients in several locations in the NHS and the private sector across the UK. I do not have specific knowledge of whether this procedure is performed by clinicians in other specialities.

	procedure/technology, please indicate your experience with it.	
2	– Please indicate your research experience relating to this procedure (please choose one or more if relevant):	I have had no involvement in research on this procedure. Other (please comment)
3	How innovative is this procedure/technology, compared to the current standard of care? Is it a minor variation or a novel approach/concept/design? Which of the following best describes the procedure (please choose one):	This procedure has been in clinical use in the NHS for over 10 years. It has become an accepted treatment method for men with prostate cancer in many parts of the country, and indeed in other countries around the world. Some parts of the country, however, do not offer focal therapy, including HIFU. My perception is that there is variation among urologists in the acceptance of this procedure as a valid treatment for men with prostate cancer. There is, therefore inequity in the access to this procedure across the country. Established practice and no longer new.
4	Does this procedure/technology have the potential to replace current standard care or would it be used as an addition to existing standard care?	I think that this procedure has the potential to be offered as an addition to currently available treatments. It would not replace other treatments (i.e. Active surveillance or radical treatments), but would allow men a greater choice. The current procedure is distinct form other available treatments and has the potential to offer some men a treatment that has fewer side effects than radical treatment, but better oncological control than active surveillance.

Current management

5	Please describe the current standard of care that is used in the NHS.	Men with non-metastatic prostate cancer are risk-stratified according to the Cambridge Prognostic Score as per NICE guidance. All men with non-metastatic prostate cancer are

		eligible for radical treatment. Men with CPG 1 are recommended active surveillance. Men with CPG2 are recommended either radical treatment or active surveillance. Men with CPG 3-5 are recommended radical treatment. Radical treatment consists of radical prostatectomy, radical external beam radiotherapy (with or without androgen deprivation), or brachytherapy.
6	Are you aware of any other competing or alternative procedure/technology available to the NHS which have a similar function/mode of action to this? If so, how do these differ from the procedure/technology described in the briefing?	Other methods of delivering focal therapy exist. These include, but might not be limited to cryotherapy, nano-knife (electroporation), or focal brachytherapy. Cryotherapy involves delivery of freezing using needles to the focus of treatment. Nano-knife uses an electric current passed between electrodes inserted at the focus of treatment. Brachytherapy uses a radiation source inserted at the focus of treatment.

Potential patient benefits and impact on the health system

7	What do you consider to be the potential benefits to patients from using this procedure/technology?	There is some evidence that HIFU provides equivalent oncological outcomes to radical therapy, but with potentially fewer side effects, specifically reduced risk of post-treatment urinary incontinence and sexual dysfunction. Most men place importance on preservation of urinary control, and many men on preservation of sexual function. Some men would place equal or greater importance on these side effects as they do on cancer control. Accordingly, some men are deterred from having radical treatment for prostate cancer because of concern about the side effects, and therefore suffer harm from the cancer. Other men regret their choice of radical treatment because of side effects and therefore suffer psychological harm as well as side effects. The present procedure, HIFU, therefore has the potential to offer some men cancer control with reduced side effects compared to radial treatment. This might improve the cancer outcomes of some men, and the psychological wellbeing of others.
8	Are there any groups of patients who would particularly benefit from using this procedure/technology?	Men who place significant importance on urinary continence and sexual function, and who do not face high cancer risk whereby radical treatment would be over-treatment of the cancer. That is most likely to be men with CPG2-3 prostate cancer.
9	Does this procedure/technology have the potential to change the current pathway or clinical outcomes to benefit the healthcare system? Could it lead, for example, to improved outcomes, fewer hospital visits or less invasive treatment?	This procedure has the potential to offer less invasive treatment with equivalent cancer outcomes. This may reduce the cost to the health system from management of urinary incontinence and sexual dysfunction.
10 - MTEP	Considering the care pathway as a whole, including initial capital and possible future costs avoided, is the procedure/technology likely to cost more or less than current standard care, or about the same? (in terms of staff, equipment, care setting etc)	I do not know details of the cost of the procedure in question, but current radical treatments are expensive to deliver, and the cost of managing side effects is substantial. If the procedure is use for some men with prostate cancer instead of radical treatment, the overall cost of the pathway could be less. If used for some men instead of active surveillance, it could make the pathway more expensive.

11 - MTEP	What do you consider to be the resource impact from adopting this procedure/technology (is it likely to cost more or less than standard care, or about same-in terms of staff, equipment, and care setting)?	The procedure in question is likely to cost more than Active surveillance. The procedure is likely to cost less than radical prostatectomy or radical radiotherapy. I do not know if it will cost less than brachytherapy.
12	What clinical facilities (or changes to existing facilities) are needed to do this procedure/technology safely?	The treatment is performed under general anaesthesia in an operating theatre. Therefore, Existing facilities with the addition of a HIFU machine will be needed.
13	Is any specific training needed in order to use the procedure/technology with respect to efficacy or safety?	Yes- specific training in the safe delivery of HIFU is required. I do not know the details of training required.

Safety and efficacy of the procedure/technology

14	What are the potential harms of the procedure/technology? Please list any adverse events and potential risks (even if uncommon) and, if possible, estimate their incidence: Adverse events reported in the literature (if possible, please cite literature) Anecdotal adverse events (known from experience) Theoretical adverse events	Guillaumier et al. A Multicentre Study of 5-year Outcomes Following Focal Therapy in Treating Clinically Significant Nonmetastatic Prostate Cancer. European Urology. This Study provides contemporary, multicentre outcomes and complications. Tables from the paper pasted below.

Table 4 – Clavien-Dindo classification of post-HIFU complications

Clavien-Dindo grade	Complication	Incidence, *n*/*N* (%)
I	Urinary tract infection	53/625 (8.5)
I	Epididymo-orchitis	12/625 (1.9)
IIIa	Rectourethral fistula	1/625 (0.2)
IIIb	Endoscopic procedures for LUTS	60/625 (9.6)
IIIb	Rectourethral fistula	1/625 (0.2)

HIFU = high-intensity focused ultrasound; LUTS = lower urinary tract symptoms.

Table 5 – Patient-reported outcome measure for urinary incontinence according to the EPIC urinary domain among men undergoing focal HIFU for nonmetastatic prostate cancer

Patient-reported urinary incontinence	Patients, *n* (%)	
	1–2 yr FU	2–3 yr FU
0 pads	304/313 (97)	241/247 (98)
0–1 pads	313/313 (100)	247/247 (100)
No leakage at all	208/250 (83)	156/195 (80)

EPIC = Expanded Prostate Cancer Index Composite; HIFU = high-intensity focused ultrasound; FU = follow-up.

15	Please list the key efficacy outcomes for this procedure/technology?	

Table 3 – Kaplan-Meier estimates of freedom from repeat HIFU, overall survival, metastasis-free survival, and overall failure-free survival following focal HIFU therapy among men treated for nonmetastatic prostate cancer

	Kaplan-Meier estimate, % (95% confidence interval)		
	1 yr	3 yr	5 yr
Overall survival	100 (99–100)	99 (98–100)	99 (97–100)
By D'Amico risk class			
Low	99 (96–100)	99 (96–100)	99 (96–100)
Intermediate	100 (99–100)	99 (98–100)	99 (97–100)
High	99.5 (98–100)	99 (97–100)	98 (96–100)
Metastasis-free survival	99.7 (99–100)	99 (98–100)	98 (97–99)
By D'Amico risk class			
Low	100 (NA)	99 (96–100)	96 (93–100)
Intermediate	99.7 (99–100)	99 (97–100)	99 (97–100)
High	99.5 (98–100)	98 (96–100)	97 (95–100)
Failure-free survival	99 (98–100)	92 (90–95)	88 (85–91)
By D'Amico risk class			
Low	99 (96–100)	96 (91–100)	96 (91–100)
Intermediate	99 (97–100)	93 (90–96)	88 (84–93)
High	98 (97–100)	89 (85–94)	84 (78–90)
By Gleason score			
≤6	99 (98–100)	95 (92–99)	92 (87–97)
7	99 (98–100)	92 (89–95)	87 (83–91)
≥8	89 (71–100)	89 (79–100)	59 (26–100)
By pre-HIFU PSA group			
<10 ng/ml	99.5 (99–100)	95 (93–97)	92 (89–95)
≥10 ng/ml	97 (94–100)	85 (78–91)	77 (69–84)
Free from repeat HIFU	98 (96–99)	84 (81–87)	75 (71–80)
By D'Amico risk class			
Low	97 (94–100)	82 (74–92)	78 (69–89)
Intermediate	97 (95–99)	88 (85–92)	79 (74–85)
High	98 (97–100)	76 (69–83)	68 (61–76)

HIFU = high-intensity focused ultrasound; NA = not applicable; PSA = prostate-specific antigen.

16	Please list any uncertainties or concerns about the efficacy and safety of this procedure/?	Lack of randomised or long term outcome data. Safety outcomes at least as good as radical prostatectomy or radiotherapy, established treatments. Efficacy long term uncertain, but same could be said for radical treatment if the risk of overtreatment is accounted for.
17	Is there controversy, or important uncertainty, about any aspect of the procedure/technology?	There is controversy in 2 main areas. Firstly, HIFU may be over treatment of men with low risk cancer, who might otherwise be managed with active surveillance until and unless their disease progresses and radical treatment is indicated. Secondly, HIFU may be undertreatment for men with higher risk disease, who should otherwise have radical treatment. In my view, men should be able to make their own choices with guidance from clinicians, using open and honest appraisal of the available evidence, their experience and clinical judgement. Men take into account treatment toxicity as well as oncological outcomes. Current recommended management (active surveillance or radical treatment) leaves a gap between low toxicity, low oncological control (AS) and high toxicity, high oncological control (radical treatment). HIFU might come somewhere in the middle and be an acceptable option for some men.
18	If it is safe and efficacious, in your opinion, will this procedure be carried out in (please choose one):	A minority of hospitals, but at least 10 in the UK. Within current cancer networks, it might be reasonable to centralise expertise and equipment to a single centre for each cancer network.

Abstracts and ongoing studies

19	Please list any abstracts or conference proceedings that you are aware of that have been recently presented / published on this	None known. Atlanta trial for metastatic prostate cancer ongoing. Likely not applicable if this work focuses on management of localised prostate cancer.

	procedure/technology (this can include your own work). Please note that NICE will do a comprehensive literature search; we are only asking you for any very recent abstracts or conference proceedings which might not be found using standard literature searches. You do not need to supply a comprehensive reference list but it will help us if you list any that you think are particularly important.	
20	Are there any major trials or registries of this procedure/technology currently in progress? If so, please list.	Current centres offering hifu are required to keep a registry, so these should be available if not already published.

Other considerations

21	Approximately how many people each year would be eligible for an intervention with this procedure/technology, (give either as an estimated number, or a proportion of the target population)?	40,000 men per year diagnosed with prostate cancer 30,000 (75% approx.) diagnosed with localised disease Approx..9000 radical prostatectomies per year, with likely higher numbers having radiotherapy. I would estimate about 1/3 having active monitoring or watchful monitoring. Potentially 5000-10,000 eligible for HIFU???
22	Are there any issues with the usability or practical aspects of the procedure/technology?	None that I am aware of
23	Are you aware of any issues which would prevent (or have prevented) this procedure/technology being adopted in your organisation or across the wider NHS?	Current culture and paradigms of management of prostate cancer. Vested interests i.e. protection of clinicians' own sphere of practice.

24	Is there any research that you feel would be needed to address uncertainties in the evidence base?	Prospective randomised trial of active surveillance, radical treatment and focal therapy.
25	Please suggest potential audit criteria for this procedure/technology. If known, please describe: − Beneficial outcome measures. These should include short- and long-term clinical outcomes, quality-of-life measures and patient-related outcomes. Please suggest the most appropriate method of measurement for each and the timescales over which these should be measured. − Adverse outcome measures. These should include early and late complications. Please state the post procedure timescales over which these should be measured:	Beneficial outcome measures: Clinical outcomes: overall survival, cancer specific survival, freedom from metastatic disease, freedom form re-treatment or second alternative treatment, biochemical control. Quality of life: EPIC26 questionnaire pre-treatment, post treatment at regular intervals. 6 weeks, 3, 6, 12, 24, 60 months. Independent collection of data to ensure validity. Also readmission within 90 days, second procedure for urinary problems as per NPCA. In fact, should be included in NPCA already. Adverse outcome measures: readmission within 90 days, second procedure for urinary problems as per NPCA. In fact, should be included in NPCA already.these are independent HES data good proxies for adverse events. Also collection of all complications, in particular those in the paper referenced above.
26	Is there any other data (published or otherwise) that you would like to share with the committee?	None

Further comments

26	Please add any further comments on your particular experiences or knowledge of the procedure/technology,	My direct experience and knowledge is limited, but I have interest and experience of prostate cancer diagnosis, counselling patients and management with active surveillance and radical surgery. I have no desire to obstruct the introduction of safe and effective alternative treatments, but would welcome their safe introduction, if evidence and consensus recommends it.

NICE National Institute for Health and Care Excellence

Declarations of interests

Please state any potential conflicts of interest relevant to the procedure/technology (or competitor technologies) on which you are providing advice, or any involvements in disputes or complaints, in the previous **12 months** or likely to exist in the future. Please use the NICE policy on declaring and managing interests as a guide when declaring any interests. Further advice can be obtained from the NICE team.

Type of interest *	Description of interest	Relevant dates	
		Interest arose	Interest ceased
Choose an item.	I have no conflicts of interest.		
Choose an item.			
Choose an item.			

☒ I confirm that the information provided above is complete and correct. I acknowledge that any changes in these declarations during the course of my work with NICE, must be notified to NICE as soon as practicable and no later than 28 days after the interest arises. I am aware that if I do not make full, accurate and timely declarations then my advice may be excluded from being considered by the NICE committee.

Please note, all declarations of interest will be made publicly available on the NICE website.

Print name:	**Benjamin Lamb**
Dated:	**7th May 2022**

NICE National Institute for Health and Care Excellence

Professional Expert Questionnaire

Technology/Procedure name & indication: IP839/2 Focal therapy using high-intensity focused ultrasound for localised prostate cancer

Your information

Name:	Clement Orczyk
Job title:	Associate Professor of Urology, Honorary Consultant Urological SUrgeon
Organisation:	University College London/ University College London Hospitals NHS Trust
Email address:	[redacted]
Professional organisation or society membership/affiliation:	Royal College of Surgeons
Nominated/ratified by (if applicable):	Sonablte Corp
Registration number (e.g. GMC, NMC, HCPC)	7498152

How NICE will use this information: the advice and views given in this questionnaire will form part of the information used by NICE and its advisory committees to develop guidance or a medtech innovation briefing on this procedure/technology. Information may be disclosed to third parties in accordance with the Freedom of Information Act 2000 and the Data Protection Act 2018, complying with data sharing guidance issued by the Information Commissioner's Office. Your advice and views represent your individual opinion and not that of your employer, professional society or a consensus view. Your name, job title, organisation and your responses, along with your declared interests will also be published online on the NICE website as part of the process of public consultation on the draft guidance, except in circumstances but not limited to, where comments are considered voluminous, or publication would be unlawful or inappropriate.

For more information about how we process your data please see our privacy notice.

☒ I give my consent for the information in this questionnaire to be used and may be published on the NICE website as outlined above. If consent is NOT given, please state reasons below:

Click here to enter text.

Please answer the following questions as fully as possible to provide further information about the procedure/technology and/or your experience.

Please note that questions 10 and 11 are applicable to the Medical Technologies Evaluation Programme (MTEP). We are requesting you to complete these sections as future guidance may also be produced under their work programme.

1	Please describe your level of experience with the procedure/technology, for example: Are you familiar with the procedure/technology?	I am familiar with the technology. I am considered as expert in the field. I am performing multiples procedures per months between 5 to 9 a months since 2017. I am the clinical lead at University College London Hospitals NHS Trust for the prostate cancer focal therapy team, largest centre in UK for number of procedures.
	Have you used it or are you currently using it? – Do you know how widely this procedure/technology is used in the NHS or what is the likely speed of uptake? – Is this procedure/technology performed/used by clinicians in specialities other than your own? – If your specialty is involved in patient selection or referral to another specialty for this	The procedure is not widely available in the NHS, but certainly in expert centres. Speed of uptake can be quick depending of regulatory approvals. This is even more true since the adoption of MRI as a first line diagnostic test in NICE guidelines in 2019. The device is solely used in my speciality. Urology- as my speciality leading the diagnostic pathway of prostate cancer- is involved first hand in selection of patients for the use of the procedure. I am performing selection of patient in clinic but also at MDT, SMDT level or dedicated meeting on a weekly basis (4 hours a week)

	procedure/technology, please indicate your experience with it.	
2	– Please indicate your research experience relating to this procedure (please choose one or more if relevant):	I have done bibliographic research on this procedure. I have done clinical research on this procedure involving patients or healthy volunteers. I have published this research. . Other (please comment)
3	How innovative is this procedure/technology, compared to the current standard of care? Is it a minor variation or a novel approach/concept/design? Which of the following best describes the procedure (please choose one):	This is a complete different approach and concept to current standard of care. The concept of treating part of the prostate- the one encompassing the cancer- to drastically lower the side effect profile of treatment of prostate cancer is very different to whole gland treatment (either surgery or radiotherapy). Established practice and no longer new.
4	Does this procedure/technology have the potential to replace current standard care or would it be used as an addition to existing standard care?	This procedure has the potential to reimplance the standard of care in a significant proportion of cases, while not every patient would be eligible for this apparoach. This is a valuable addition to current standard of care.

Current management

5	Please describe the current standard of care that is used in the NHS.	Current standard of care for treatment of significant localised prostate cancer includes surgery (robotic assisted radical prostatectomy) and radiotherapy. This procedure does not intend to reimplace active surveillance which is a monitoring option for less aggressive disease.
6	Are you aware of any other competing or alternative procedure/technology available to the NHS which have a similar function/mode of action to this? If so, how do these differ from the procedure/technology described in the briefing?	Cryotherapy and Irreversible electroprotation are currently available in the NHS to perfrom focal therapy – as a targeting the cancer concept. However those 2 technologies are used for cancer in different location in the prostate (anterior part of the gland). HIFU is used for the posterior aspects of the gland. Those are not directly competing with HIFU.

Potential patient benefits and impact on the health system

7	What do you consider to be the potential benefits to patients from using this procedure/technology?	Significanlty less side effects from treatment on erections and urinary incontinence Quicker procedure -day case surgery- Quicker recovery Less disruptive in patient life Decrease need of further medical interventions to treat sside effects.
8	Are there any groups of patients who would particularly benefit from using this procedure/technology?	Male with localised prostate cancer identified at MRI
9	Does this procedure/technology have the potential to change the current pathway or clinical outcomes to benefit the healthcare system? Could it lead, for example, to improved outcomes, fewer hospital visits or less invasive treatment?	Yes will change the pathway. This is a far less invasive procedure. This is a single visit procedure. Functional outcomes are greatly improved (eg less tha 1% of incontinence vs 40% post surgery) Healthcare system will - use less operating time - less requirements for overnight stay, freeing beds in hospitals - les visit for treatment of complications (erectile dysfunction, urinary incontinence
10 - MTEP	Considering the care pathway as a whole, including initial capital and possible future costs avoided, is the procedure/technology likely to cost more or less than current standard care, or about the same? (in terms of staff, equipment, care setting etc)	Potentially to cost less than robotic prostatectomy (capital cost for a robot + disposable) + vs radiotherapy suite. Less staff needed to deliver the procedure (1 operator) No need for artificial urinary sphincter (4-5% in post surgery, £10K per unit) However follow up require use of MRI every year/ 2 years (£350 per MRI)
11 - MTEP	What do you consider to be the resource impact from adopting this procedure/technology (is it likely to cost more or less than standard care, or about	To cost less. See above

	same-in terms of staff, equipment, and care setting)?	
12	What clinical facilities (or changes to existing facilities) are needed to do this procedure/technology safely?	none
13	Is any specific training needed in order to use the procedure/technology with respect to efficacy or safety?	Yes, specific trainings are needed for patient selection, delivery of the procedure and follow up.

Safety and efficacy of the procedure/technology

14	What are the potential harms of the procedure/technology? Please list any adverse events and potential risks (even if uncommon) and, if possible, estimate their incidence: Adverse events reported in the literature (if possible, please cite literature) Anecdotal adverse events (known from experience) Theoretical adverse events	Infection (6-7%) Sepsis (less 1%) Bleeding in urine Urinary Incontinence (less tha 1 %) Erectile dysfunction (15%) Reduced volume of semen or dry orgasm Prostate rectal fistula (1/500) Urethral stricture (inf 5% requiring endoscopic procedure) Peri anal tear (anecdotal) Quoted in A Multicentre Study of 5-year Outcomes Following Focal Therapy in Treating Clinically Significant Nonmetastatic Prostate Cancer by Guillaumier et al., European Urology
15	Please list the key efficacy outcomes for this procedure/technology?	Need for second line of treatment: 12% at 5 years

		Need for repeat procedure within 5 years (1/5)
16	Please list any uncertainties or concerns about the efficacy and safety of this procedure/?	- Long term data (10 years) for recurrence of the disease, contralateral recurrence are uncertain currently.
17	Is there controversy, or important uncertainty, about any aspect of the procedure/technology?	- Long term natural history of untreated tissue on contralateral side (10 years)
18	If it is safe and efficacious, in your opinion, will this procedure be carried out in (please choose one):	A minority of hospitals, but at least 10 in the UK. Subjected to centralisation of cancer care Cannot predict at present.

Abstracts and ongoing studies

19	Please list any abstracts or conference proceedings that you are aware of that have been recently presented / published on this procedure/technology (this can include your own work). Please note that NICE will do a comprehensive literature search; we are only asking you for any very recent abstracts or conference proceedings which might not be found using standard literature searches. You do not need to supply a comprehensive reference list but it will help us if you list any that you think are particularly important.	All recent relevant are indexed.
20	Are there any major trials or registries of this procedure/technology currently in progress? If so, please list.	The INDEX trial UCL led (multicentre phase 2 b) have completed recruitment and awaiting mature data at 10 years.

		The UK National HEAT registry is ongoing with thousands of patients included operaitn under NICE IPG. The PART trial (Oxford led) as an RCT comparing standard of care vs focal therapy is paused and haven't started opening the main trial phase.

Other considerations

21	Approximately how many people each year would be eligible for an intervention with this procedure/technology, (give either as an estimated number, or a proportion of the target population)?	40% of newly localised prostate cancer
22	Are there any issues with the usability or practical aspects of the procedure/technology?	No, but requires trainings.
23	Are you aware of any issues which would prevent (or have prevented) this procedure/technology being adopted in your organisation or across the wider NHS?	Quality of the diagnostic pathway but implementation of mpMRI before initial biopsy is implemented in 90% of NHS sites.
24	Is there any research that you feel would be needed to address uncertainties in the evidence base?	Ultimately an RCT would be useful but has shown multiples times to fail recruitment. The feasibility of the PART trial showed a drop out rate of 25% when patient are aware of the technology. This can not be compensated by statistical modelling to report in intention to treat. This has been reported in many RCT attempt.
25	Please suggest potential audit criteria for this procedure/technology. If known, please describe: − Beneficial outcome measures. These should include short- and long-term	Beneficial outcome measures: Composite outcome measures.

	clinical outcomes, quality-of-life measures and patient-related outcomes. Please suggest the most appropriate method of measurement for each and the timescales over which these should be measured. – Adverse outcome measures. These should include early and late complications. Please state the post procedure timescales over which these should be measured:	Audit criteria would be transition to 2nd of line of treatment free survival at 5 and 10 years. That can be measured using data linkage/ NHS digital HES data. Short term would be rate of recurrenc at 1 year (persistence of MRI lesion) Medium term would be rate of re treatment using the technology Adverse outcome measures: Easrly urinary incontinence (1 months) Rate of prostate rectal fistula.
26	Is there any other data (published or otherwise) that you would like to share with the committee?	no

Further comments

26	Please add any further comments on your particular experiences or knowledge of the procedure/technology,	Need skills in detection/ diagnostic of prostate cancer to carry out the procedure + understanding of MRI reading Need to be complemented with a technology for treatment of anterior disease

NICE National Institute for Health and Care Excellence

Declarations of interests

Please state any potential conflicts of interest relevant to the procedure/technology (or competitor technologies) on which you are providing advice, or any involvements in disputes or complaints, in the previous **12 months** or likely to exist in the future. Please use the NICE policy on declaring and managing interests as a guide when declaring any interests. Further advice can be obtained from the NICE team.

Type of interest *	Description of interest	Relevant dates	
		Interest arose	Interest ceased
Direct - financial	Likely to give consultancy for a competitor	**has not started**	
Choose an item.			
Choose an item.			

☒ I confirm that the information provided above is complete and correct. I acknowledge that any changes in these declarations during the course of my work with NICE, must be notified to NICE as soon as practicable and no later than 28 days after the interest arises. I am aware that if I do not make full, accurate and timely declarations then my advice may be excluded from being considered by the NICE committee.

Please note, all declarations of interest will be made publicly available on the NICE website.

Print name:	**CLEMENT ORCZYK**
Dated:	**13/06/2022**

NICE National Institute for Health and Care Excellence

Professional Expert Questionnaire

Technology/Procedure name & indication: **IP839/2 Focal therapy using high-intensity focused ultrasound for localised prostate cancer**

Your information

Name:	Hashim U. Ahmed
Job title:	Professor and Chair of Urology
Organisation:	Imperial College London and Imperial College Healthcare NHS Trust
Email address:	[redacted]
Professional organisation or society membership/affiliation:	British Association of Urological Surgeons (UK); Chair, Focal Therapy UK (UK Urology users group)
Nominated/ratified by (if applicable):	Click here to enter text.
Registration number (e.g. GMC, NMC, HCPC)	4771696

How NICE will use this information: the advice and views given in this questionnaire will form part of the information used by NICE and its advisory committees to develop guidance or a medtech innovation briefing on this procedure/technology. Information may be disclosed to third parties in accordance with the Freedom of Information Act 2000 and the Data Protection Act 2018, complying with data sharing guidance issued by the Information Commissioner's Office. Your advice and views represent your individual opinion and not that of your employer, professional society or a consensus view. Your name, job title, organisation and your responses, along with your declared interests will also be published online on the NICE website as part of the process of public consultation on the draft guidance, except in circumstances but not limited to, where comments are considered voluminous, or publication would be unlawful or inappropriate.

For more information about how we process your data please see our privacy notice.

☒ I give my consent for the information in this questionnaire to be used and may be published on the NICE website as outlined above. If consent is NOT given, please state reasons below:

Click here to enter text.

Please answer the following questions as fully as possible to provide further information about the procedure/technology and/or your experience.

Please note that questions 10 and 11 are applicable to the Medical Technologies Evaluation Programme (MTEP). We are requesting you to complete these sections as future guidance may also be produced under their work programme.

1	Please describe your level of experience with the procedure/technology, for example: Are you familiar with the procedure/technology? Have you used it or are you currently using it? – Do you know how widely this procedure/technology is used in the NHS or what is the likely speed of uptake? – Is this procedure/technology performed/used by clinicians in specialities other than your own? – If your specialty is involved in patient selection or referral to another specialty for this	I have had experience using HIFU for prostate cancer ablation since 2006. I have conducted hundred of these procedure over that period of time and continue to carry it out every year. I have conducted and led some of the key trials and studies evaluating its effectiveness in treating prostate cancer. - The procedure is used in the NHS at Imperial College Healthcare NHS Trust, UCLH NHS Foundation Trust, University Hospital Southampton NHS Trust, and Hampshire Hospitals NHS Trust. It was previously conducted in Princess Alexandra Hospital, Harlow. Brighton use it for salvage after radiotherapy in select cases. - Another approximate 6 centres have expressed interest in starting a HIFU programme over the next 12 months. - A charity called Prost8 has started a campaign to raise funds for the equipment required to facilitate uptake of HIFU. www.prost8.org.uk. Please contact them via paul.sayer@prost8.org.uk - HIFU for prostate cancer focal therapy is used by urological surgeons

	procedure/technology, please indicate your experience with it.	
2	– Please indicate your research experience relating to this procedure (please choose one or more if relevant):	I have done bibliographic research on this procedure. X
		I have done research on this procedure in laboratory settings (e.g. device-related research).
		I have done clinical research on this procedure involving patients or healthy volunteers. X
		I have published this research. X
		I have had no involvement in research on this procedure. Other (please comment)
3	How innovative is this procedure/technology, compared to the current standard of care? Is it a minor variation or a novel approach/concept/design? Which of the following best describes the procedure (please choose one):	The use of focal HIFU for localised prostate cancer is a paradigm shift compared to the alternatives for patients. Men with localised prostate cancer (intermediate or low volume high risk) currently have to undergo radical whole-gland prostatectomy surgery or radical while-gland radiotherapy. These are effective treatments but cause urinary leakage or significant symptoms (10-25%) and erectile dysfunction (30-60%); with radiotherapy rectal problems can also occur (5-20%). Treating the cancer area only – focal therapy – using HIFU is a day case minimally invasive procedure under general anaesthetic. There are no incisions or needles. Recovery is swifter and side effects are lower. Urinary leak is about 1%, erectile dysfunction 5-15% and rectal side effects rare.
		Established practice and no longer new. X (in the centres mentioned above and increasingly in many centres, the procedure is offered routinely as a standard care treatment. However, due to the IPG caveat for 'special arrangements' access to all suitable patients is limited and so patients often have to push their local centres for a referral or simply are not told about it.

		A minor variation on an existing procedure, which is unlikely to alter the procedure's safety and efficacy. Definitely novel and of uncertain safety and efficacy. The first in a new class of procedure.
4	Does this procedure/technology have the potential to replace current standard care or would it be used as an addition to existing standard care?	It has the potential to replace standard care in about 10-12,000 patients every year who would be suitable for this. I am happy to share our studies which demonstrate why I came to this figure.

Current management

5	Please describe the current standard of care that is used in the NHS.	In most centres, the standard of care for men with non-metastatic prostate cancer that is significant and requires treatment is radiotherapy (brachytherapy, external beam) or robotic prostatectomy. Men suitable for active surveillance are sometimes treated by the above and occasionally due to anxiety focal HIFU is used for this group. However, the majority of patients treated in the UK (data from our publications) are those who require active treatment rather than being suitable for active surveillance. Therefore, I do not think (and the Focal Therapy user group concurs) that focal HIFU is an alternative to active surveillance.

6	Are you aware of any other competing or alternative procedure/technology available to the NHS which have a similar function/mode of action to this? If so, how do these differ from the procedure/technology described in the briefing?	Focal cryotherapy IPG 423 is used in a complementary fashion to focal HIFU. Focal HIFU is used for posterior lesions in the prostate as the ultrasound beam cannot reach lesions too far from the rectum; we have published data showing anterior lesions fare poorly with HIFU. As a result, focal cryotherapy was started in 2014/2015 to focally treat anterior lesions of the prostate. Whilst the IPG programme deals with individual devices, the concept of focal therapy uses 2 technologies to deliver focal therapy based on individual characteristics of patients. I would encourage the NICE team to strongly consider evaluating focal HIFU alongside focal cryotherapy for this reason.

Potential patient benefits and impact on the health system

7 What do you consider to be the potential benefits to patients from using this procedure/technology?

Early recovery and return to work or normal activities

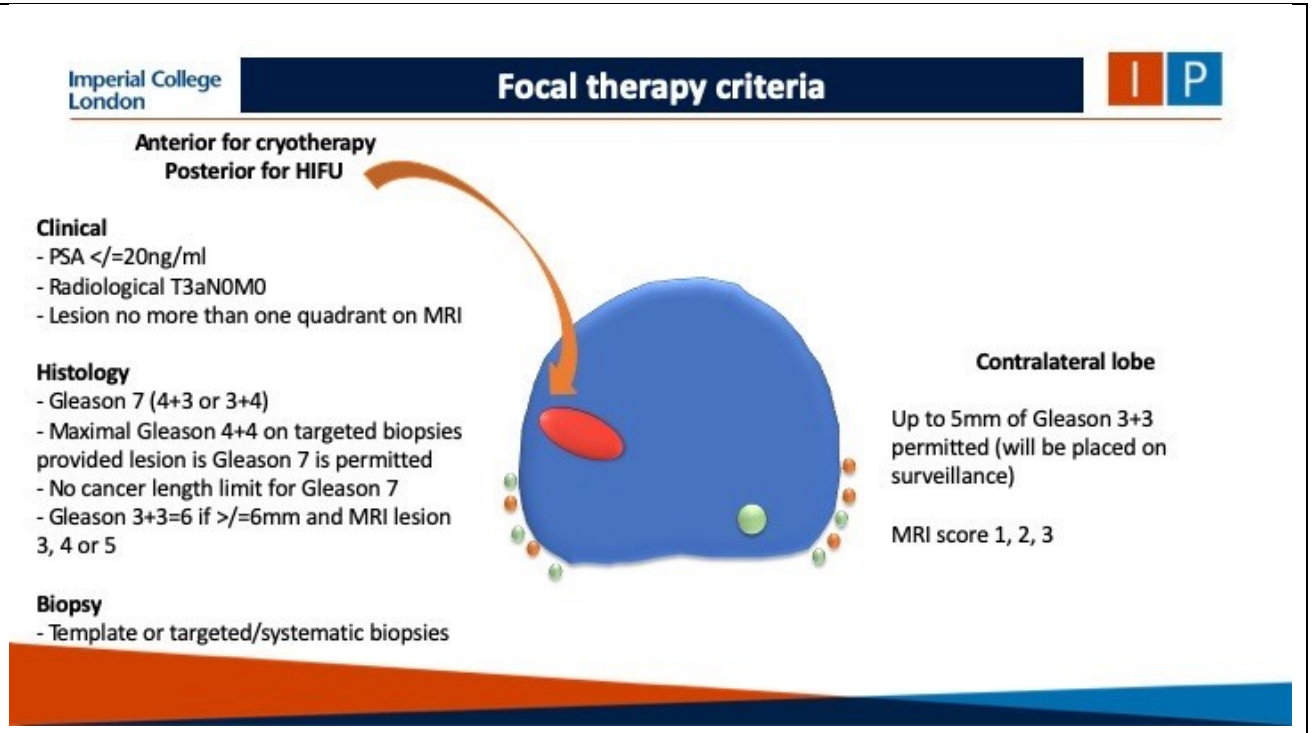
Lower post-operative complications

5-10 fold lower side effects

Please see table below

Outcome		Radical Prostatectomy		Radical Radiotherapy		Focal Therapy (cryo 50%; hifu 50%)	
Urine leak	1x pad	23%	5-30%	4%		1%	0-2%
	>/=2 pads	13%		0.5%		0%	
	Artificial urinary sphincter (AUS) or Male Sling operation	3.9%	3-9%	0%		0%	
Cystoscopy or urethral dilatation (70:30 ratio)		20% over 2 years 34% over 5 years	10-34%	20% over 2 years 30% over 5 years		8%	1-10%
Erectile dysfunction		50%	29-80%	50%	30-70%	10%	5-20%
(denominator is those who develop ED)	Sildenafil or tadalafil medication use	74%		74%		40%	20-45%
	Vacuum pump	6%		6%		1%	
	Intracavernosal injection (eg., Invicorp or caverject)	5%		5%		0.5%	
	Penile prosthesis	1%	0.8-1.95	1%		0%	
Faecal incontinence		0.1%		5%	1.6-58%	0%	

		requiring daily pads								
		Bowel problems requiring procedures (e.g., colonoscopy)		7-10%		18%		0.1%		
		Readmission (1-2 nights hospital)		0.3%		N/A		0.1%		
8	Are there any groups of patients who would particularly benefit from using this procedure/technology?	Men with non-metastatic prostate cancer PSA <30 Stage on MRI T3aN0M0 Biopsy: Gleason 7 (3+4 or 4+3) with secondary small low grade lesions Please see diagram below:								

		
9	Does this procedure/technology have the potential to change the current pathway or clinical outcomes to benefit the healthcare system? Could it lead, for example, to improved outcomes, fewer hospital visits or less invasive treatment?	See table above for detailed rates Day case so fewer bed stays Fewer re-admissions Fewer complications post-operatively Fewer side effects so less use of medication for erections; less use of pads; less use of implant surgery for erectile dysfunction and incontinence
10 - MTEP	Considering the care pathway as a whole, including initial capital and possible future costs avoided, is the procedure/technology likely to cost more or less than current standard	Considering the alternatives are radiotherapy and robotic prostatectomy, hospital resource use, side effects and complications differential, and recurrence and retreatment risks, there is likely to be net savings. The device costs about one quarter the cost of a robot for prostatectomy and the consumables per case are approx. £500 (again a quarter of robotic consumable cost).

	care, or about the same? (in terms of staff, equipment, care setting etc)	
11 - MTEP	What do you consider to be the resource impact from adopting this procedure/technology (is it likely to cost more or less than standard care, or about same-in terms of staff, equipment, and care setting)?	There will need to be an initial investment in buying new devices or hire costs. Currently the hiring model is too expensive for the very low HRG tariff that hospitals are reimbursed for the procedure. I have previously discussed with Jill Cockrill in the National Casemix Office and the tariff reimbursement seems to have been a historical issue with a misinterpretation of the word ultrasound implying a diagnostic test when this first started in 2004. The tariff has steadily risen since then and latest tariff may be sufficient to cover Trusts' costs.
12	What clinical facilities (or changes to existing facilities) are needed to do this procedure/technology safely?	The procedure can be done in any theatre setting.
13	Is any specific training needed in order to use the procedure/technology with respect to efficacy or safety?	If the device is bought, then theatre nursing training will be required. Surgeons are required to undergo the company specific remote modular training and then on site training at a reference centre followed by proctoring. After this, the proctor will determine when to sign off as independent.

Safety and efficacy of the procedure/technology

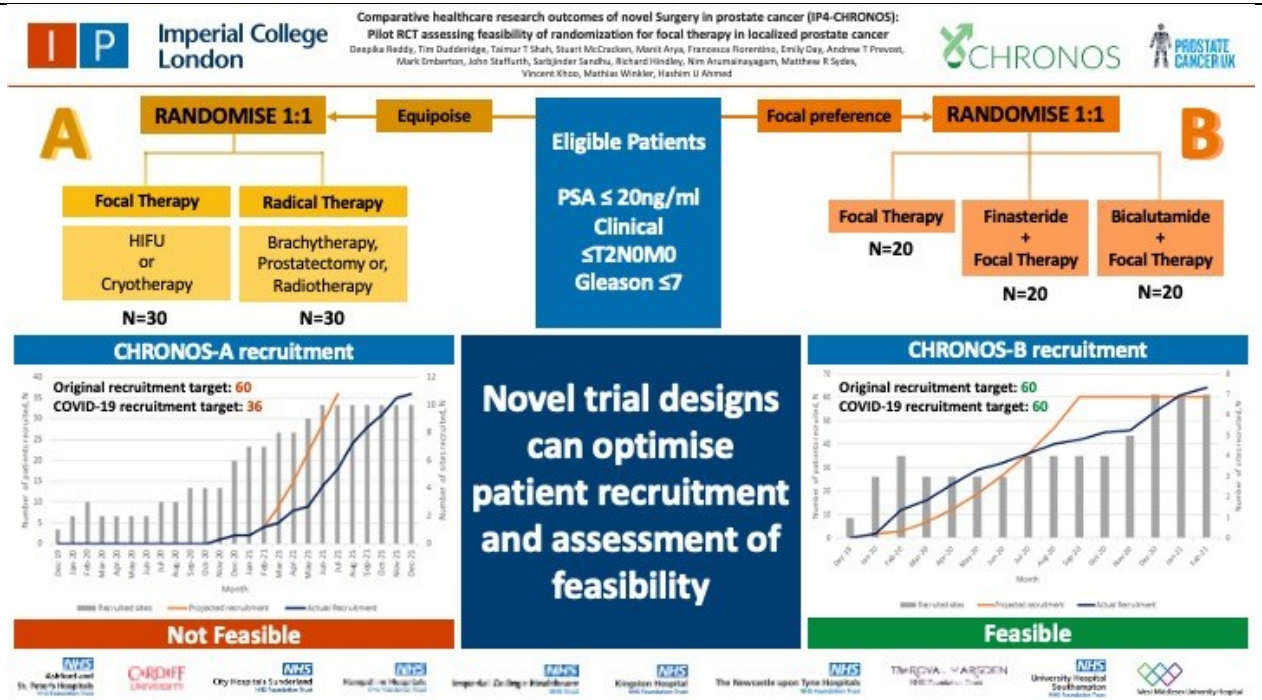
14	What are the potential harms of the procedure/technology? Please list any adverse events and potential risks (even if uncommon) and, if possible, estimate their incidence: Adverse events reported in the literature (if possible, please cite literature) Anecdotal adverse events (known from experience) Theoretical adverse events	Please see table above in section 7

15	Please list the key efficacy outcomes for this procedure/technology?	Failure free survival defined as avoiding radical therapy (radiotherapy or surgery), no androgen deprivation use, no metastases and no death from cancer.
16	Please list any uncertainties or concerns about the efficacy and safety of this procedure/?	Data for 10-15 year follow-up is not available.
17	Is there controversy, or important uncertainty, about any aspect of the procedure/technology?	There have been some calls for randomised trials. 3 pilot RCTs have now been conducted and all show that recruitment to an RCT lacks equipoise (patients want to have focal). - PART (2016-2017) (CI: Freddie Hamdy): Variable accrual. Extended accrual period. Lowered target number. Non-compliance to radical therapy allocation was ~20%. - Oslo, Norway RCT (2021) (CI: Edouard Baco). Reported in abstract form. Accrued 50% of target. Stopped early. Non-compliance in radical arm was ~20%. - IP4-CHRONOS (2020-2022) (CI: Hashim Ahmed): Target lowered from 60 to 36 and modified target met. Accrual period affected by Covid but extended recruitment still slow. Non-compliance in radical arm was ~20%. Qualitative study by Cardiff University showed lack of patient and clinician equipoise. This shows that an RCT attempting to recruit 800-1000 patients for a non-inferiority analysis with follow-up of 5 years would not only take 8-10 years but is unlikely to recruit.
18	If it is safe and efficacious, in your opinion, will this procedure be carried out in (please choose one):	Most or all district general hospitals.
		A minority of hospitals, but at least 10 in the UK. X 10-15 expert centres would allow access for men to undergo this in their region.
		Fewer than 10 specialist centres in the UK. Cannot predict at present.

Abstracts and ongoing studies

19	Please list any abstracts or conference proceedings that you are aware of that have been recently presented / published on this	We are currently doing a database update of UK cases since our last published series published in European Urology (Reddy et al). This is likely to be available in confidence to NICE in about 3-4 months.

	procedure/technology (this can include your own work). Please note that NICE will do a comprehensive literature search; we are only asking you for any very recent abstracts or conference proceedings which might not be found using standard literature searches. You do not need to supply a comprehensive reference list but it will help us if you list any that you think are particularly important.	We are also conducting a health economics analysis and this results of this can be shared in about 4-6 weeks in confidence.
20	Are there any major trials or registries of this procedure/technology currently in progress? If so, please list.	The HEAT registry is the national NICE IPG mandated registry. I am chair of the oversight of this and the data is held in a Redcap project by Imperial College London. All centres enter their data as required by IPG 424. The INDEX trial is in follow-up and results will not be available for at least another 2 years. The IP4-CHRONOS RCT has completed its pilot and a further application will be made for the randomisation evaluating neoadjuvant medication combined with focal therapy. See poster that will be presented at ASCO 2022.

Other considerations

21	Approximately how many people each year would be eligible for an intervention with this procedure/technology, (give either as an estimated number, or a proportion of the target population)?	We estimate 10,000-12,000 per year
22	Are there any issues with the usability or practical aspects of the procedure/technology?	None
23	Are you aware of any issues which would prevent (or have prevented) this	The low tariff might be an issue

	procedure/technology being adopted in your organisation or across the wider NHS?	The professional and systemic investment in radiotherapy equipment and robots means that there are perverse incentives to not discuss focal therapy in some centres as this could reduce a centre's radical therapy numbers significantly and could lead to that centre being asked to take its radiotherapy or robotic surgery cases to another centre.
24	Is there any research that you feel would be needed to address uncertainties in the evidence base?	Discussed above.
25	Please suggest potential audit criteria for this procedure/technology. If known, please describe: − Beneficial outcome measures. These should include short- and long-term clinical outcomes, quality-of-life measures and patient-related outcomes. Please suggest the most appropriate method of measurement for each and the timescales over which these should be measured. − Adverse outcome measures. These should include early and late complications. Please state the post procedure timescales over which these should be measured:	Beneficial outcome measures: Continence Pad use Erectile function PDE5-I use Health related Quality of life and other PROMS Avoidance of radical therapy Adverse outcome measures: Readmission rates Hospital stay Complications as defined by Clavien Dindo Implant surgery for urine leak and erectile dysfunction Rectal injury (fistula)

Further comments

26	Please add any further comments on your particular experiences or knowledge of the procedure/technology,	Nil else to add.

NICE National Institute for Health and Care Excellence

Declarations of interests

Please state any potential conflicts of interest relevant to the procedure/technology (or competitor technologies) on which you are providing advice, or any involvements in disputes or complaints, in the previous **12 months** or likely to exist in the future. Please use the NICE policy on declaring and managing interests as a guide when declaring any interests. Further advice can be obtained from the NICE team.

Type of interest *	Description of interest	Relevant dates	
		Interest arose	Interest ceased
Direct - financial	Sonablate Corp have funded the INDEX trial which is in follow-up. They also provide funding for the support of the HEAT registry but have no input into data entry or analysis or write up or presentation of the results. Sonablate also pay me for training other surgeons in the procedure and have funded conference attendance about 5 years ago.	**2005**	**Ongoing**
Direct - financial	Boston Scientific pay me to proctor surgeons in the techniques of Rezum water vapour therapy for benign prostate ablation and cryotherapy for prostate cancer. The companies which were taken over by Boston (Galil and BTG) have previously provided funding for the ICE Focal cryotherapy registry database in the UK.	**2014**	**Ongoing**
Direct - financial	Francis Medical. I sit on the advisory panel for this company which is looking to treat prostate cancer in a focal manner within trials in the USA and possibly Europe.	**2021**	**Ongoing**

☒ I confirm that the information provided above is complete and correct. I acknowledge that any changes in these declarations during the course of my work with NICE, must be notified to NICE as soon as practicable and no later than 28 days after the interest arises. I am aware that if I do not make full, accurate and timely declarations then my advice may be excluded from being considered by the NICE committee.

Please note, all declarations of interest will be made publicly available on the NICE website.

Print name:	**Hashim Ahmed**
Dated:	**16th May 2022**

NICE National Institute for Health and Care Excellence

Professional Expert Questionnaire

Technology/Procedure name & indication: IP839/2 Focal therapy using high-intensity focused ultrasound for localised prostate cancer

Your information

Name:	Manit ARYA
Job title:	Consultant Urological Surgeon
Organisation:	Imperial College NHS Trust London
Email address:	[redacted]
Professional organisation or society membership/affiliation:	British Association of Uroloical Surgeons
Nominated/ratified by (if applicable):	Click here to enter text.
Registration number (e.g. GMC, NMC, HCPC)	GMC No: 3677629

How NICE will use this information: the advice and views given in this questionnaire will form part of the information used by NICE and its advisory committees to develop guidance or a medtech innovation briefing on this procedure/technology. Information may be disclosed to third parties in accordance with the Freedom of Information Act 2000 and the Data Protection Act 2018, complying with data sharing guidance issued by the Information Commissioner's Office. Your advice and views represent your individual opinion and not that of your employer, professional society or a consensus view. Your name, job title, organisation and your responses, along with your declared interests will also be published online on the NICE website as part of the process of public consultation on the draft guidance, except in circumstances but not limited to, where comments are considered voluminous, or publication would be unlawful or inappropriate.

For more information about how we process your data please see our privacy notice.

X I give my consent for the information in this questionnaire to be used and may be published on the NICE website as outlined above. If consent is NOT given, please state reasons below:

-

Please answer the following questions as fully as possible to provide further information about the procedure/technology and/or your experience.

Please note that questions 10 and 11 are applicable to the Medical Technologies Evaluation Programme (MTEP). We are requesting you to complete these sections as future guidance may also be produced under their work programme.

1	Please describe your level of experience with the procedure/technology, for example: Are you familiar with the procedure/technology? Have you used it or are you currently using it? – Do you know how widely this procedure/technology is used in the NHS or what is the likely speed of uptake? – Is this procedure/technology performed/used by clinicians in specialities other than your own? – If your specialty is involved in patient selection or referral to another specialty for this	I am a Urological surgeon with a sub-specialist interest in prostate cancer, working mainly at Imperial College NHS Trust, London. In my own personal clinical practice, I have been performing focal therapy using high intensity focused ultrasound (HIFU) to treat prostate cancer for over 10years. This technique (focal HIFU to treat prostate cancer) is only routinely available in the NHS in approximately four units in the UK. I am not aware that HIFU is used by clinicians in other specialities. In our unit, as we regularly perform focal HIFU procedure ourselves, we decide which patients are amenable to focal HIFU treatment via discussion at our prostate SMDT. Our unit at Imperial College NHS Trust performs approximately 80-00 HIFU procedures per year for the treatment of prostate cancer.

	procedure/technology, please indicate your experience with it.	
2	– Please indicate your research experience relating to this procedure (please choose one or more if relevant):	I have done bibliographic research on this procedure. I have done clinical research on this procedure involving patients or healthy volunteers. I have published this research.
3	How innovative is this procedure/technology, compared to the current standard of care? Is it a minor variation or a novel approach/concept/design? Which of the following best describes the procedure (please choose one):	Focal HIFU for the treatment of localised prostate cancer was initially a novel approach 10years ago. However, I would say that it is now an increasingly accepted alternative to robotic radical prostatectomy and radical radiotherapy. Established practice and no longer new.
4	Does this procedure/technology have the potential to replace current standard care or would it be used as an addition to existing standard care?	Focal HIFU is an addition or alternative to existing standard care for men with localised prostate cancer.

Current management

5	Please describe the current standard of care that is used in the NHS.	Current standard of care for localised prostate cancer is either robotic radical prostatectomy or radical radiotherapy+/-hormones (also seed brachytherapy in some units)

6	Are you aware of any other competing or alternative procedure/technology available to the NHS which have a similar function/mode of action to this? If so, how do these differ from the procedure/technology described in the briefing?	No I am not aware of this

Potential patient benefits and impact on the health system

7	What do you consider to be the potential benefits to patients from using this procedure/technology?	Focal HIFU is a minimally invasive ablative technique which is a day surgery procedure offering good cancer control with a lower side-effect profile for men with localised prostate cancer
8	Are there any groups of patients who would particularly benefit from using this procedure/technology?	Men who would benefit from focal HIFU treatment include: 1) those with primary intermediate risk localised prostate cancer including men over the age of 75yrs (ie men of any age who are able to have a general anaesthetic) 2) those with localised prostate cancer recurring after previous prostate radiotherapy (radiorecurrent prostate cancer) – any grade of cancer 3) men with primary localised prostate cancer of any grade who are not able to either have radical prostatectomy or radical radiotherapy
9	Does this procedure/technology have the potential to change the current pathway or clinical outcomes to benefit the healthcare system? Could it lead, for example, to improved outcomes, fewer hospital visits or less invasive treatment?	Focal HIFU is of advantage as it is a minimally invasive ablative treatment which is a day surgery procedure with patients walking out of the hospital unassisted on the same day of surgery. Patients are often able to return to work after 48hours. Focal HIFU provides good cancer control but has a lower side-effect profile than the current alternatives of radical prostatectomy and radical radiotherapy+/-hormones – focal HIFU has a particularly low rate of post-operative erectile dysfunction and urinary incontinence.
10 - MTEP	Considering the care pathway as a whole, including initial capital and possible future costs avoided, is the procedure/technology likely to cost more or less than current standard care, or about the same? (in terms of staff, equipment, care setting etc)	Focal HIFU is likely to cost less than a robotic prostatectomy or radical radiotherapy. It involves only one procedure which is performed in the Day Surgery Unit under general anaesthetic with the patient going home later the same day. The number of staff required is minimal – one surgeon, one anaesthetist and one theatre nurse. The HIFU machine is a one-off purchase and is significantly cheaper than a Da Vinci Robot or a radiotherapy machine (linear accelerator). Consumables required for a procedure are minimal – only degassed water and a condom.

11 - MTEP	What do you consider to be the resource impact from adopting this procedure/technology (is it likely to cost more or less than standard care, or about same-in terms of staff, equipment, and care setting)?	Focal HIFU is likely to cost less than a robotic prostatectomy or radical radiotherapy. It involves only one procedure which is performed in the Day Surgery Unit under general anaesthetic with the patient going home later the same day. The number of staff required is minimal – one surgeon, one anaesthetist and one theatre nurse. The HIFU machine is a one-off purchase and is significantly cheaper than a Da Vinci Robot or a radiotherapy machine (linear accelerator). Consumables required for a procedure are minimal – only degassed water and a condom.
12	What clinical facilities (or changes to existing facilities) are needed to do this procedure/technology safely?	No changes would be needed to current or existing facilities. The procedure can be performed in either the Day Surgery Unit or in Main Operating Theatres (under general anaesthetic).
13	Is any specific training needed in order to use the procedure/technology with respect to efficacy or safety?	

Safety and efficacy of the procedure/technology

14	What are the potential harms of the procedure/technology? Please list any adverse events and potential risks (even if uncommon) and, if possible, estimate their incidence: Adverse events reported in the literature (if possible, please cite literature) Anecdotal adverse events (known from experience) Theoretical adverse events	Potential side-effects of focal HIFU used in the treatment of primary localised prostate cancer, which are cited in the literature, include: 5-15% risk of erectile dysfunction 1% risk of urinary incontinence 50% risk of dry ejaculation 1 in 1000 risk of rectourethral fistula Less than <1% risk of urethral stricture 5% risk of urine infection 20-30% need for a second focal HIFU at 5-10years 5-10% risk of failure requiring radical therapy at 5-10years

15	Please list the key efficacy outcomes for this procedure/technology?	Following focal HIFU in the treatment of primary prostate cancer there is a: 20-30% need for a second focal HIFU at 5-10years 5-10% risk of failure requiring radical whole gland therapy at 5-10years
16	Please list any uncertainties or concerns about the efficacy and safety of this procedure/?	10 years (or greater) post-operative data following focal HIFU in the treatment of primary prostate cancer is not yet available – however, medium term outcomes at 7 years are available and the cancer control outcomes are similar to radical prostatectomy and radical radiotherapy at this timeline.
17	Is there controversy, or important uncertainty, about any aspect of the procedure/technology?	10 years (or greater) post-operative data following focal HIFU in the treatment of primary prostate cancer is not yet available - however, medium term outcomes at 7 years are available and the cancer control outcomes are similar to radical prostatectomy and radical radiotherapy at this timeline.
18	If it is safe and efficacious, in your opinion, will this procedure be carried out in (please choose one):	A minority of hospitals, but at least 10 in the UK.

Abstracts and ongoing studies

19	Please list any abstracts or conference proceedings that you are aware of that have been recently presented / published on this procedure/technology (this can include your own work). Please note that NICE will do a comprehensive literature search; we are only asking you for any very recent abstracts or conference proceedings which might not be found using standard literature searches. You do not need to supply a comprehensive reference list but it will help	Reddy D, Peters M, Shah TT, van Son M, et al. Cancer Control Outcomes Following Focal Therapy Using High-intensity Focused Ultrasound in 1379 Men with Nonmetastatic Prostate Cancer: A Multi-institute 15-year Experience. Eur Urol. 2022 Apr;81(4):407-413. doi: 10.1016/j.eururo.2022.01.005. Epub 2022 Feb 3. PMID: 35123819.

	us if you list any that you think are particularly important.	
20	Are there any major trials or registries of this procedure/technology currently in progress? If so, please list.	**There is a national registry called the HIFU Evaluation and Assessment of Treatment (HEAT) registry.** An important relevant ongoing trial which includes focal HIFU treatment is the : Comparative Health Research Outcomes of NOvel Surgery in Prostate Cancer (IP4-CHRONOS) trial

Other considerations

21	Approximately how many people each year would be eligible for an intervention with this procedure/technology, (give either as an estimated number, or a proportion of the target population)?	Approximately 30% of men diagnosed with localised prostate cancer across all age groups (including men over 75 years of age).
22	Are there any issues with the usability or practical aspects of the procedure/technology?	No issues
23	Are you aware of any issues which would prevent (or have prevented) this procedure/technology being adopted in your organisation or across the wider NHS?	No issues

24	Is there any research that you feel would be needed to address uncertainties in the evidence base?	Medium term ie 7yrs post-operative outcome data is available following focal HIFU in the treatment of primary localised prostate cancer is available. The cancer control outcomes are similar to radical prostatectomy and radical radiotherapy at this timeline. This has established focal HIFU as a safe and efficacious procedure. In my opinion focal HIFU can now be safely offered as an option to men in the treatment of primary intermediate prostate cancer on the proviso that the results are entered onto the national HEAT registry (HIFU Evaluation and Assessment of Treatment registry), whilst we await 10year post-operative outcome data.
25	Please suggest potential audit criteria for this procedure/technology. If known, please describe: − Beneficial outcome measures. These should include short- and long-term clinical outcomes, quality-of-life measures and patient-related outcomes. Please suggest the most appropriate method of measurement for each and the timescales over which these should be measured. − Adverse outcome measures. These should include early and late complications. Please state the post procedure timescales over which these should be measured:	Beneficial outcome measures: and Adverse outcome measures: <u>Impact on urinary function:</u> International Prostate Symptom Score (IPSS) questionnaire – to be completed up till the 1 year post-operative period <u>Impact on sexual function:</u> International Index of Erectile Function (IIEF-15) questionnaire - to be completed up till the 1 year post-operative period
26	Is there any other data (published or otherwise) that you would like to share with the committee?	Reddy D, Peters M, Shah TT, van Son M, et al. Cancer Control Outcomes Following Focal Therapy Using High-intensity Focused Ultrasound in 1379 Men with Nonmetastatic Prostate Cancer: A Multi-institute 15-year Experience. Eur Urol. 2022 Apr;81(4):407-413. doi: 10.1016/j.eururo.2022.01.005. Epub 2022 Feb 3. PMID: 35123819.

Further comments

26	Please add any further comments on your particular experiences or knowledge of the procedure/technology,	In my opinion focal HIFU can now be safely offered as an option to men in the treatment of primary intermediate prostate cancer on the proviso that the results are entered onto a national registry such as the HEAT registry (HIFU Evaluation and Assessment of Treatment registry) and so long as normal governance procedures are followed in the unit.

NICE National Institute for Health and Care Excellence

Declarations of interests

Please state any potential conflicts of interest relevant to the procedure/technology (or competitor technologies) on which you are providing advice, or any involvements in disputes or complaints, in the previous **12 months** or likely to exist in the future. Please use the NICE policy on declaring and managing interests as a guide when declaring any interests. Further advice can be obtained from the NICE team.

Type of interest *	Description of interest	Relevant dates	
		Interest arose	Interest ceased
Choose an item.	None		
Choose an item.	None		
Choose an item.	None		

X I confirm that the information provided above is complete and correct. I acknowledge that any changes in these declarations during the course of my work with NICE, must be notified to NICE as soon as practicable and no later than 28 days after the interest arises. I am aware that if I do not make full, accurate and timely declarations then my advice may be excluded from being considered by the NICE committee.

Please note, all declarations of interest will be made publicly available on the NICE website.

Print name:	**Manit ARYA**
Dated:	**21/06/2022**

NICE National Institute for Health and Care Excellence

Professional Expert Questionnaire

Technology/Procedure name & indication: IP839/2 Focal therapy using high-intensity focused ultrasound for localised prostate cancer

Your information

Name:	Mark Emberton
Job title:	Professor
Organisation:	UCL /UCLH NHS trust
Email address:	[redacted]
Professional organisation or society membership/affiliation:	RCSEngl. BAUS, EAU, American Association of GU Surgeons, Focal Therapy Society, Academy of Medical Sciences
Nominated/ratified by (if applicable):	Click here to enter text.
Registration number (e.g. GMC, NMC, HCPC)	3098619

How NICE will use this information: the advice and views given in this questionnaire will form part of the information used by NICE and its advisory committees to develop guidance or a medtech innovation briefing on this procedure/technology. Information may be disclosed to third parties in accordance with the Freedom of Information Act 2000 and the Data Protection Act 2018, complying with data sharing guidance issued by the Information Commissioner's Office. Your advice and views represent your individual opinion and not that of your employer, professional society or a consensus view. Your name, job title, organisation and your responses, along with your declared interests will also be published online on the NICE website as part of the process of public consultation on the draft guidance, except in circumstances but not limited to, where comments are considered voluminous, or publication would be unlawful or inappropriate.

For more information about how we process your data please see our privacy notice.

☒ I give my consent for the information in this questionnaire to be used and may be published on the NICE website as outlined above. If consent is NOT given, please state reasons below:

Click here to enter text.

Please answer the following questions as fully as possible to provide further information about the procedure/technology and/or your experience.

Please note that questions 10 and 11 are applicable to the Medical Technologies Evaluation Programme (MTEP). We are requesting you to complete these sections as future guidance may also be produced under their work programme.

1	Please describe your level of experience with the procedure/technology, for example: Are you familiar with the procedure/technology? Have you used it or are you currently using it? − Do you know how widely this procedure/technology is used in the NHS or what is the likely speed of uptake? − Is this procedure/technology performed/used by clinicians in specialities other than your own? − If your specialty is involved in patient selection or referral to another specialty for this	I have been doing HIFU for over 15 years and was the first in the UK to offer this intervention Offered within M25 in numerous places but very hard to get outside SE. Only Urology use this currently Urologist patient select and treat

	procedure/technology, please indicate your experience with it.	
2	− Please indicate your research experience relating to this procedure (please choose one or more if relevant):	**I have done bibliographic research on this procedure.** **I have done research on this procedure in laboratory settings (e.g. device-related research).** **I have done clinical research on this procedure involving patients or healthy volunteers.** **I have published this research.** I have had no involvement in research on this procedure. Other (please comment)
3	How innovative is this procedure/technology, compared to the current standard of care? Is it a minor variation or a novel approach/concept/design? Which of the following best describes the procedure (please choose one):	**Established practice and no longer new.** A minor variation on an existing procedure, which is unlikely to alter the procedure's safety and efficacy. Definitely novel and of uncertain safety and efficacy. The first in a new class of procedure.
4	Does this procedure/technology have the potential to replace current standard care or	Yes, it should drive down utilisation rates for surgery and radiotherapy and offer a cheaper, better tolerated, less invasive option for many men with prostate cancer

	would it be used as an addition to existing standard care?	

Current management

5	Please describe the current standard of care that is used in the NHS.	It is available in some of the larger NHS Trusts – UCLH / Imperial etc
6	Are you aware of any other competing or alternative procedure/technology available to the NHS which have a similar function/mode of action to this? If so, how do these differ from the procedure/technology described in the briefing?	Cryotherapy, IRE, radiofrequency, laser

Potential patient benefits and impact on the health system

7	What do you consider to be the potential benefits to patients from using this procedure/technology?	Avoidance of the toxicities associated with standard of care treatments. Also de-intensifies care. HIFU is a daycase. Radiotherapy is done over multiple visits and combined with 1-3 years hormonal theray.
8	Are there any groups of patients who would particularly benefit from using this procedure/technology?	Anybody who places high utility on urinary continence and maintaining sexual function
9	Does this procedure/technology have the potential to change the current pathway or clinical outcomes to benefit the healthcare system? Could it lead, for example, to improved outcomes, fewer hospital visits or less invasive treatment?	Yes, yes, and yes.
10 - MTEP	Considering the care pathway as a whole, including initial capital and possible future costs avoided, is the procedure/technology likely to cost more or less than current standard care, or about the same? (in terms of staff, equipment, care setting etc)	The costs are much less both in terms of capital, maintenance and disposables
11 - MTEP	What do you consider to be the resource impact from adopting this procedure/technology (is it likely to cost more or less than standard care, or about same-in terms of staff, equipment, and care setting)?	Much less as the treatment can be done in a non sterile environment, although still needs anaethesia
12	What clinical facilities (or changes to existing facilities) are needed to do this procedure/technology safely?	

13	Is any specific training needed in order to use the procedure/technology with respect to efficacy or safety?	Yes. A supervised learning curve of 10-20 cases is normal. On line material are now available.

Safety and efficacy of the procedure/technology

14	What are the potential harms of the procedure/technology? Please list any adverse events and potential risks (even if uncommon) and, if possible, estimate their incidence: Adverse events reported in the literature (if possible, please cite literature) Anecdotal adverse events (known from experience) Theoretical adverse events	Few. Rectal injury is a possibility. I have had no such cases in a primary setting in over 2000 patients. Incontinence is very rare. Men will experience a reduction / loss of ejaculate The safety is very well documented in the literature (over 9,000 patients reported upon)
15	Please list the key efficacy outcomes for this procedure/technology?	Freedom from failure, combined with freedom from genitourinary toxicity
16	Please list any uncertainties or concerns about the efficacy and safety of this procedure/?	The chance of developing a second primary – small but as yet unsure.
17	Is there controversy, or important uncertainty, about any aspect of the procedure/technology?	Patients always ask why it is not more widely available – I must say I agree.
18	If it is safe and efficacious, in your opinion, will this procedure be carried out in (please choose one):	Most or all district general hospitals. **A minority of hospitals, but at least 10 in the UK.**

		Cannot predict at present.

Abstracts and ongoing studies

19	Please list any abstracts or conference proceedings that you are aware of that have been recently presented / published on this procedure/technology (this can include your own work). Please note that NICE will do a comprehensive literature search; we are only asking you for any very recent abstracts or conference proceedings which might not be found using standard literature searches. You do not need to supply a comprehensive reference list but it will help us if you list any that you think are particularly important.	Everything we have is in the public domain. I have been associated with over 100 articles on this procedure.
20	Are there any major trials or registries of this procedure/technology currently in progress? If so, please list.	HIFU registry

Other considerations

21	Approximately how many people each year would be eligible for an intervention with this procedure/technology, (give either as an estimated number, or a proportion of the target population)?	20-30% of all patients presenting with a new prostate cancer
22	Are there any issues with the usability or practical aspects of the procedure/technology?	None

23	Are you aware of any issues which would prevent (or have prevented) this procedure/technology being adopted in your organisation or across the wider NHS?	Quality of MRI scanning
24	Is there any research that you feel would be needed to address uncertainties in the evidence base?	RCT is difficult as 25% on men withdraw consent when allocated to control arm. Patients want HIFU for obvious reasons.
25	Please suggest potential audit criteria for this procedure/technology. If known, please describe: − Beneficial outcome measures. These should include short- and long-term clinical outcomes, quality-of-life measures and patient-related outcomes. Please suggest the most appropriate method of measurement for each and the timescales over which these should be measured. − Adverse outcome measures. These should include early and late complications. Please state the post procedure timescales over which these should be measured:	Beneficial outcome measures: Freedom from failure. Adverse outcome measures: Continence should be as at baseline. Erectile function at 3 months should be present in 90% of men.
26	Is there any other data (published or otherwise) that you would like to share with the committee?	

Further comments

26	Please add any further comments on your particular experiences or knowledge of the procedure/technology,	I think you are asking the wrong questions. The key question relates to focal therapy in prostate cancer. HIFU is just one of many ways of achieving this. The intervention is selective destruction of a cancer. The manner by which it is done is very much a secondary issue.

NICE National Institute for Health and Care Excellence

Declarations of interests

Please state any potential conflicts of interest relevant to the procedure/technology (or competitor technologies) on which you are providing advice, or any involvements in disputes or complaints, in the previous **12 months** or likely to exist in the future. Please use the NICE policy on declaring and managing interests as a guide when declaring any interests. Further advice can be obtained from the NICE team.

Type of interest *	Description of interest	Relevant dates	
		Interest arose	Interest ceased
Direct - financial	I have been paid by Sonacare for consultancy, teaching, lecturing and travel	**2008**	**To date**
Non-financial professional	I have had research funded by industry	**2008**	**To date**
Non-financial personal	**I have received numerous awards and recognition over the last 5 years or so in recognition for the work I have done in this field. Career progression and standing has been positively affected by my involvent with this technology**		

☒ I confirm that the information provided above is complete and correct. I acknowledge that any changes in these declarations during the course of my work with NICE, must be notified to NICE as soon as practicable and no later than 28 days after the interest arises. I am aware that if I do not make full, accurate and timely declarations then my advice may be excluded from being considered by the NICE committee.

Please note, all declarations of interest will be made publicly available on the NICE website.

Print name:	**Mark Emberton**
Dated:	**15 June 2022**

NICE National Institute for Health and Care Excellence

Professional Expert Questionnaire

Technology/Procedure name & indication: IP839/2 Focal therapy using high-intensity focused ultrasound for localised prostate cancer

[redacted]

Your information

Name:	Tim Dudderidge
Job title:	Consultant Urologist
Organisation:	University Hospital Southampton
Email address:	[redacted]
Professional organisation or society membership/affiliation:	BAUS
Nominated/ratified by (if applicable):	Click here to enter text.
Registration number (e.g. GMC, NMC, HCPC)	4505451

How NICE will use this information: the advice and views given in this questionnaire will form part of the information used by NICE and its advisory committees to develop guidance or a medtech innovation briefing on this procedure/technology. Information may be disclosed to third parties in accordance with the Freedom of Information Act 2000 and the Data Protection Act 2018, complying with data sharing guidance issued by the Information Commissioner's Office. Your advice and views represent your individual opinion and not that of your employer, professional society or a consensus view. Your name, job title, organisation and your responses, along with your declared interests will also be published online on the NICE website as part of the process of public consultation on the draft guidance, except in circumstances but not limited to, where comments are considered voluminous, or publication would be unlawful or inappropriate.

For more information about how we process your data please see our privacy notice.

☒ I give my consent for the information in this questionnaire to be used and may be published on the NICE website as outlined above. If consent is NOT given, please state reasons below:

Deleted: ☐

Click here to enter text.

Please answer the following questions as fully as possible to provide further information about the procedure/technology and/or your experience.

Please note that questions 10 and 11 are applicable to the Medical Technologies Evaluation Programme (MTEP). We are requesting you to complete these sections as future guidance may also be produced under their work programme.

1	Please describe your level of experience with the procedure/technology, for example:	
	Are you familiar with the procedure/technology?	I have been a HIFU user since 2005. I am regarded as an expert in the field of prostate cancer and focal therapy in particular. I started using cryotherapy in 2015 and am also an expert in that type of focal therapy.
	Have you used it or are you currently using it?	YES
	– Do you know how widely this procedure/technology is used in the NHS or what is the likely speed of uptake?	YES
	– Is this procedure/technology performed/used by clinicians in specialities other than your own?	NO
	– If your specialty is involved in patient selection or referral to another specialty for this	n/a

	procedure/technology, please indicate your experience with it.	
2	– Please indicate your research experience relating to this procedure (please choose one or more if relevant):	I have done bibliographic research on this procedure. yes I have done research on this procedure in laboratory settings (e.g. device-related research).no I have done clinical research on this procedure involving patients or healthy volunteers.yes – several trials I have published this research. yes I have had no involvement in research on this procedure. Other (please comment)
3	How innovative is this procedure/technology, compared to the current standard of care? Is it a minor variation or a novel approach/concept/design? Which of the following best describes the procedure (please choose one):	This treatment is now very well established with more than 10 years focal therapy with HIFU having been undertaken in the UK. Overall the approach of focal therapy is relatively new but it fills in a gap between surveillance and radical treatment which offers a better balance of benefit and risk for many men. Established practice and no longer new. A minor variation on an existing procedure, which is unlikely to alter the procedure's safety and efficacy. Definitely novel and of uncertain safety and efficacy. The first in a new class of procedure.

Formatted: Underline

4	Does this procedure/technology have the potential to replace current standard care or would it be used as an addition to existing standard care?	It represents an alternate option for some men with prostate cancer otherwise facing radical surgery and radiotherapy boith of which have significant side effects which focal therapy largely avoids.

Current management

5	Please describe the current standard of care that is used in the NHS.	Actiove surveillance (for low risk), surgery and forms of radiotherapy (brachytherapy (seed / HDR) and external beam
6	Are you aware of any other competing or alternative procedure/technology available to the NHS which have a similar function/mode of action to this? If so, how do these differ from the procedure/technology described in the briefing?	Cryotherapy, Nanoknife , laser focal ablation

Potential patient benefits and impact on the health system

7	What do you consider to be the potential benefits to patients from using this procedure/technology?	Reduced side effects and acceptable cancer outcomes
8	Are there any groups of patients who would particularly benefit from using this procedure/technology?	Those with unilateral clinmically significant disease.
9	Does this procedure/technology have the potential to change the current pathway or clinical outcomes to benefit the healthcare system? Could it lead, for example, to improved outcomes, fewer hospital visits or less invasive treatment?	Yes – the work up needs to be moire site specific I.e need to know the location of disease not just that it is present. The benefit is the ability to identify men who maby not need radical therapy and ofer them a treatment that has fewer functional consequences like incontinence and erectile dysfuintion.
10 - MTEP	Considering the care pathway as a whole, including initial capital and possible future costs avoided, is the procedure/technology likely to cost more or less than current standard care, or about the same? (in terms of staff, equipment, care setting etc)	Probably less – device treats in half the time as surgery and the device is 1/3 of the cost.
11 - MTEP	What do you consider to be the resource impact from adopting this procedure/technology (is it likely to cost more or less than standard care, or about same-in terms of staff, equipment, and care setting)?	Will need to set up a regional way of delivering focal therapy with pathways aligned to gather the side specific imaging reporiots and pathology that we need to select patients without additional diagnostic work up.
12	What clinical facilities (or changes to existing facilities) are needed to do this procedure/technology safely?	A HIFU device or use of. mobile system (I have used mobile systems for 10 yeas and it is a cost efficient model.

13	Is any specific training needed in order to use the procedure/technology with respect to efficacy or safety?	Yes requires support over at least 10 cases after simulated training.

Safety and efficacy of the procedure/technology

14	What are the potential harms of the procedure/technology? Please list any adverse events and potential risks (even if uncommon) and, if possible, estimate their incidence: Adverse events reported in the literature (if possible, please cite literature) Anecdotal adverse events (known from experience) Theoretical adverse events	See publications
15	Please list the key efficacy outcomes for this procedure/technology?	See publications
16	Please list any uncertainties or concerns about the efficacy and safety of this procedure/?	Nil of note , very small risk of a fistula
17	Is there controversy, or important uncertainty, about any aspect of the procedure/technology?	Comparative effectiveness is not established via RCT yet – unlikely that will be deliverable given reluctablce of men to be randomised.
18	If it is safe and efficacious, in your opinion, will this procedure be carried out in (please choose one):	Most or all district general hospitals. **A minority of hospitals, but at least 10 in the UK.** Fewer than 10 specialist centres in the UK.

Formatted: Font: Bold, Underline

		Cannot predict at present.

Abstracts and ongoing studies

19	Please list any abstracts or conference proceedings that you are aware of that have been recently presented / published on this procedure/technology (this can include your own work). Please note that NICE will do a comprehensive literature search; we are only asking you for any very recent abstracts or conference proceedings which might not be found using standard literature searches. You do not need to supply a comprehensive reference list but it will help us if you list any that you think are particularly important.	
20	Are there any major trials or registries of this procedure/technology currently in progress? If so, please list.	CHRONOS PART

Other considerations

21	Approximately how many people each year would be eligible for an intervention with this procedure/technology, (give either as an estimated number, or a proportion of the target population)?	20-40 % of all men treated for localiosed disease.
22	Are there any issues with the usability or practical aspects of the procedure/technology?	Not too many – the training is well established.

23	Are you aware of any issues which would prevent (or have prevented) this procedure/technology being adopted in your organisation or across the wider NHS?	no
24	Is there any research that you feel would be needed to address uncertainties in the evidence base?	Need long term prospective observational work to continue.
25	Please suggest potential audit criteria for this procedure/technology. If known, please describe: – Beneficial outcome measures. These should include short- and long-term clinical outcomes, quality-of-life measures and patient-related outcomes. Please suggest the most appropriate method of measurement for each and the timescales over which these should be measured. – Adverse outcome measures. These should include early and late complications. Please state the post procedure timescales over which these should be measured;	Beneficial outcome measures: Retreatment rates, functional outcomes, resource utilisation dueing treatment episode and follow up compared to surgery / RT Adverse outcome measures: Fistula, incontinence, treatment for LUTS (TURP), ED treatment utilisation
26	Is there any other data (published or otherwise) that you would like to share with the committee?	Plenty – see pub med.

Formatted: List Paragraph, Bulleted + Level: 1 + Aligned at: 0.63 cm + Indent at: 1.27 cm

Deleted: ¶

Formatted: Font: (Default) Arial, 11 pt

Further comments

26	Please add any further comments on your particular experiences or knowledge of the procedure/technology,	Apologies for brief responses – was late and no time. This is ready for everyone to be able too access. Each network should have focal available HIFU and a needle based treatment. Pathways will need to adjust to ensure we charaterise men properly so we can tell if they are a suitable case.

NICE National Institute for Health and Care Excellence

Declarations of interests

Please state any potential conflicts of interest relevant to the procedure/technology (or competitor technologies) on which you are providing advice, or any involvements in disputes or complaints, in the previous **12 months** or likely to exist in the future. Please use the NICE policy on declaring and managing interests as a guide when declaring any interests. Further advice can be obtained from the NICE team.

Type of interest *	Description of interest	Relevant dates	
		Interest arose	Interest ceased
Direct - financial	I do HIFU in private practice	**2013**	**present**
Choose an item.			
Choose an item.			

☐ I confirm that the information provided above is complete and correct. I acknowledge that any changes in these declarations during the course of my work with NICE, must be notified to NICE as soon as practicable and no later than 28 days after the interest arises. I am aware that if I do not make full, accurate and timely declarations then my advice may be excluded from being considered by the NICE committee.

Please note, all declarations of interest will be made publicly available on the NICE website.

Print name:	**TIM DUDDERIDGE**
Dated:	**14/6/22**