

# Patient Experience of Participating in a Global First Kidney Cancer Histotripsy Trial:

The phase 1 CAIN trial evaluating effectiveness and safety profile of the HistoSonics histotripsy system in treating primary solid renal tumours

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## Purpose:

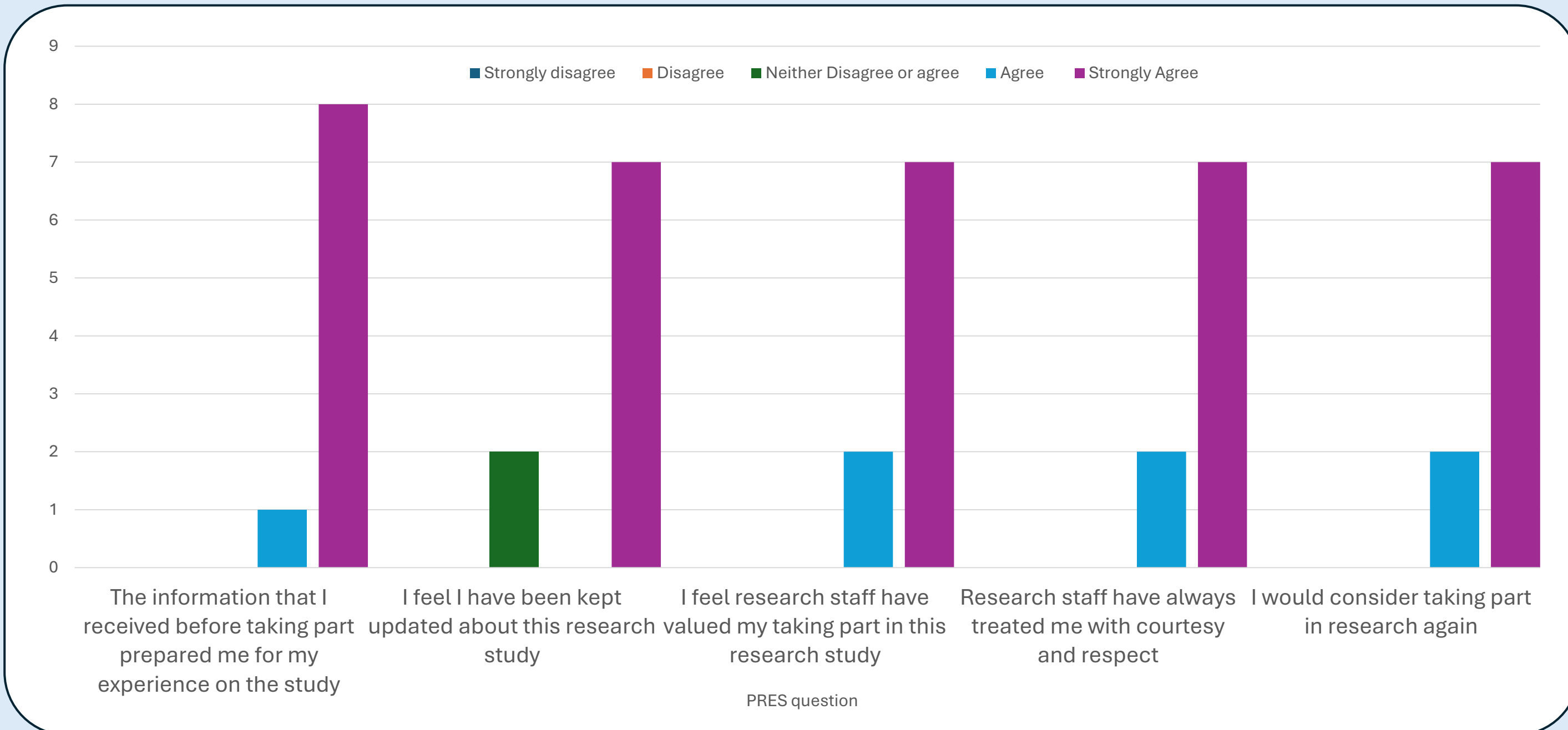
The CAIN trial successfully delivered the global-first in renal cancer treatment at Leeds Teaching Hospitals NHS Trust using histotripsy technology; a novel, non-invasive ultrasound-based treatment creating cavitation bubbles within the tumour to mechanically break down the tissue. The aim of this patient-focused study was to gather insights into the participants' experience.

## Material and Methods:

The UK National Institute of Health Research (NIHR) Participant in Research Experience Survey (PRES) was provided to all participants treated between 01/03/2023-01/12/2024. Completion of the survey was voluntary, and responses anonymised. Data were extracted to measure demographics, Likert scale responses of research experience and free-text comments.

## Results:

- All study participants (n=9) responded.
- Demographics – Ethnicity: black British/white British (1/8). Sex: female/male (3/6). Age groups: 50-59 (n=1), 60-69 (n=2), 70-79 (n=3), 80-89 (n=1), non-stated (n=2).
- All participants stated this was the first research trial they had participated in.
- All agreed (n=2) or strongly agreed (n=7) they would take part in research again.
- All agreed (n=1) or strongly agreed (n=8) they felt prepared for the trial by the information provided.
- All agreed (n=2) or strongly agreed (n=7) they felt their participation had been valued.
- All agreed (n=2) or strongly agreed (n=7) they had been treated with courtesy and respect.
- Participants' free-text comments identified key themes of altruism, the desire to contribute to medical science and the development of future treatments and technologies.



## What was positive about your research experience?

- "Knowing I am making a difference to medical science."
- "I will always be grateful for this opportunity to invest in the future treatment for cancer. The team took time to explain throughout the experience both verbally and physically was effortless on my behalf."
- "Because of my op the research team learnt valuable information which would benefit the next person to take part"
- "The research was very helpful, not only accepting me for the trial but also helping me to stand strong"
- "Everything was well handled and informative"
- "It was great to take part in future treatment & be able to find better ways to treat cancers"

## What would have made your research experience better?

- "Everything was perfect. Empathy, being genuine and considerate step by step"
- "Nothing it was superb throughout."
- "If it had been a success, other than that I cannot fault the people that looked after me."
- "If it had worked 100%"
- "No improvement required. Everything and everyone was exceptional."
- "Unable to quantify"

## Conclusion:

Participants were prepared to try novel therapy despite absence of long-term data, with high levels of motivation to help others and future technologies. High levels of satisfaction were reported for participating in this early-phase innovative, novel trial treatment, with willingness to participate in future trials.