

Co-designing a Point of Care Genomics Resource with Consumers for Oncology Patients

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Project scoping/Background

Personalised medicine and circulating tumour DNA (ctDNA)

The shift: Genomic testing is rapidly transforming cancer diagnostics and treatment response monitoring.

Liquid biopsy (ctDNA): Currently being evaluated as a companion diagnostic and monitoring tool in a number of tumour types including lung cancers¹.

Australian Guidelines and Studies

Feb 2025 (RCPA and TOGA): ‘Molecular Testing of Lung Cancer in Australia’ guidelines² outlining ctDNA use at diagnosis and disease recurrence.

2026 (ASPIRATION – 2 Liquid study³): Australian trial tracking 500 patients with driver mutation positive metastatic NSCLC to guide subsequent treatment decisions.

The consultation bottleneck

Medical Oncology consultations have limited time to explain complex genomic testing to patients.

The Missing Pieces for Patients

- ✗ What is ctDNA and what is being tested
- ✗ The specific test panels for their cancer type
- ✗ What the results mean and the next clinical steps

The Evaluation

Surveys conducted with Cancer Genetic Specialists alongside audits of major genomics information platforms (eviQ, Melbourne Genomics and the Centre for Genetics Education).

Findings: Current materials offer sparse, fragmented details

Verdict: There is a lack of comprehensive, patient –centered resource written in everyday, accessible language.

Project aim and plan

Assess patient ctDNA knowledge via a survey of cancer patients to determine their understanding of ctDNA testing, its role in their cancer treatment and ongoing monitoring, and empower patients to ask relevant questions of their treating team about ctDNA testing

Survey development completed with clinician and consumer feedback and shared using Google Forms to patient advocacy and consumer groups within GI Cancer Trials, ALK Positive Australia, Breast Cancer Trials (BCT), Rare Cancers Australia and TOGA.

The survey incorporated patient preferences, including

‘What information would you like in an educational resource?’

‘How would you like this information resource presented?’

‘Is there anything else you would like to know or have included in an information sheet/flyer?’

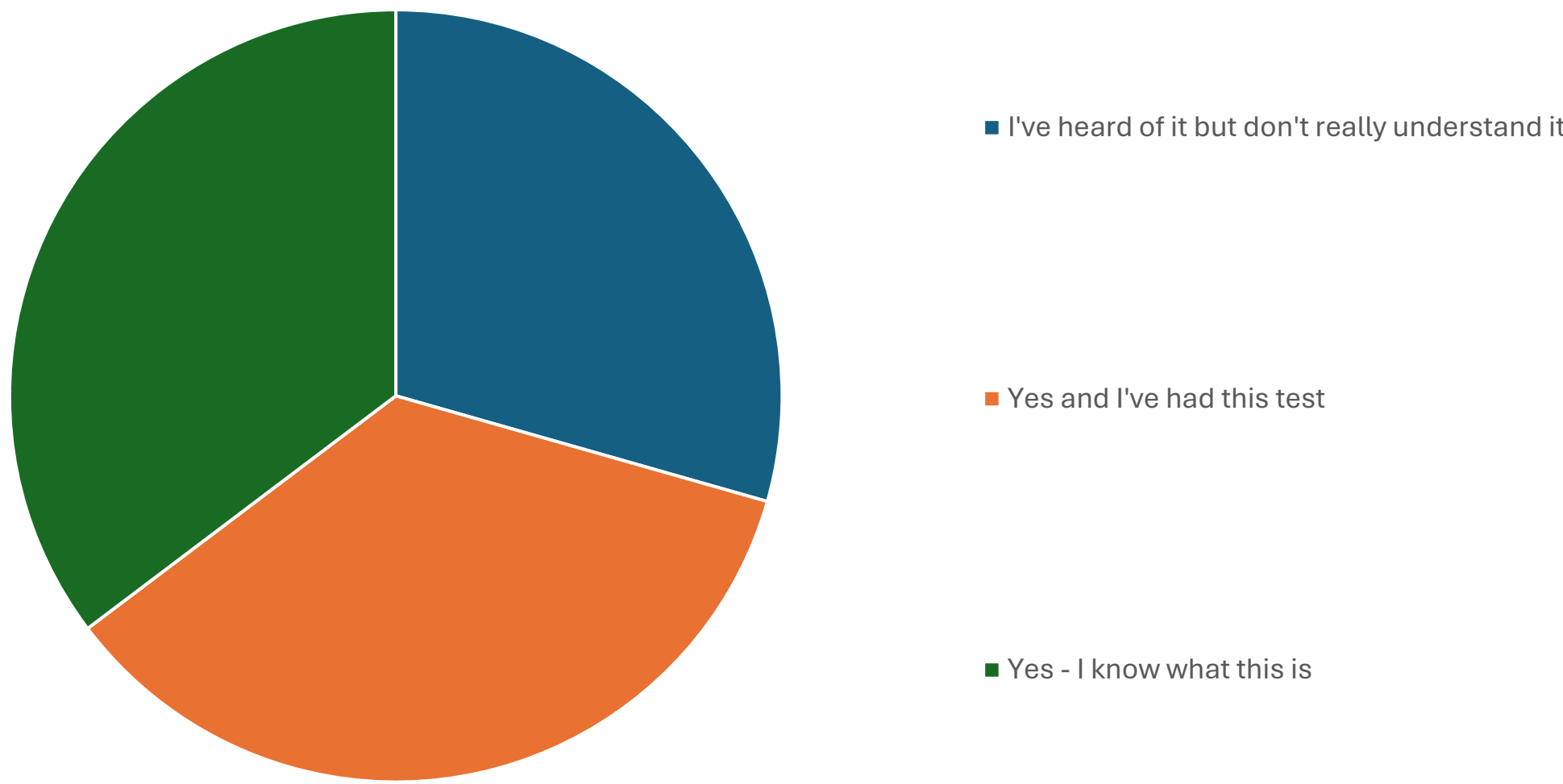
The project was completed as a Quality Improvement (QI) project focused on improving cancer patient's consumer education⁴.

Results

The survey has received 30 patient responses to date, with 17 responses from lung cancer patients. Focussing on lung cancer patient responses:

Patient Awareness and Understanding

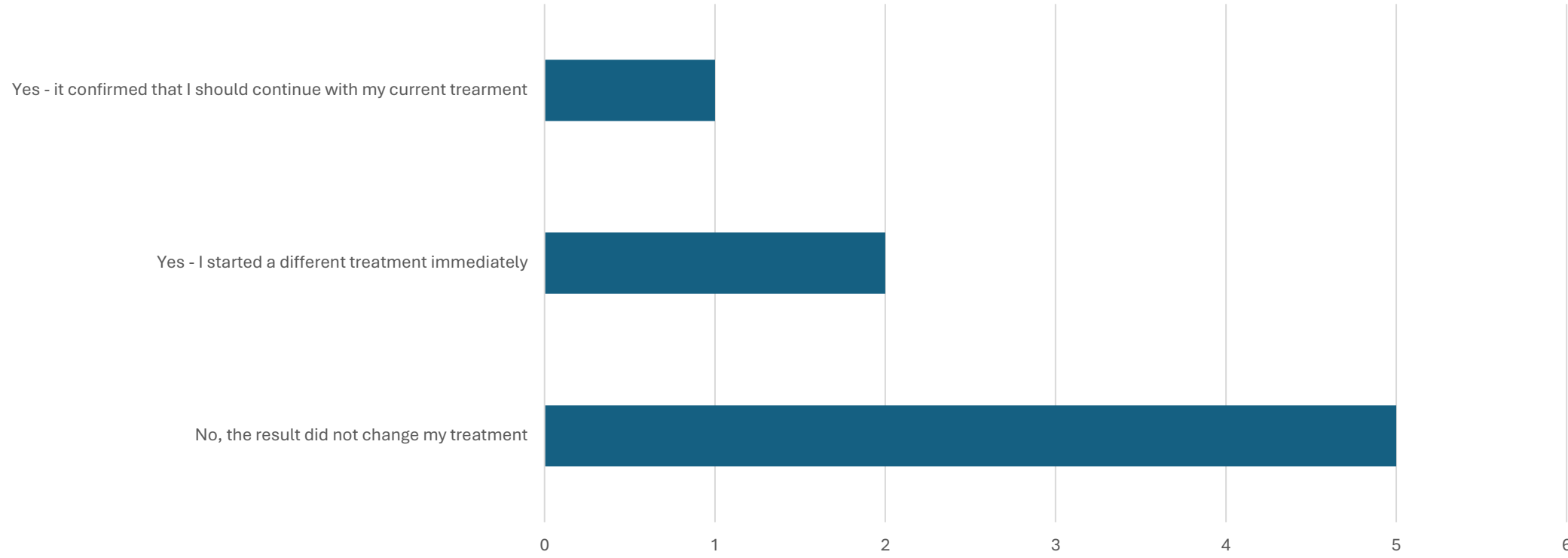
35% (6/17) patients understood ctDNA testing, 30% had heard of it but didn't really understand ctDNA testing and 35% had completed ctDNA testing, with a mix of self funded testing or testing as part of a clinical trial



Results (continued)

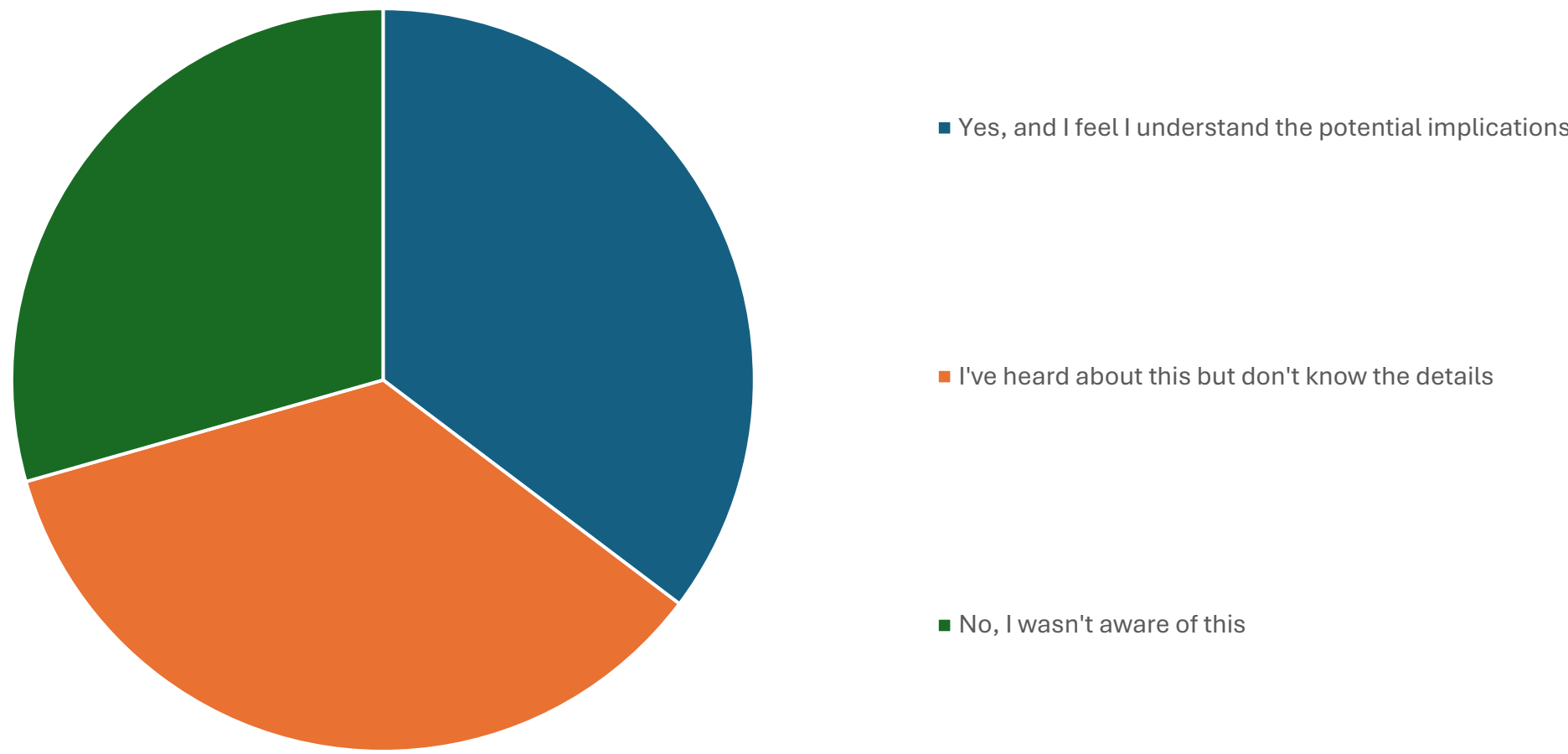
Treatment Impact

2 (20%) patients changed their treatment as a result of the ctDNA testing results, 1 (10%) patient's result confirmed they were on the correct treatment, 1 (10%) patient was unsure and for the remaining 5 (60%) patients, the result did not change their treatment



Potential Implications

- 35% (6/17) patients understood the potential implications, 35% were unsure and 30% were not aware of any implications associated with ctDNA testing.



Patients were most interested in:

- ✓ The basics of genetics
- ✓ The ctDNA testing process, what was being tested with ctDNA and how to interpret the results
- ✓ Ways to access testing – reimbursed or self- funded options in Australia
- ✓ Potential testing implications
- ✓ Links to resources

Project Limitations

- The survey results are not an accurate representation of the cancer patient population, as the survey was disseminated to patient advocates/consumer groups, who have a moderate to high level of health literacy.
- As the survey was in English, it did not capture any patients who are from culturally and linguistically diverse populations (CALD).

Future directions

- Once 100 patient responses are received, patient knowledge gaps and areas of interest will be assessed and incorporated into a draft patient resource
- The draft resource will be reviewed by Medical Oncology Clinicians and Genetic counsellors
- There is consideration to translate the finalised patient resource to the 5 most common languages used at the Northern Sydney Cancer Centre at Royal North Shore Hospital, which is Chinese (Mandarin and Cantonese), Korean, Greek and Italian

References

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