BMJ Open

Establishing a national platform to facilitate patient recruitment and advanced diagnostics for cancer immunotherapies (the NHS Cancer Vaccine Launch Pad): a multicentre prospective cohort feasibility study protocol

Benjamin Moxley-Wyles ,[1,2] Nicole Keyworth,[1] Victoria M Goss,[1] Samuel Goode,[1] Laura Pope,[1] Tiffany Joyce,[1] Jeny Mathew,[1] Charlotte M Stuart,[1] Sarah Chamberlain,[1,3] Jessica Curtis,[1] Dan Muller,[1,3] Emily C Shaw,[3,4] Max Shen,[5] Nicola Chapman-Hart,[5] Molly Obadiah,[5] Patrick Ezeani,[5] Gillian Rosenberg,[5] Jane Starczynski,[5] Sarrah Tayabali,[6] Katrina Cathie,[7] Lennard YW Lee,[8,9] Päivi Tikka-Kleemola ,[10] James Batchelor,[11] Zandra C Deans,[12] Simon Crabb,[1,3] Gareth Griffiths,[1,3] Peter WM Johnson[3,5]

To cite: Moxley-Wyles B, Keyworth N, Goss VM, *et al*. Establishing a national platform to facilitate patient recruitment and advanced diagnostics for cancer immunotherapies (the NHS Cancer Vaccine Launch Pad): a multicentre prospective cohort feasibility study protocol. *BMJ Open* 2026;**16**:e124300. doi:10.1136/bmjopen-2026-124300

► Prepublication history for this paper is available online. To view these files, please visit the journal online (https://doi.org/10.1136/bmjopen-2026-124300).

Received 16 June 2026
Accepted 26 October 2026

Check for updates

© Author(s) (or their employer(s)) 2026. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.

For numbered affiliations see end of article.

Correspondence to
Dr Benjamin Moxley-Wyles; ben.moxley-wyles@soton.ac.uk

ABSTRACT

Background The National Health Service (NHS) Cancer Vaccine Launch Pad (CVLP) is a research study designed to develop national patient referral and tumour tissue processing pathways to support patients with cancer to access commercial cancer vaccine and other targeted immunotherapy clinical trials. Recent advances in nucleic acid technology, tumour sequencing and immuno-oncology have renewed interest in cancer vaccines and other targeted immunotherapies. The CVLP aims to accelerate translation to routine care by assessing the feasibility of integrating patient screening, consent, biological sample handling and genomic profiling across the NHS to support access to these trials. This will prepare the NHS for wider implementation should these novel therapeutics be adopted.

Methods and analysis The CVLP (ISRCTN13053675) is a multicentre prospective observational cohort feasibility study, sponsored by NHS England and coordinated by the Cancer Research UK Southampton Clinical Trials Unit (SCTU). Via an academically led protocol, adult participants will be recruited from participating NHS locations. Consent will be obtained for the use of routinely collected demographic and clinical data alongside access to surplus tumour tissue and other biological samples for molecular analysis. This will serve to guide trial eligibility and onward referral to commercial trials open in the UK. Initial feasibility of the CVLP platform will be assessed via recruitment rates, timeliness of tumour tissue and biological sample handling and the proportion of participants referred onward to commercial clinical trials on the CVLP portfolio. Analysis will be descriptive, summarising recruitment metrics, pathway timelines and follow-up outcomes.

Ethics and dissemination This study received ethical approval from East of England—Essex Research Ethics Committee on 20 August 2023 (23/EE/0178). Findings will be disseminated through peer-reviewed publications, scientific meetings and stakeholder reports to inform national delivery models for NHS cancer services. Lay summaries of study progress and findings will be published on the SCTU website.

Trial registration number ISRCTN13053675.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ The multicentre prospective design of this study enables evaluation of patient referral and sample-processing pathways using NHS infrastructure across the UK.
⇒ Standardised referral and tissue-processing pathways support consistent operational delivery across participating locations.
⇒ Operation of the NHS Cancer Vaccine Launch Pad relies on onward referral to a clinical trial portfolio which, in turn, is dependent on continued participation of industry partners with appropriate trials.
⇒ Variation in eligibility and sample requirements between supported trials may limit comparability across participants that are referred to different supported trials.

INTRODUCTION

Cancer immunotherapy is an area of active, fast evolving research and clinical progress. In many instances, immunotherapeutic targeting depends on the identification

BMJ Open: first published as 10.1136/bmjopen-2026-124300 on 9 November 2026. Downloaded from http://bmjopen.bmj.com/ on November 10, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

of specific molecular characteristics, such as somatic mutations, in individual tumour samples. The discovery of novel molecular targets provides an opportunity to develop equally novel therapeutics. Over recent years, understanding of the complexities of the human immune system and tumour immunobiology, including the tumour micro-environment and mechanisms of immune evasion, has expanded considerably, alongside advances in messenger RNA (mRNA) vaccine manufacture, lipid nanoparticle delivery and nucleoside modification.[1] These have led to renewed interest in mRNA-based and other types of, therapeutic cancer vaccines that complement the rapidly developing immunotherapy landscape.[2]

Therapeutic cancer vaccines are a form of immunotherapy designed to elicit an immune response against tumour-specific or tumour-associated antigens expressed by malignant cells and can be split into two types: personalised and non-personalised. Personalised cancer vaccines are tailored to an individual patient, targeting specific neoantigens unique to their cancer. Non-personalised, or 'off-the-shelf', cancer vaccines target neoantigens that are common in cancers of the same type in many patients. These novel therapeutics may be given alongside other immunotherapies, such as immune checkpoint inhibitors, to potentiate their action.

Despite growing scientific and commercial interest, most cancer vaccines are in the early clinical development stages, with phase 2 and 3 studies required to assess their safety and efficacy. Although other types of immunotherapy may be more established and already in clinical use, clinical development of new therapeutics continues, with current emphasis on bispecific antibodies.[2–4]

Targeted immunotherapies, including cancer vaccines, may not be appropriate for all patients and all cancer types. Additional diagnostic testing, from patients' biological samples such as blood and/or tumour tissue, may be required to determine if a targeted immunotherapy is likely to be beneficial for an individual patient and their specific cancer. These requirements create operational challenges for health systems seeking to support equitable patient access to relevant clinical trials.

The NHS and UK Government have published key UK ambitions that will support clinical development of immunotherapies and enhance genomic healthcare infrastructure in 'Genome UK', 'The Life Sciences Vision', the 'NHS Genomics Strategy' and the 'NHS 10 Year Health Plan for England'.[5–8] These papers include the following shared ambitions:

- To give patients an opportunity to participate in research for their potential benefit and to inform future care for other patients.
- To accelerate the development of cancer vaccines, as well as other immunotherapies, from being an innovation to representing 'business-as-usual'.
- To create the most advanced and integrated genomic research healthcare ecosystem in the world.
- To use genomic research assets to drive the next generation of Life Sciences discoveries.

However, when the biotechnology and pharmaceutical industries operate commercial trials in the UK, they are often restricted to a relatively small number of NHS locations that have the capacity and capability to run clinical trials of novel interventions and associated complex sample processing requirements. Consequently, patients who are treated in less research active hospitals often do not have equitable access to these trials. Smaller eligible patient populations at cancer centres running commercial trials take longer to recruit, as only a limited proportion of UK patients can potentially participate due to geographical constraints. A new approach is needed in the UK to enable a greater opportunity for patients to be matched with supported cancer vaccine and targeted immunotherapy clinical trials, irrespective of where their standard of care NHS treatment takes place.

To achieve these ambitions, the NHS Cancer Vaccine Launch Pad (CVLP) has been set up to establish the feasibility of pathways that enable NHS patients to access cancer vaccine and other targeted immunotherapy trials.

The CVLP is a collaborative research study sponsored by NHS England (NHSE) and coordinated by the Cancer Research UK Southampton Clinical Trials Unit (SCTU), with input from government, government-funded independent bodies and industry partners.

In this paper, the authors report the CVLP protocol.

METHODS AND ANALYSIS

Objectives

The primary objective of this study is to determine a feasible model for a national patient identification, recruitment and referral network for participation in cancer vaccine and immunotherapy trials. Feasibility will be determined by:

1. The ability to identify and refer potentially eligible patients to clinical trials supported by the CVLP.
   a. The target number of patients is dependent on the size of participating industry trials; however, a minimum target of 200 patients consenting to the CVLP per year is expected.
2. The capacity to prepare and process tumour and other biological samples within clinically relevant time frames, where required.
   a. Time frames may vary depending on the sample type and the requirements of the participating industry trial protocols. An overarching target of less than 2 weeks for the preparation of all samples within the CVLP will be in place if no shorter time frame is required for each participating industry trial.
3. The proportion of referred patients who proceed to enrolment in CVLP supported clinical trials.
   a. This is an exploratory objective to further understand how many CVLP participants go on to participating trials supported by the CVLP. This is expected to be approximately 10% for individualised mRNA cancer vaccines; however, this will vary de-

BMJ Open: first published as 10.1136/bmjopen-2026-124300 on 9 November 2026. Downloaded from http://bmjopen.bmj.com/ on November 10, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

pending on the number and type of clinical trials supported at any time.

The secondary objective is to determine if genomic sequencing outputs from NHS laboratories can support the manufacture of therapeutic cancer therapies.

Acheivement of these objectives will be evaluated annually.

Study design

This is a multicentre prospective observational cohort feasibility study for the recruitment, biological sample processing and onward referral of NHS patients to support participation in interventional clinical trials of cancer vaccines and immunotherapies available through the CVLP. No specific therapeutic intervention is proposed: this study provides the infrastructure for supporting multiple biotechnology and pharmaceutical industry partner organisations, accommodating patient identification and referral into relevant clinical trials, and parallel biological sample handling where required. Should patients entering the CVLP be matched to an appropriate onward trial, they would be introduced to, and then liaise directly with, the corresponding commercial trial team/NHS location. Should they consent to entering the trial, all associated trial processes are conducted outside of the CVLP. The CVLP is a non-commercial study that matches UK patients with available commercial cancer clinical trials.

Dependent on the requirement of the onward trial, patients will be asked to consent to their surplus tumour material, collected as part of standard of care, to be sent for genomic sequencing and analysis. Patients may also have blood samples, along with other biological samples (eg, urine), collected and sent for analysis, where necessary.

Patients will be asked to allow access to their relevant medical records and storage of routine clinical data. These data will be linked to any molecular information generated as part of the CVLP. Outcomes following participation in a clinical trial and yearly survival data will also be collected and stored by the CVLP.

One, or a combination of, the pathways including patient referral, tumour tissue (or other biological sample) processing and genomic sequencing will be used dependent on the requirements of the supported clinical trials, as illustrated in figures 1(figure 1), 2(figure 2), and 3(figure 3).

In instances where a supported clinical trial requires genomic sequencing or other advanced diagnostic testing for patient eligibility purposes, tumour material will be processed as per the trial protocol for nucleic acid extraction, quality assessment and genomic sequencing. Where there is provision for required advanced diagnostics within the NHS, an NHS laboratory will perform these tests. Where there is no provision within the NHS, tests will be performed by the industry partner sponsoring the relevant onward clinical trial.

Cellular Pathology Genomic Centres (CPGCs) have been established to support delivery of standard of care tissue preparation for submission to Genomic Laboratory Hubs (GLHs) as part of the NHS Genomic Medicine Service. In addition, they provide the infrastructure required to establish standardised, high-quality tissue preparation pathways and optimise sample preparation for the CVLP. These centres support consistent, high-quality sample preparation across clinical trials while retaining flexibility to meet the requirements of individual studies. Where required, this remit also includes the delivery of advanced diagnostics in support of trials.

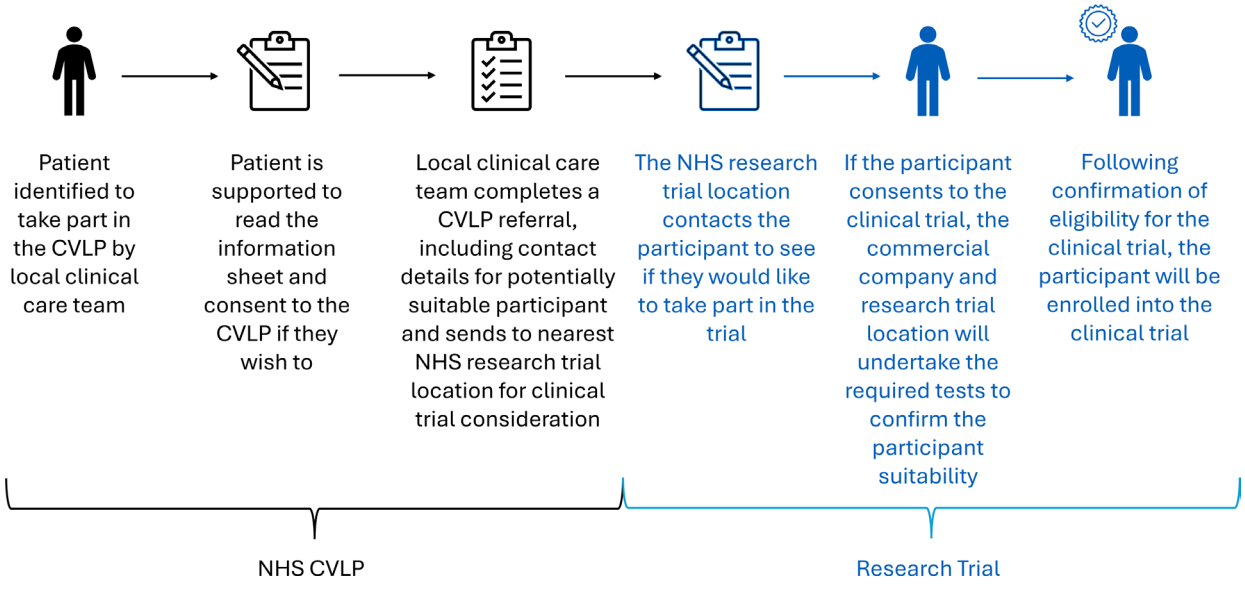


Figure 1 CVLP patient referral pathway. The process from patient identification and CVLP consent to onward referral and enrolment onto an appropriate clinical trial. CVLP, Cancer Vaccine Launch Pad; NHS, National Health Service.

BMJ Open: first published as 10.1136/bmjopen-2026-124300 on 9 November 2026. Downloaded from http://bmjopen.bmj.com/ on November 10, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

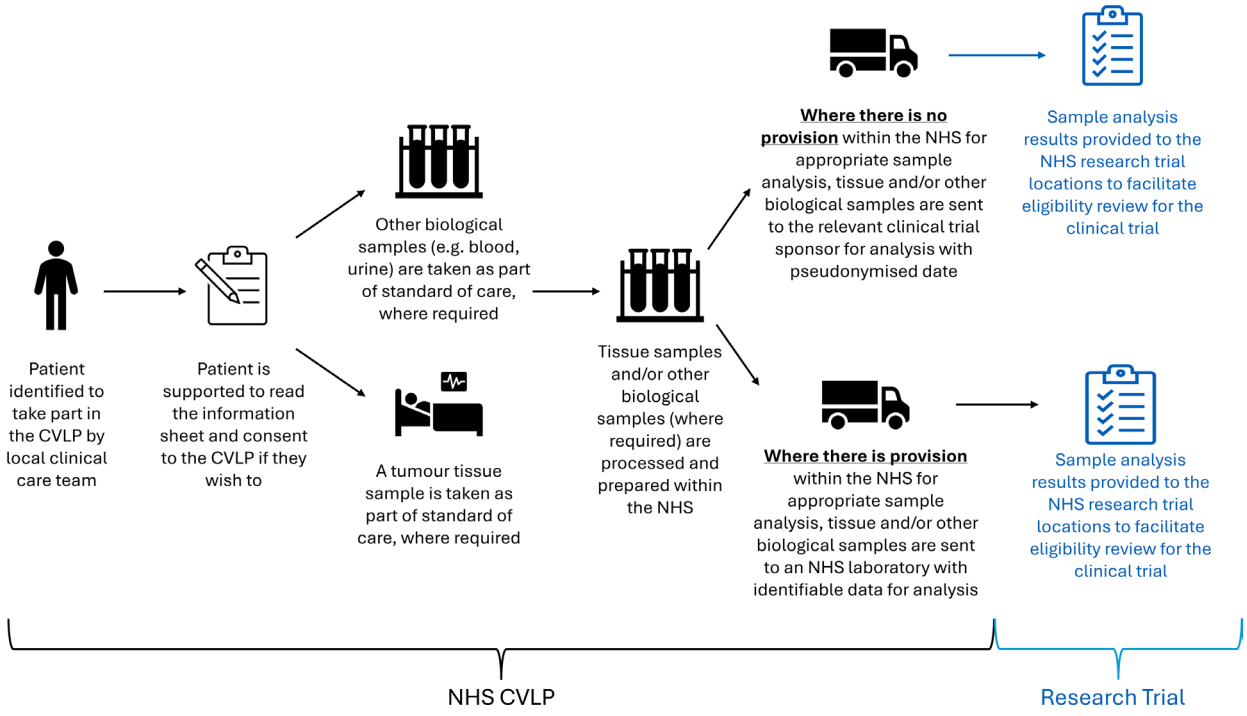


Figure 2 CVLP tumour tissue (and other biological samples) pathway. A pathway for patient consent to the CVLP and the subsequent acquisition and processing of surplus patient tumour tissue (or other biological samples). Dependent on NHS capability and specific trial requirements, samples may undergo additional processing in an NHS or industry setting. CVLP, Cancer Vaccine Launch Pad; NHS, National Health Service.

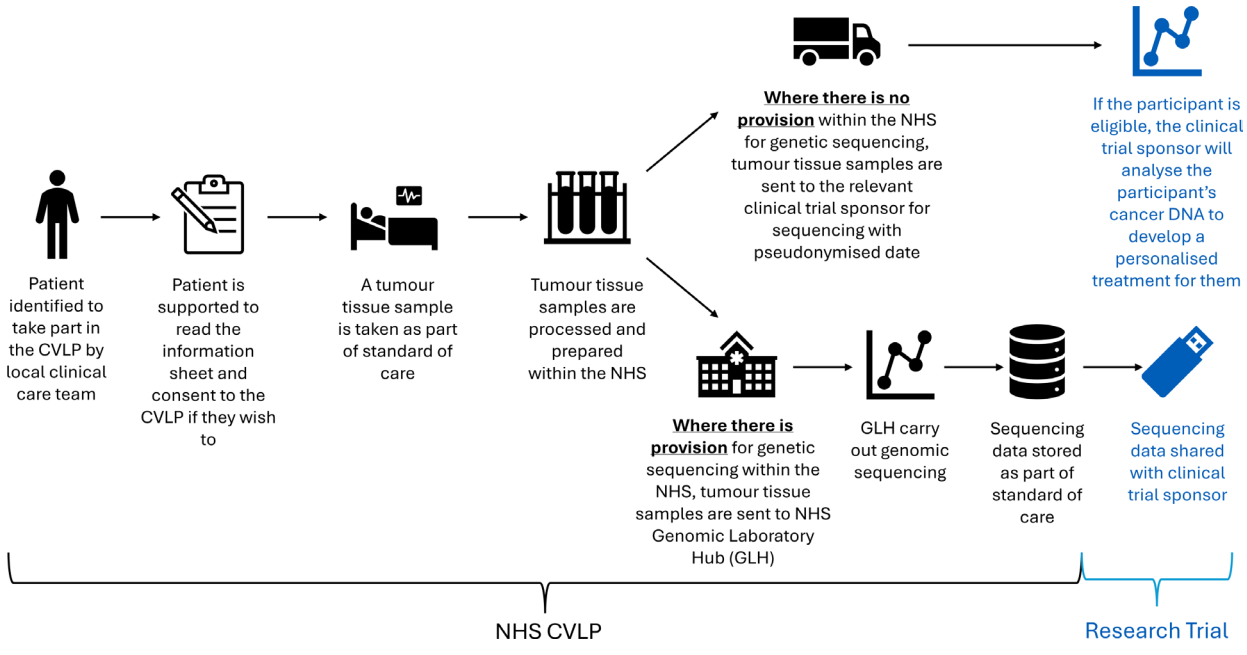


Figure 3 CVLP genomic sequencing pathway. A pathway for patient consent to the CVLP and the subsequent genomic sequencing of surplus tumour tissue if required for the specific trial. Dependent on NHS capability and specific trial requirements, samples may undergo genomic sequencing in an NHS or industry setting. NHSE aims to provide all genomic sequencing in an NHS setting in the future so that sequencing data are retained and can be used for other research that benefits NHS patients. CVLP, Cancer Vaccine Launch Pad; NHS, National Health Service; NHSE, NHS England.

BMJ Open: first published as 10.1136/bmjopen-2026-124300 on 9 November 2026. Downloaded from http://bmjopen.bmj.com/ on November 10, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

The future ambition is for the samples to be processed and sequenced within the NHS with CPGCs and GLHs, or equivalent in the devolved nations, undertaking this through standard of care pathways. Prior to the transition, a validation process will be conducted to enable the GLHs to carry out DNA/RNA extraction and then nucleic acid sequencing for 'repatriation' into the NHS. Therefore, where clinical trials requiring genomic sequencing are supported by the CVLP, the CVLP will take on the additional task of organising the genomic sequencing and analysis of tumour tissue to identify mutations that may be suitable for use in a personalised cancer treatment.

Selection and enrolment of patients into the CVLP study

Eligibility

Participants will be eligible for inclusion in the CVLP if they:

- Are over the age of 16.
- Have a cancer for which there is a supported industry clinical trial.
- Have a tumour which has been, or will be, resected or biopsied.
- Have the capacity to consent to involvement in the CVLP.
- Have sufficient tumour available for genomic analyses for clinical trials which require it (to be assessed by local pathology once tissue sample is collected).

There are no exclusion criteria specifically for the CVLP.

There are referral criteria to be considered in addition to the above list specific for each clinical trial for which patients are considered and referred. These referral criteria are outlined in the clinical trial specific technical requirements documents.

Consent and registration process

Participants who consent to take part in the CVLP are registered using a central electronic referral tool. This tool was co-developed and is managed by BC Platforms Oy and SCTU with ongoing technical and infrastructure support by the Clinical Informatics Research Unit, University of Southampton. Only trained personnel with specific roles assigned will be granted access to the referral tool. Completion guides will be provided to the investigator locations to aid data entry of participant information. The data are submitted to the trial location through the referral tool for review, which will enable participants to be contacted and offered research trials sponsored by partner industry organisations.

Onward referral to clinical trials

Suitable participants referred via the CVLP will be contacted by NHS research trial locations delivering the industry cancer vaccine or immunotherapy clinical trials and a separate consent process to the onward trial will take place. This 'onward referral' will be via the central electronic referral tool to NHS research trial locations delivering the cancer vaccine or immunotherapy clinical trials.

Withdrawal criteria

No CVLP withdrawal criteria are specified other than participant preference. Participants remain free to withdraw at any time without giving reasons and without prejudicing their further treatment. In this event, any stored tissue, blood and other biological samples, including nucleic acid, will be disposed of.

End of study

The end of study for individual participants will occur when one of the following events takes place:

- The participant reaches the final yearly survival check for the CVLP.
- The participant is lost to annual follow-up.
- The participant withdraws consent from the CVLP.
- The participant dies.

End of study criteria for supported clinical trials are separate to the CVLP and are determined by each supported clinical trial protocol.

Since this is a feasibility study to establish the conditions for successful transition into standard of care pathways, the CVLP will be closed if CVLP patient referral and sample processing pathways are adopted as standard of care within the NHS, or if there is no demand from partner organisations for the support of new clinical trials via the CVLP and funding ends. The CVLP will also be closed if it is deemed unfeasible (as assessed against the objectives); for example, if the expected annual participant recruitment target is not met, NHSE may consider closure of the study.

Statistical analysis

Feasibility outcomes will be summarised descriptively. Time intervals for key pathway steps, including preparation of tumour samples for analysis where required will be summarised as median, quartiles, 5th and 95th percentiles and range expressed in days. In determining whether all patient tumour samples (when required) are prepared for analysis within 2 weeks, a sample size of 200 per associated clinical trial provides a lower 95% Wilson CI[9] of 0.98 if the observed proportion is 1 (and above 0.9 if at least 189 are processed in time). If above 0.9, this is considered as evidence that a high proportion of patient samples can be prepared for analysis within 2 weeks.

The proportion of participants who are referred onward, assessed as eligible for a supported trial and subsequently participate in supported cancer vaccine or immunotherapy trials will also be reported with 95% Wilson score CI.[9] Loss to follow-up, withdrawals and deaths will also be reported. Descriptive analysis of the patients entering CVLP to examine associations between baseline clinical characteristics, omics and clinical outcomes will be undertaken.

No formal sample size calculation has been performed as sample size targets will be based on recruitment rates

BMJ Open: first published as 10.1136/bmjopen-2026-124300 on 9 November 2026. Downloaded from http://bmjopen.bmj.com/ on November 10, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

over time required by the clinical trials supported by the CVLP. The results of each supported trial that CVLP participants enter are outside of CVLP and are reported when the supported trial results are analysed.

Industry partner onboarding

Additional industry partners may be onboarded during this study, with appropriate interventional clinical trials supported by the CVLP. This includes cancer vaccines and other targeted immunotherapy clinical trials that require a widened referral network and biological sample processing pathway to aid trial prescreening, eligibility and enrolment. Onboarding involves: assessing proposed industry trial protocols for feasibility and alignment with UK standard of care, CVLP participant and sample pathway development, development of streamlined referral criteria and activation of the proposed study as a new arm of the CVLP at participating locations.

Patient and public involvement

Lay members are selected as NHSE Patient and Public Voice (PPV) Partners in line with NHSE's policy on working in partnership with people and communities.[10] PPV Partners with lived experience of cancer have been involved in study design and protocol development, as well as the development of technical requirements and set up of all supported clinical trials. PPI representatives from SCTU contributed to the initial bid to coordinate this study and continue to contribute alongside NHSE PPV Partners, providing comments and review in appropriate working and oversight groups. In these groups, PPI/PPV representatives work with team members from NHSE and SCTU, and clinical subject matter experts. There will be PPI throughout the duration of the study, including when disseminating study results and other associated outcomes.

ETHICS, REGULATORY ASPECTS AND DISSEMINATION

The study sponsor is NHSE. The study received approval from East of England—Essex Research Ethics Committee (REC) on 20 August 2023 (ref: 22/EE/0178). The study is registered on the ISRCTN registry (ISRCTN13053675) and has the following IRAS project ID: 325 291.

At the time of submitting this manuscript, V.4.0 (09-09-2025) is the latest version of the study protocol. Important protocol modifications are reported to relevant parties as part of SCTU's standard operating procedures.

SCTU follows the University of Southampton information governance and security framework which includes a Data Protection policy adhering to the UK General Data Protection Regulation (GDPR) and all data protection legislation. Participant information is stored in line with GDPR and the Data Protection Act (2018). Any industry partners joining the CVLP are first required to demonstrate that the appropriate legal, ethical and data governance processes are in place before being accepted. Industry partners cannot directly access the CVLP platform database. Participant information is pseudonymised and only shared with industry partners after explicit consent for CVLP enrolment and 'onward referral'. Sharing of biological material and data will follow the principles of the minimum required and on a pseudonymised basis.

The study may be subject to inspection and audit by NHSE, under their remit as sponsor, the SCTU as Sponsor's delegate and other regulatory bodies to ensure adherence to the principles of Good Clinical Practice, Research Governance Framework for Health and Social Care, applicable contracts/agreements and national regulations.

Study results and other associated outcomes related to the CVLP will be disseminated via peer-reviewed journals, scientific meetings, and stakeholder reports. Lay summaries of study findings will be published on the SCTU website.

DISCUSSION

The CVLP is the first national patient referral and tissue processing platform for cancer vaccine and immunotherapy clinical trials, representing a new practice-changing model for clinical research. It is intended to test the feasibility of coordinated national pathways to benefit patients with cancer, but also contribute to many wider NHS, UK Government, Life Sciences and industry goals.[5–8]

The development of a national patient referral network as part of the CVLP involves opening referral locations across the country, including at hospitals that are not traditionally active in experimental cancer medicine studies. This will improve equitable access to cancer vaccine and immunotherapy clinical trials, especially for patients who are not in the catchment area of larger research active cancer centres. This network leads to a larger cohort of eligible patients who may wish to participate, potentially accelerating recruitment timelines for clinical trials while also providing increased trial participant diversity. The CVLP network currently covers England, with the intention to expand to the devolved nations of the UK.

Harnessing the reach of a national healthcare system allows industry research and development to be de-risked by using the robust infrastructure that is already in place. It also allows industry to better understand NHS patient treatment pathways to adapt clinical trials and predict how cancer vaccines and immunotherapies may be integrated into the NHS, if found to be efficacious and commercialised. The CVLP's development and utilisation of NHS infrastructure to support clinical trials is complemented by the UK Vaccine Innovation Pathway (VIP). This is an initiative to create a more streamlined research delivery system that supports the UK Government aim of becoming a global leader in clinical trials.[11 12] The CVLP and VIP are embedded within the NHS Cancer Plan and form the foundations for a future NHS cancer trials accelerator programme.[13]

BMJ Open: first published as 10.1136/bmjopen-2026-124300 on 9 November 2026. Downloaded from http://bmjopen.bmj.com/ on November 10, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

Over the long term, the CVLP has the potential to collate a large NHS held data pool that can include clinical, pathology, radiology and genomic data. This will be a valuable resource for future clinical cancer research.

By nature of its design, the CVLP supports clinical trials but does not directly assess treatment efficacy. Feasibility of this study is based on how the CVLP performs its function which depends on the participation of industry partners and operational performance within the NHS. The CVLP has already shown success in the early years of its operation. However, for this success to continue, the CVLP relies on the recognition of its strengths, identification and resolution of any inefficiencies or pitfalls, ongoing support from industry partners and maintenance of a sustainable infrastructure. There must be a sufficient number of appropriate and adequately performing clinical trials on the CVLP portfolio for it to operate.

In future, this study will provide evidence on whether a national NHS approach to patient referral and biological sample processing pathway coordination is deliverable. The CVLP will be a key driver in ensuring the NHS has robust infrastructure, formalised internal pathways and workforce expertise to provide cancer vaccines and novel immunotherapies as standard of care, if they are found to be efficacious and cost-effective.

Author affiliations
[1]Cancer Research UK Southampton Clinical Trials Unit, University of Southampton, Southampton, UK
[2]Department of Cellular Pathology, Oxford University Hospitals NHS Foundation Trust, Oxford, UK
[3]University Hospital Southampton NHS Foundation Trust, Southampton, UK
[4]Faculty of Medicine, University of Southampton, Southampton, UK
[5]NHS England, London, UK
[6]Royal Free London NHS Foundation Trust, London, UK
[7]NIHR Southampton Clinical Research Facility and Biomedical Research Centre, University Hospital Southampton NHS Foundation Trust, Southampton, UK
[8]Department of Oncology, University of Oxford, Oxford, UK
[9]Oxford University Hospitals NHS Foundation Trust, Oxford, UK
[10]BC Platforms Ltd Oy, Espoo, Finland
[11]Clinical Informatics Research Unit, University of Southampton, Southampton, UK
[12]GenQA, Laboratory Medicine, NHS Lothian, Royal Infirmary of Edinburgh, Edinburgh, UK

Acknowledgements The authors gratefully acknowledge the support from clinical and research staff at all CVLP locations, along with all participating patients, NIHR Research Delivery Networks, biotechnology industry partners and involved patient and public voice partners and charities.

Contributors The study was conceived by PJ and designed by PJ, NK, GR, NC-H, GG, VG, BM-W, ST and LL with input from all other authors. BM-W and NK drafted the manuscript with input from PJ, GG and VG and all other authors. All authors reviewed, edited and approved the final version of the manuscript. BM-W is the guarantor.

Funding The study is primarily funded by the sponsor, NHSE, with additional financial support from CVLP industry partners. Cancer Research UK Southampton Clinical Trials Unit was successful in being awarded NHSE funding to run the CVLP via a NHSE tender process.

Competing interests DM has received travel funding from Eisai and presenter fees from Bristol Myers Squibb. KC acts on behalf of University Hospital Southampton NHS Foundation Trust as an investigator and/or provides consultative advice on studies funded or sponsored by pharmaceutical companies and vaccine manufacturers including AstraZeneca, GlaxoSmithKline, Janssen, Medimmune, Merck, Pfizer, Sanofi, Iliad, Moderna, Novartis and GL Pharma UK; she receives no personal financial payment for this work. GG holds the grant from NHSE to SCTU for coordination of the CVLP. MS, NC-H, MO, PE, GR, JS and PJ are affiliated with the study sponsor, NHSE. Given this is a feasibility study that may lead to integration of new patient pathways into the NHS, NHSE as study sponsor has had influence on study design. All other authors declare that they have no competing interests.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: https://creativecommons.org/licenses/by-nc/4.0/.

ORCID iDs
Benjamin Moxley-Wyles https://orcid.org/0000-0002-0912-9324
Päivi Tikka-Kleemola https://orcid.org/0000-0003-3348-0760

REFERENCES

1 Grimmett E, Al-Share B, Alkassab MB, *et al*. Cancer vaccines: past, present and future; a review article. *Discov Oncol* 2022;13:31.
2 Bandara S, Raveendran S. Current landscape and future directions in cancer immunotherapy: therapies, trials, and challenges. *Cancers (Basel)* 2025;17:821.
3 Mitra A, Kumar A, Amdare NP, *et al*. Current landscape of cancer immunotherapy: harnessing the immune arsenal to overcome immune evasion. *Biology (Basel)* 2024;13:307.
4 Surowka M, Klein C. A pivotal decade for bispecific antibodies? *MAbs* 2024;16:2321635.
5 HM Government. Genome UK: the future of healthcare [online]. 2020. Available: https://www.gov.uk/government/publications/genome-uk-the-future-of-healthcare [Accessed 2 Nov 2025].
6 HM Government. Life sciences vision [online]. 2021. Available: https://www.gov.uk/government/publications/life-sciences-vision [Accessed 2 Nov 2025].
7 NHS England. Accelerating genomic medicine in the NHS [online]. 2022. Available: https://www.england.nhs.uk/publication/accelerating-genomic-medicine-in-the-nhs/ [Accessed 2 Nov 2025].
8 HM Government. Fit for the future: the 10 year health plan for England [online], 2025. Available: https://www.gov.uk/government/publications/10-year-health-plan-for-england-fit-for-the-future [Accessed 2 Nov 2025].
9 Wilson EB. Probable inference, the law of succession, and statistical inference. *J Am Stat Assoc* 1927;22:209–12.
10 NHS England. Policy on working in partnership with people and communities [online], 2025. Available: https://www.england.nhs.uk/long-read/policy-on-working-in-partnership-with-people-and-communities/ [Accessed 2 Jun 2026].
11 National Institute for Health and Care Research. UK vaccine innovation pathway [online]. 2024. Available: https://www.nihr.ac.uk/support-and-services/industry/spotlights/uk-vaccine-innovation-pathway [Accessed 2 Nov 2025].
12 Danson S, Jones RP, Duggleby K, *et al*. The UK vaccine innovation pathway. *Immunother Adv* 2026;6:ltaf032.
13 HM Government. The national cancer plan for England: delivering world-class cancer care [online], 2026. Available: https://www.gov.uk/government/ations/national-cancer-plan-for-england [Accessed 17 Feb 2026].

BMJ Open: first published as 10.1136/bmjopen-2026-124300 on 9 November 2026. Downloaded from http://bmjopen.bmj.com/ on November 10, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.