Wales' cancer research strategy, CReSt: Celebrating our collective progress

March 2026

The CReSt strategy has set a collective responsibility for progress in cancer research in Wales.

Our research community is a vibrant and ever-evolving set of individuals, teams, groups, and organisations. This report celebrates some of the highlights since CReSt was launched in 2022.

This report is also available in Welsh:
https://walescancerresearchcentre.org/cy/strategy-welsh/

About CReSt — Page 4

Find out about Wales' first unified cancer research strategy and how its delivery is being supported

Wales' cancer research environment in 2025 — Page 6

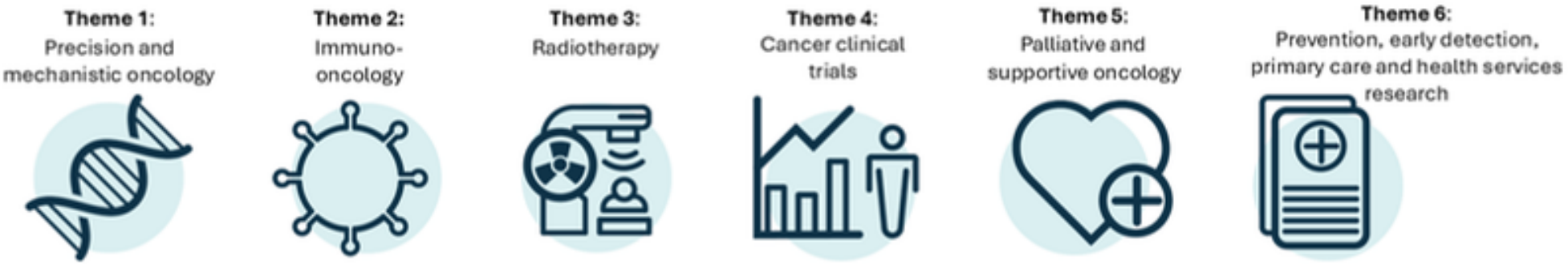
See how organisations and groups have responded to the challenge of increasing cancer research activity

Wales' research highlights 2022-25 — Page 12

Read about some of Wales' notable research activity since 2022, such as major awards and clinical studies

Research themes across Wales in 2025 — Page 29

View a snapshot of the research themes in different locations across Wales



CReSt is the first all-Wales Cancer strategy, launched in 2022

The **Cancer Research Strategy for Wales (CReSt)** was published in 2022 as the first all-Wales approach to providing a unified direction of travel for cancer research in the principality.[1]

It was launched by **Health and Care Research Wales**, the **Wales Cancer Network** (now known as the National Cancer Team) and the **Wales Cancer Research Centre** following research community and expert panel input, and has been supported by a range of Welsh NHS and academic institutions.

Its core aim is to **build capacity in a focused way** around the **six CReSt themes** above, which are Wales' areas of research strength.

By building a collaborative, efficient, and well-supported research community, we are increasing research grant income and expanding the research base and, ultimately, improving outcomes for patients with cancer.

CReSt recommendations

- Ensure high-level **strategic support** and collective responsibility
- Focus on the **six themes** of research strength
- **Research leaders** to champion each theme, via a Leadership Group
- Identify gaps in the **research workforce and career pathways**
- Explore future opportunities for cancer research **funding**
- Develop new cancer research **infrastructure**
- Explore **commercial** joint ventures and investment, including **spin outs**

1. Health and Care Research Wales, Wales Cancer Network and Wales Cancer Research Centre. Moving Forward: A Cancer Research Strategy for Wales. https://walescancerresearchcentre.org/crest/ (2022).

The Wales Cancer Research Centre has realigned its work programme to support CReSt delivery

Canolfan Ymchwil Canser Cymru | Wales Cancer Research Centre

The **Wales Cancer Research Centre** (WCRC) was established in 2015, and works across sectors and institutions in Wales, with core funding from the Welsh Government via Health and Care Research Wales, and institutional support from Cardiff University.

Upon the publication of CReSt, we redirected our 2023-25 funding to **support and coordinate CReSt delivery**, and in 2025-30, we are continuing to focus on the high-level items in CReSt. This includes:

- running the **CReSt Leadership Group** and WCRC/CReSt Steering Committee, to coordinate progress across the six CReSt themes
- aligning our **directly funded research posts** to support emerging talent in CReSt themes, and securing salary co-funding
- taking a **leadership role in national initiatives** such as the Cardiff Cancer Research Partnership, a major new infrastructure for Wales
- delivering a programme of **community-wide research activities**, including workshops, research groups, and an annual conference
- supporting **career pathways** via an early and mid career researcher network for cancer researchers in Wales, providing peer support, training and mentoring opportunities
- supporting **collaborative funding bids** within and beyond Wales to increase the volume and scale of our cancer research.

Health and Care Research Wales funding has stimulated CReSt activity

Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

A **£1m Health and Care Research Wales CReSt implementation award** to the WCRC has accelerated research-enabling activity in areas that span CReSt themes, by:

- **increasing bioinformatics capacity** through offering analytical support and training, and introducing a Wales Cancer Bioinformatics Network
- **starting to 'unlock' cancer data sets** for research use, with the SAIL Databank producing Data Explained reports[1] to help cancer researchers navigate data resources, and running a cancer data showcase event
- **supporting early career posts** to work with talented mid-career supervisors to scale their work and build towards larger research funding
- **developing clinical research talent**, via academic research sessions for clinicians working on cancer trials and/or translational research in Wales
- **supporting a pipeline of academic researchers** by offering non-clinical Career Starter Awards for talented cancer researchers in Wales to follow on from their PhDs
- **providing concept development funds** for pilot work or training, to support early- and mid-career researchers to start winning their own funding and building their research CVs.

1. https://saildatabank.com/new-data-explained-reports-provide-insights-into-cancer-related-data-sources/

Welsh Government reinforces its commitment to cancer

- The **'Tackling Cancer' initiative** was established by the Cabinet Secretary for Health and Social Care in 2024 as part of an ambitious, collaborative approach to improving cancer outcomes for the people of Wales. As part of this, the **Tackling Cancer Through Research**[1] programme supports the acceleration of **participation in high-quality cancer clinical trials**, with a focus on commercial studies to fund expanded opportunities for patients across Wales to access clinical trials.

- The **Cross-Party Group on Cancer** within the Senedd brings together Members of the Senedd, medical professionals, charities, and individuals affected by cancer. It holds regular meetings and Senedd receptions, and ran a consultation on inequalities and cancer, resulting in the 2023 report, **All Things Being Equal**.[2]

1. Tackling Cancer. https://healthandcareresearchwales.org/about-research-taking-place-wales/tackling-cancer-through-research-programme
2. Senedd Cross-Party Group on Cancer. All Things Being Equal? Inquiry into Cancer Inequalities in Wales Caused by Socio-Economic Deprivation. https://www.cancerresearchuk.org/sites/default/files/all_things_being_equal_-_full_report_-_final.pdf (2023).

New Wales-wide strategies and delivery plans launched

- The **National Cancer Team**, NHS Wales Performance & Improvement, launched a **three-year improvement plan** for NHS cancer services for 2023-26, which includes system-wide actions to support research and trial uptake.[1]

- The **Genomics Delivery Plan for Wales 2022-25**[2] included a commitment to offer up to 5,000 extensive genomic testing profiles to patients with newly diagnosed cancer annually, and a **genomics strategic research plan** was launched by Genomics Partnership Wales and Health and Care Research Wales in January 2026.[3]

- **Public Health Wales** released a **2023-26 research and evaluation strategy**[4] to complement its **2023-2035 long term strategy**,[5] which includes priorities around reducing smoking prevalence, promoting health behaviours, delivering human papilloma virus (HPV) vaccinations and cancer screening services.

- **Advanced Therapies Wales** released a Wales-wide **delivery plan**[6] for 2025-2029 to set a collective approach to developing innovative new therapies.

1. Wales Cancer Network. A Cancer Improvement Plan for NHS Wales, 2023-26. https://performanceandimprovement.nhs.wales/functions/networks-and-planning/cancer/cancer-improvement-plan-docs/full-plan/ (2023).
2. Welsh Government. Genomics Delivery Plan 2022 to 2025. https://www.gov.wales/genomics-delivery-plan-2022-2025 (2022).
3. Genomics Partnership Wales and Health and Care Research Wales. https://genomicspartnership.wales/wp-content/uploads/2026/01/Strategic-Research-Plan_Genomics-in-Wales.pdf
4. Public Health Wales. https://phw.nhs.wales/about-us/working-together-for-a-healthier-wales/public-health-wales-research-and-evaluation-strategy-2023-2026/
5. Public Health Wales. Our Long-Term Strategy 2023–2035. https://phw.nhs.wales/about-us/working-together-for-a-healthier-wales/phw-long-term-strategy-pdf/
6. Advanced Therapies Wales delivery plan. https://advancedtherapieswales.co.uk/about-us/delivery-plan/

Organisations unite to form new Cardiff Cancer Research Partnership

The **Cardiff Cancer Research Partnership** (CCRP),[1] launched in September 2025, is a key thematic priority for Cardiff Health Partners, a strategic academic health partnership between Cardiff University, Cardiff and Vale University Health Board and Velindre University NHS Trust.

With a focus on next generation cancer care, the CCRP provides a **single front door to cancer research expertise and facilities in Cardiff,** which span haematological and solid cancers, and discovery science through to clinical research. The clinical research team enables delivery of a range of clinical trials, from early phase through to complex late phase clinical trials, including trials of advanced (cell, tissue and gene) therapies requiring cross-site working. Patients from across South Wales, and further afield, have access to CCRP trials.

Crucially, the CCRP is also focused on **aligning and growing academic cancer research** across Cardiff University, linking academic and clinical researchers via the Discovery and Translational Research group, to promote collaborative grant development and accelerate discoveries into the clinic for patient benefit.

1. Cardiff Cancer Research Partnership. https://ccrp.org.uk

Industry is a vital part of Wales' research ecosystem

- The **voluntary scheme for branded medicines pricing, access and growth (VPAG)** is bringing **£22m over 5 years** into Wales, as part the UK Government and Association of Pharmaceutical Industries' 2024 scheme.[1] This will strengthen NHS research infrastructure to deliver more commercial research, including cancer trials.
- Strategic partnerships between **Health and Care Research Wales** and **a number of pharmaceutical companies** support the delivery of clinical trials in Wales, including increasing access across health board boundaries.[2]
- The **Wales Cancer Industry Forum**,[3] led by the National Cancer Team and Life Sciences Hub Wales, continues to support collaborative multi-sector working, with representation from the pharmaceutical and biotech industries, higher education, NHS and government.

1. Health and Care Resarch Wales. https://healthandcareresearchwales.org/about/news/unlocking-wales-potential-what-investment-programme-means-commercial-research-delivery
2. Health and Care Research Wales. https://healthandcareresearchwales.org/support-and-guidance/for-partners-and-industry
3. Wales Cancer Industry Forum. https://performanceandimprovement.nhs.wales/functions/networks-and-planning/cancer/workstreams/research-and-innovation/wales-cancer-industry-forum/

Commitment to cancer continues within Welsh universities

- **Cardiff University**, **Bangor University** and **Swansea University** are all supporting co-funded research posts with the Wales Cancer Research Centre for the 2025-2030 quinquennium, demonstrating their commitment to capacity building in CReSt areas of academic strength.

- **Cardiff University** has launched a **2025-30 cancer strategy**,[1] setting out its commitment to connecting cancer research across Cardiff University and key NHS partners. This includes aims to train future leaders and teams, ensure equal representation, accelerate discovery and innovation, and leverage cancer data from every patient.

- The new **North Wales Medical School** at **Bangor University** was officially formed in September 2023, and is backed by the Welsh Government with the aim of developing future health and social care that is sustainable, place-based, and bolsters the growth of the regional life sciences sector.

1. Cardiff University. Cardiff University Cancer Strategy 2025-30. https://ccrp.org.uk/wp-content/uploads/2025/09/Cardiff-University-Cancer-Strategy-2025-2030_updated-ENGLISH1-1.pdf

NHS investments will enable more cutting-edge research

The **National Cancer Team**[1] in NHS Wales Performance and Improvement brings health professionals together in its Research & Innovation workstream.

Swansea Bay University Health Board, **Velindre University NHS Trust** and **Cardiff and Vale University Health Board** are all co-funding research posts with the Wales Cancer Research Centre during 2025-2030, confirming their commitment to research aligned with Wales' strengths in CReSt.

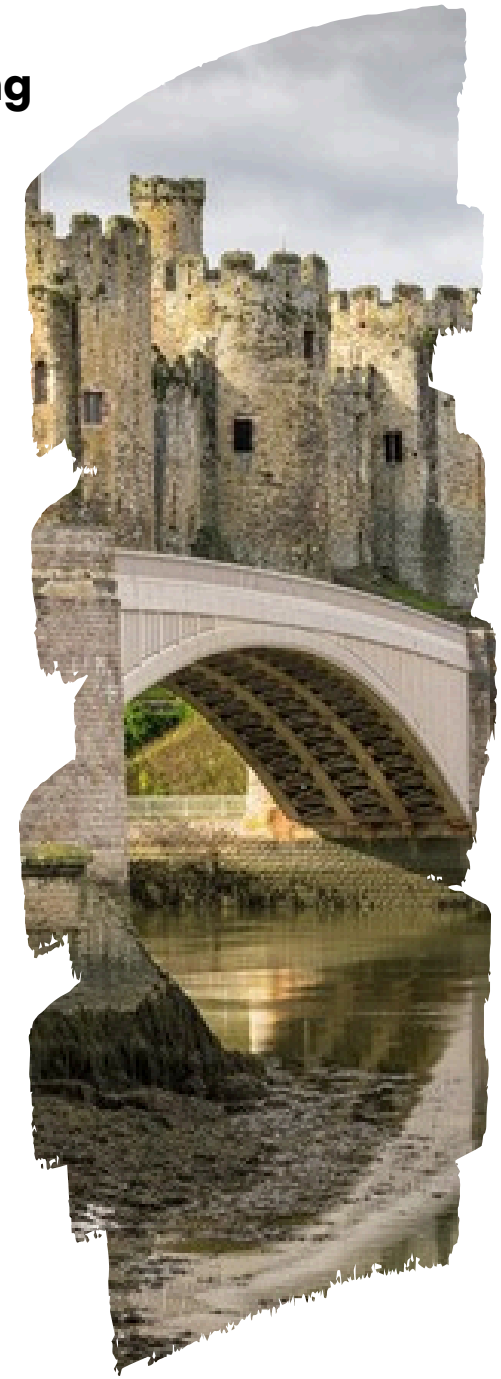
Investments in NHS cancer services that will increase capacity for both clinical care and research include:

- the **new Velindre Cancer Centre**, funded through a Mutual Investment Model with the support of the Welsh Government[2]
- the new **£38 million Velindre @ Nevill Hall Radiotherapy Unit**[3]
- capital funding from the Welsh Government for **four static PET-CT scanners**[4] within the next 10 years at the cancer centres in Swansea, Velindre, North Wales and a fourth site to be decided
- the 2023 opening of the **Wales Genomic Health Centre** in North Cardiff[5]
- a new **£3m chemotherapy day unit** in Aberystwyth.[6]

1. National Cancer Team. https://performanceandimprovement.nhs.wales/functions/networks-and-planning/cancer/
2. https://velindre.nhs.wales/new-velindre-cancer-centre/news/tcs-news/agreement-reached-to-build-new-velindre-cancer-centre/
3. Nevill Hall Radiotherapy Unit. https://velindre.nhs.wales/velindrecs/radiotherapy-unit-at-nevill-hall-hospital/
4. Swansea Bay University Health Board https://sbuhb.nhs.wales/news/swansea-bay-health-news/work-starts-on-14-million-singleton-hospital-development-that-will-transform-cancer-diagnoses/
5. Wales Genomic Health Centre. https://cavuhb.nhs.wales/news/latest-news/cigc-opening/
6. Hywel Dda UHB. https://hduhb.nhs.wales/news/press-releases/work-to-begin-on-3million-cancer-day-unit-at-bronglais-hospital/

Wales' third sector organisations are providing new cancer research funding and development opportunities

- **Cancer Research Wales** launched a **Brain Tumour Research Initiative** in April 2024, with a fund of approximately £1m per year available for research, responding directly to strengths in Wales.[1]
- In July 2023, matched funding from the **Moondance Foundation** and **Velindre's Charitable Funds** established the **Advancing Radiotherapy Cymru (ARC) Academy**,[2] with £3m to invest in radiotherapy innovation, research and training.
- **CADARN** (Collaborative Action for Driving & Accelerating Research Nationally)[3] is a system-level intervention launched by **Moondance Cancer Initiative** in 2025 to agree shared priorities, activate delivery and generate new ideas, ensuring patients across Wales benefit from research more equitably.
- Joint working between organisations is strengthened by the **Wales Cancer Alliance**,[4] a coalition of charities working together to prevent cancer, improve care, fund research and influence policy in Wales.



The patient voice is shaping Wales' cancer research

- **Patient and public involvement** is embedded into the work of groups across Wales, including the Wales Cancer Research Centre, Wales Cancer Biobank, Cardiff Experimental Cancer Medicine Centre and the Centre for Trials Research.
- **Tenovus** launched the **All-Wales Cancer Community** in 2022 for patients to share their experiences, for example by accessing consultations and other opportunities to have their voices heard.
- The third Macmillan- and Wales Cancer Network-led Wales **cancer patient experience survey** enrolled more than 6,000 people who were treated for cancer in Wales in 2020, with results published in 2023.[1] 92% of respondents rated their cancer care as 7+ out of 10; but 80% reported they had not been offered the opportunity to take part in cancer research, highlighting this as an ongoing area for focus.

1. Cancer Research Wales' Brain Tumour Research Initiative. https://www.cancerresearch.wales/batri
2. ARC Academy. https://velindre.nhs.wales/about-us/innovation/programmes/arc-academy/
3. CADARN. https://moondance-cancer.wales/research-insights/cadarn
4. Wales Cancer Alliance. https://walescanceralliance.org/

1. Macmillan Cancer Support. Wales Cancer Patient Experience Survey 2021 National Report. https://performanceandimprovement.nhs.wales/functions/networks-and-planning/cancer/wcn-documents/patient-hub/cpes/cpes21/ (2023)

Key research infrastructures have been competitively funded

- **Health and Care Research Wales** ran a competitive funding process and re-funded 12 of its existing infrastructures for 2025-2030,[1] through **sustainability awards**.

- Two of these are cancer specific: The **Wales Cancer Research Centre**[2] (£4.9m), which delivers collaborative cancer research; and the **Wales Cancer Biobank**[3] (£2.4m), which performs biobanking activities from consenting patients and data extraction, to processing and curating biosamples. Both are hosted at Cardiff University and work across Wales.

- A third, the **Centre for Trials Research**[4] at Cardiff University (£4.7m), has a Cancer Division as one of its four themes, and provides expertise to develop and deliver clinical trials within and beyond Wales.

- Other re-funded infrastructures that are pan-disease and contribute to work in cancer include the Cardiff-based **Wales Centre for Primary and Emergency Care Research**[5] (PRIME, £3.0m), and the **Advanced Neurotherapies Centre**[6] (£2.9m), the **SAIL Databank**[7] at Swansea University (£4.6m), and **Health and Care Economics Cymru**[8] (£1.9m) based at Swansea and Bangor Universities.

- **Health and Care Research Wales** also ran a call for new research centres,[1] as **catalytic funding** awards. Five new centres were funded, including the **Wales Applied Virology Unit**[9] (£3m) whose research includes enhanced vaccines to combat cancer, and engineered viral platforms for oncology.

- The **Cardiff Experimental Medicine Cancer Centre** (ECMC, £2.5m) had its core funding from Cancer Research UK and Health and Care Research Wales renewed in 2023, and now has both adult[10] and paediatric[11] research centres, with **early phase trial and translational research** strengths in solid tumours and haematological malignancies.

- In 2023, the **Marie Curie Research Centre**[12] at Cardiff University was awarded five more years of funding (£3.2m) from Marie Curie. As Wales' only dedicated **palliative research** centre, it shapes the way people at the end of their life are cared for.

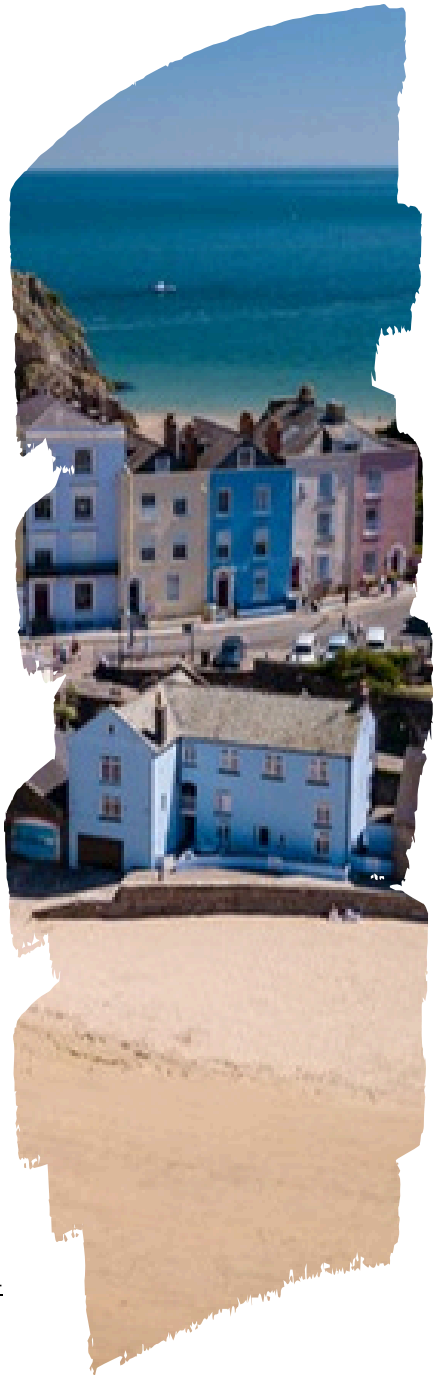
- Through Advanced Therapies Wales, Wales co-leads the **Midlands–Wales Advanced Therapies Treatment Centre** (ATTC)[13] with Birmingham UHB, as part of the 2023-28 Phase 2 of the ATTC network, funded by **Innovate UK** and coordinated through the **Cell and Gene Therapy Catapult**.[14]

1. Health and Care Research Wales announces major £49m investment in research infrastructure. https://healthandcareresearchwales.org/about/news/major-investment-research-infrastructure (2025).
2. Wales Cancer Research Centre. https://walescancerresearchcentre.org
3. Wales Cancer Biobank. https://walescancerbank.com/
4. Centre for Trials Research. https://www.cardiff.ac.uk/centre-for-trials-research
5. Wales Centre for Primary and Emergency Care Research. https://primecentrewales.yolasite.com/
6. Advanced Neurotherapies Centre. https://brain.wales/
7. SAIL Databank. https://saildatabank.com/
8. Health and Care Economics Cymru. https://www.bangor.ac.uk/hcec
9. Wales Applied Virology Unit. https://www.cardiff.ac.uk/research/explore/research-units/wales-applied-virology-unit
10. Cardiff Adult Experimental Cancer Medicine Centre. https://www.ecmcnetwork.org.uk/centres/cardiff
11. Cardiff Paediatric Experimental Cancer Medicine Centre. https://www.ecmcnetwork.org.uk/centres/cardiff-paediatric-ecmc-0
12. Marie Curie Research Centre. https://www.mariecurie.org.uk/research-and-policy/research/where-we-do-research/marie-curie-palliative-care-research-centre-cardiff
13. Midlands-Wales Advanced Therapies Treatment Centre. https://www.theattcnetwork.co.uk/centres/midlands-wales
14. Cell and Gene Therapy Catapult. https://ct.catapult.org.uk/news/cell-and-gene-therapy-catapult-announces-successful-renewal-of-its-five-year-funding-from-innovate-uk-to-further-support-the-advanced-therapies-sector

Other research-active organisations add to Wales' capabilities in cancer

- **Life Sciences Hub Wales**[1] drive the development and adoption of life sciences innovation in health and social care in Wales. One of their focus areas is early detection, diagnosis and treatment of cancer.
- The **Health and Care Research Wales Evidence Centre**[2] provides rapid reviews and data analysis to inform future research in cancer and other areas.
- Awarded in 2024, the **Tessa Jowell South Wales Centre of Excellence** unites the work of University Hospital of Wales, Velindre Cancer Centre and the South West Wales Cancer Centre in brain cancer.
- The **Advanced Therapies Wales**[3] programme is funded by Welsh Government as part of the Precision Medicine portfolio, and provides coordination and support across Wales.
- The **All-Wales Medical Genomics Service**[4] (an NHS national genomic health service) and the **Genomics Partnership Wales**[5] (a multi-partner collaboration) both support advances in genetics and genomics, including for cancer.
- The Public Health Wales **Welsh Cancer Intelligence & Surveillance Unit** (WCISU)[6] is the National Cancer Registry for Wales and delivers collaborative research including international programmes and projects using cancer registry data.

1. Life Sciences Hub Wales. https://lshubwales.com/we-are-life-sciences-hub-wales
2. Health and Care Research Wales Evidence Centre. https://researchwalesevidencecentre.co.uk/
3. Advanced Therapies Wales. https://advancedtherapieswales.co.uk
4. All-Wales Medical Genomics Service. https://cavuhb.nhs.wales/our-services/all-wales-medical-genomics-service-awmgs/
5. Genomics Partnership Wales. https://genomicspartnership.wales/
6. WCISU. https://phw.nhs.wales/services-and-teams/welsh-cancer-intelligence-and-surveillance-unit-wcisu/



Community-building opportunities for cancer researchers have increased

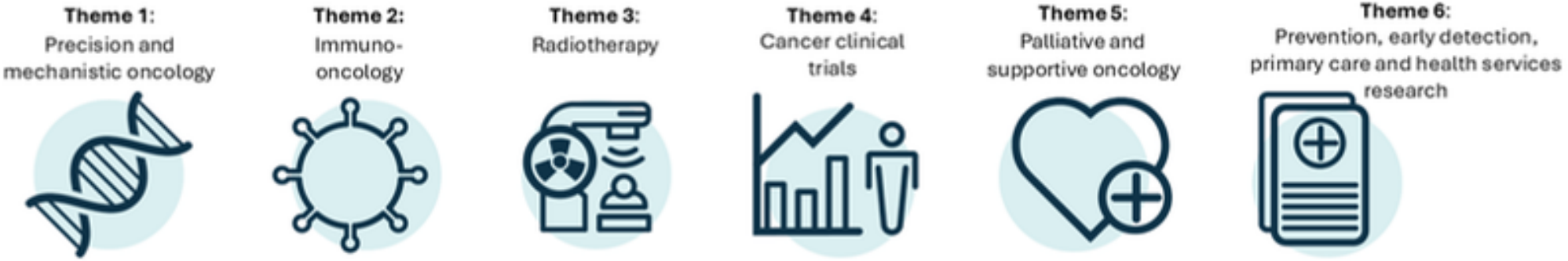
- WCRC established the **Early- and Mid-career Cancer Researcher Network for Wales**[1] in 2024, and it is a growing cohort of clinical and non-clinical researchers. The group is Wales wide and provides peer support, mentorship and learning opportunities.
- WCRC launched the **Wales Cancer Bioinformatics Network**[2] in 2023, which has now broadened its membership to other specialties and has over 80 members from across Wales.
- WCRC continues to run the **Brain and Urology multi-disciplinary research groups**, where researchers work together on research proposals.
- Advanced Therapies Wales and the Cardiff Experimental Cancer Medicine Centre run the **Advanced Therapies multi-disciplinary research group**, which includes a cancer arm as one of three areas of focus.
- The annual **Wales Cancer Research Conference**, run by WCRC, brings around 350 cancer researchers in Wales together each year, with posters and oral abstracts, awards, career development sessions, and keynote speakers.

1. Early and Mid Career Researcher Network for Wales. https://walescancerresearchcentre.org/emcr-network/
2. Wales Bioinformatics Network. https://walescancerresearchcentre.org/wales-cancer-bioinformatics-network/

Progress in research is rarely the result of a single effort - it emerges from the foundation of previous discoveries, and the collective endeavour of many researchers, teams, and projects.

The next section highlights some of the key Wales-led advances since CReSt was launched in 2022, ranging from large grants awarded to development of research tools and clinical trials; from spin-outs to leadership successes.

Many more projects, personal awards, and other research achievements underpin and expand upon this work. More details can be found on the websites of universities, Health Boards, charities, research centres and other organisations.



Broken String Biosciences partners with Francis Crick Institute

Broken String Biosciences,[1] led by **Professor Simon Reed (Cardiff University)**, Dr Felix Dobbs and Dr Patrick van Eijk, was created in 2020 as a gene editing partner, with the aim to reduce unintended gene edits with the introduction of their technology, INDUCE-seq® which allows researchers to visualise the consequences of any gene editing system they utilise. The Cardiff-developed platform garnered widespread recognition, attracting **$15 million in investment** in its 2023 funding round.

The technology has been widely used, leading to a **collaboration with the Francis Crick Institute**, beginning in 2024. This partnership was formed to generate new applications for INDUCE-seq®, expanding its capabilities further than DNA break-mapping, aiming to facilitate investigation into genomic instability.

1. Broken String Biosciences. https://www.brokenstringbio.com

TeloNostiX expands its global reach

TeloNostiX[1] was founded in Cardiff in 2017, by Professors **Duncan Baird (Cardiff University), Chris Fegan (Cardiff University)** and Chris Pepper (Brighton and Sussex Medical School).

The work of the TeloNostiX team has demonstrated that **telomeres (caps at the ends of chromosomes) play a critical role in the development and progression of cancer**, and telomere length can determine the 'stamina' of cell-based therapies directed against cancer cells. The TeloNostiX diagnostic platform was therefore developed to allow clinicians to evaluate their patients' DNA, to record their telomere lengths, to help make informed clinical decisions based on the findings.

The company **gained ISO17025 accreditation in 2022**, and has grown rapidly since then.

A network of over 165 clinicians is using TeloNostiX's diagnostic service, not only across the UK, but globally, with users in Australia, New Zealand, and Canada.

1. Telonostix. https://www.telonostix.com/about-us

UKRI grant recognises excellence in glioblastoma research at Cardiff University

Dr Florian Siebzehnrubl, a senior lecturer in Cardiff University's School of Biosciences and deputy director of the European Cancer Stem Cell Research Institute, and colleagues have been awarded a **£1.3 million UKRI grant** (as part of a total project fund of £1.6 million) to investigate protein production and regulation in glioblastoma cells.[1]

The funding runs from 2023 to 2027, and the work aims to identify differential **protein expression in aggressive versus less aggressive glioblastoma cells**. The long-term aim is to provide a springboard for further research into novel glioblastoma treatments based on the understanding of protein production in these cells, gleaned in the course of this work.

The team also aims to validate a new microscopy technology's prognostic and diagnostic value, with the target of improving clinical benefit for glioblastoma patients by identifying new treatment avenues.

1. Siebzehnrubl. Proteostatic regulation of glioblastoma stemness. UKRI Gateway to Research https://gtr.ukri.org/projects?ref=MR%2FX018318%2F1

UKRI Future Leaders Fellowship at Bangor University renewed for 3 more years

Cancer biology and pharmacology research is a strategic priority for the new North Wales Medical School at Bangor University, underscored by recent appointments to the **North West Cancer Research Institute (NWCRI)** of five new faculty members spanning cancer metabolism, lung cancer, tumour immunobiology, acute myeloid leukaemia, and breast cancer drug development.

Research interests at the NWCRI are aligned with CReST theme 1 (Precision & Mechanistic Oncology). The team includes **Dr Chris Staples**, a cancer cell biologist focused on genome integrity and current **UKRI Future Leaders Fellowship** holder. His initial Fellowship award for £1.4 million ran from 2019-2023, and he was successful in receiving a **£657k renewal from 2023-26**.

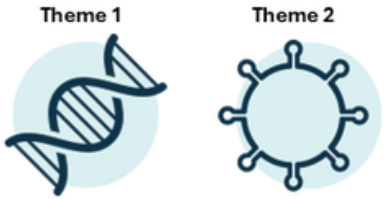
Research in the Staples laboratory is focused on identifying novel mechanisms via which cancer cells can become resistant to DNA-damaging chemotherapies, and how DNA damage in tumours leads to inflammation.[1,2]

1. Bennett et al. *MRNIP limits ssDNA gaps during replication stress. Nucleic Acids Res* 2024;52:8320-8331.
2. Gamble et al. IFI16 senses and protects stalled replication forks. *Mol Cell* 2026;86:258-272.

Patent granted for innovative PROTAC treatment for acute myeloid leukaemia

In January 2024, Cardiff University's Professor Simon Ward and his team at the Medicines Discovery Institute were granted a **patent for their novel anti-KAT2A proteolysis-targeting chimaera (PROTAC)**.[1] The function of these compounds is to target the protein KAT2A, which is responsible for maintaining cancer cell stemness, the degradation of which can allow immune attack, depleting the cancer cells.

The potential of this work was recognised by the Medical Research Council (MRC) who awarded the team **£1.8 million to investigate the efficacy** of these novel PROTAC treatments **for acute myeloid leukaemia**.[2,3] This was the first major award bringing the Medicines Discovery Institute's talents and resources into the cancer field, with the funding running from January 2024 to October 2025, resulting in new compounds being developed and tested in late preclinical studies.



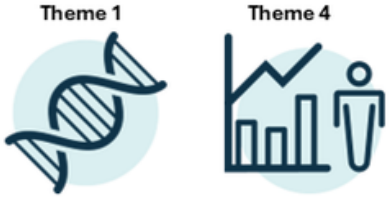
1. Ward et al. Protacs for Targeted Degradation of Kat2a and Kat2b for the Treatment of Cancer. https://patentscope.wipo.int/search/en/WO2024003533 (2024).
2. Ward. KAT2A PROTACs targetting the differentiation of blasts and leukemic stem cells for the treatment of Acute Myeloid Leukaemia. UKRI Gateway to Research https://gtr.ukri.org/projects?ref=MR%2FX029557%2F1
3. Medicines Discovery Institute projects. https://www.cardiff.ac.uk/medicines-discovery/research/projects (2025)

NICE and FDA approval granted for breast cancer drug capivasertib, following Cardiff-led trials

Clinical trials carried out by teams led by Professor Rob Jones at Cardiff University and Velindre Cancer Centre, demonstrated a doubling of survival time when a new drug **capivasertib** was added to standard hormone compared to placebo and hormone.[1] It was determined that this treatment could confer a significant benefit to the subset of patients who would previously have suffered considerable side effects with alternative treatment options.

In November 2023, the United States **Food and Drug Administration** ratified these findings and **approved capivasertib** as a first in class drug for patients with advanced ER positive, HER-2 negative breast cancer.[2]

In April 2025, the **National Institute for Health and Clinical Research Excellence** followed suit and approved capivasertib for use in England and Wales,[3] making this treatment available for an estimated 8,000 women per year.



1. Howell et al. Fulvestrant plus capivasertib versus placebo after relapse or progression on an aromatase inhibitor in metastatic, oestrogen receptor-positive, HER2-negative breast cancer (FAKTION): overall survival, updated progression-free survival, and expanded biomarker analysis from a randomised, phase 2 trial. *Lancet Oncol 2022;*23:851–864.
2. FDA approves capivasertib with fulvestrant for breast cancer. https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-capivasertib-fulvestrant-breast-cancer
3. National Institute for Health and Clinical Research Excellence. Technology Appraisal Guidance TA1063: Capivasertib with fulvestrant for treating hormone receptor-positive HER2-negative advanced breast cancer after endocrine treatment. https://www.nice.org.uk/guidance/ta1063 (2025).

Awen Oncology receives multiple awards and enters new national/international partnerships

A notable development is the spin-out from Bangor and Cardiff universities of **Awen Oncology**,[1] a venture capital-backed oncology drug discovery start-up focused on a new class of therapeutics that target novel, undrugged cancer-specific factors.

Venture capital investment partners include the Development Bank of Wales, with investment being allied to grants from the Welsh Government and Innovate UK. With work originally emerging from a Life Sciences Research Network Wales grant, the company was founded in 2021 by Dr Ramsay McFarlane, Dr Jane Wakeman and Professor Andrea Brancale, and the company is located at **M-Sparc, Bangor University's science park on Anglesey**.

In the early stages of development, Awen Oncology was selected as a Cancer Research UK top 6 oncology venture working closely with some of the largest global pharmaceutical concerns and gaining official affiliate status with the prestigious University of Cambridge Milner Therapeutic Institute. Since these early successes, Awen Oncology has won **best emerging start-up company** at BioVaria 2023 and was selected for **Innovate UK's prestigious High Growth programme**. This was followed by award of an Innovate UK RTO to partner with the **Medicines Discovery Catapult** and the first award in Wales of an Innovate UK Future Economies Investor Partnership.

More recently, Awen Oncology won the **2024 MediWales Innovation Start-up Award** and were the **2025 o2h Ventures Kickstarter winners**, designed to accelerate world-leading drug discovery.

1. Awen Oncology, https://www.awenoncology.com/

Co-produced public involvement toolkit reaches 1600+ global downloads

The **Public Involvement in Research Impact Toolkit (PIRIT)**[1] was launched in February 2023, and has been downloaded 1600+ times by users from >30 countries.

PIRIT was co-produced by the Cardiff **Marie Curie Research Centre**, the **Wales Cancer Research Centre**, and **27 members of the public**. The toolkit is now included in Health and Care Research Wales' funding guidance, to ensure public involvement is at the heart of every award.

A **peer-reviewed publication** on PIRIT and the importance of public involvement in research was published in March 2025,[2] showing how the tool is supporting delivery and evaluation of public involvement within a large scale, multi-centre European award.

1. Newman et al. Public Involvement In Research Impact Toolkit (PIRIT). Cardiff University, Wales, UK. https://www.cardiff.ac.uk/marie-curie-research-centre/patient-and-public-involvement/public-involvement-in-research-impact-toolkit-pirit (2023)
2. Edwards et al. Involving patients and the public in cancer associated thrombosis research: A strategy for success. *Thromb Update* 2025;18:100196.

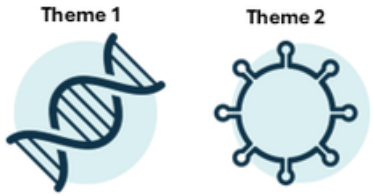
First patient receives a novel, Wales-developed viral immunotherapy in phase I ATTEST trial

Accession Therapeutics has begun to treat patients in its Phase 1 ATTEST trial of TROCEPT-01 (ATTR-01), a **first-in-class tumour-activated viral immunotherapy** for solid tumours.[1,2]

Cardiff's **Professor Alan Parker** is co-inventor of the Trocept platform, developed at Cardiff University, and is Chief Scientific Officer of **Accession Therapeutics' Trocept Therapeutics subsidiary** in which the technology is being developed.

Following systemic delivery, TROCEPT-01 selectively generates a checkpoint inhibitor within tumours. This approach targets αvβ6 integrin on epithelial tumours, to optimise efficacy while minimising damage to healthy tissue. Preclinical studies showed strong anti-tumour activity in multiple solid tumour models, indicating its potential for use in aggressive cancers.

The open-label ATTEST trial will assess safety, tolerability, pharmacokinetics, and preliminary efficacy in patients with advanced carcinomas across UK sites including Cardiff, with expansion planned in Spain.

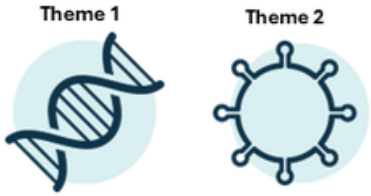


1. Accession Therapeutics. https://www.accessiontherapeutics.com/attest-clinical-trial (2025)
2. ISRCN. https://www.isrctn.com/ISRCTN38972074

New Wales Applied Virology Unit boosts cancer research at Cardiff University

The **Wales Applied Virology Unit** (WAVU)[1] aims to reduce the burden of viral disease through the development and evaluation of intervention and control strategies. This includes the delivery of next-generation advanced therapeutics, from enhanced vaccines to combat infectious disease and cancer, to engineered viral platforms for oncology and genome-editing applications.

The new unit launched in April 2025 after receiving **£3 million in funding** from Health and Care Research Wales, and is co-directed by Alan Parker (Professor of Translational Virology), Richard Stanton (Professor of Virology) and David Gillespie (Director of Infection, Inflammation & Immunity Trials at the Centre for Trials Research).

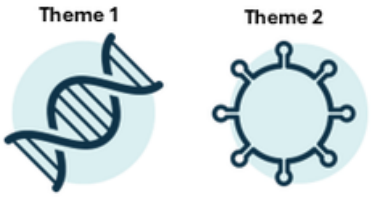


1. Wales Applied Virology Unit. https://www.cardiff.ac.uk/research/explore/research-units/wales-applied-virology-unit

Cardiff University's Andrew Sewell recognised for T-cell therapies research

In July 2023, **Professor Andrew Sewell** and his team at the Systems Immunity Research Institute, Cardiff University, was one of only three winners of the **Molecular Cloud Distinguished Research Awards**,[1] rewarding outstanding achievements in gene therapy, cell therapy and vaccine development. The team was recognised for their pioneering work on T-cell receptor-based therapies.[2]

Professor Sewell is also part of the international **NexTGen Grand Challenge** consortium,[3] funded in 2022 by Cancer Research UK, National Cancer Institute and The Mark Foundation for Cancer Research. NexTGen aims to create new generation engineered T-cell therapies for children with solid cancers, and will include three early phase clinical trials – one in the UK and two in the USA – which will initially focus on rhabdomyosarcoma, Ewing's sarcoma and aggressive brain tumours.



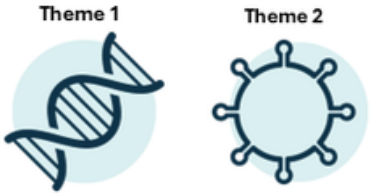
1. Molecular Cloud. https://www.molecularcloud.org/2023-distinguished-research-awards.html
2. Dolton et al. Targeting of multiple tumor-associated antigens by individual T cell receptors during successful cancer immunotherapy. *Cell* 2023;186:3333-49.
3. NexTGen Cancer Grand Challenge. https://nex-t-gen.com/

New programme grant at Cardiff University to advance the development of next-generation cancer vaccines

Professor Andrew Godkin and **Professor Awen Gallimore** at Cardiff University[1] have been awarded a Cancer Research UK discovery programme on **optimisation of anti-cancer CD4+ T-cell responses** through molecularly-informed modification of HLA class II antigens. The award for ~£2 million started in December 2025 and will run for 5 years.

The research team will investigate whether candidate **colorectal cancer antigens** can be engineered to become more immunogenic. These modified antigens will then be incorporated into vaccines and assessed using advanced preclinical systems, including organoids developed at the Beatson Institute.

By designing antigens that are widely effective, the team aims to create vaccines that could be made available to all colorectal cancer patients. This is an alternative to the approach of highly personalised immunotherapies, which, although promising, are expensive and less accessible.



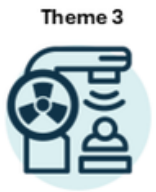
1. The Gallimore Godkin Cancer Immunology Lab. https://www.cancerimmunology.co.uk/

Swansea Bay clinician appointed as UK lead for radiotherapy trial quality assurance (QA)

Dr Sarah Gwynne, clinical oncologist at Swansea Bay UHB, was appointed to the role of **medical lead for the NIHR radiotherapy trial quality assurance (RTTQA) group** in July 2023. The RTTQA Group is an independent, multidisciplinary network, based across a number of UK NHS sites, with the remit to monitor safety, consistency and accuracy of treatment within clinical trials. The group is funded by the NIHR Clinical Research Network.

Dr Gwynne has been the QA lead for Wales-led NeoSCOPE and SCOPE 2 trials and is currently the QA lead for the proton trial in oesophagus (PROTIEUS). Since her appointment she has published several papers on the improvement of QA, including an editorial on the impact of the NIHR RTTQA programme since its inception[1] and learnt from the RTTQA programme of the SCOPE 2 trial that can be used to inform the next oesophageal radiotherapy trials.[2]

Dr Gwynne is also a member of the **Global Harmonisation Group, (QA groups from around the world)**, participating in 3 subgroups looking at developing consensus guidelines for consistent reporting of trial QA outcomes, developing criteria for acceptable and unacceptable variation of outlining in trials and building the evidence for the impact of outlining variation on outcome.



1. Miles et al. The National Radiotherapy Trials Quality Assurance Group – Driving up Quality in Clinical Research and Clinical Care. *Clin Oncol* 2024;36:273-277
2. Helbrow et al. Radiotherapy Quality Assurance in the SCOPE2 Trial: What Lessons can be Learned for the Next UK Trial in Oesophageal Cancer? *Clin Oncol* 2025;38:103735

Wales becomes the first devolved nation to offer proton beam therapy trials

Proton beam therapy (PBT) is a new type of radiotherapy that uses charged particles instead of X-rays, to target tumours more precisely. Wales was the first devolved nation to offer PBT trials to its patients, and has now been open to studies in:

- head and neck cancers (**TORPEdO**)[1], the first PBT trial to be run in the UK
- breast cancer (**PARABLE**)[2]
- oesophageal cancer (**PROTIEUS**)[3]
- oligodendroglioma (**APPROACH**)[4]
- sinonasal cancer (**PROTIS**)[5]
- mesothelioma (**Hit-MESO**).[6]

Patients in these trials who are assigned to receive PBT will travel to England to receive treatment, with travel costs covered.

Consultants from the South West Wales Cancer Centre and Velindre Cancer Centre provide leadership as members of the trial management groups for several of these studies.

1. TORPEdO: A phase III trial of intensity-modulated proton beam therapy versus intensity-modulated radiotherapy for multi-toxicity reduction in oropharyngeal cancer
https://www.isrctn.com/ISRCTN16424014
2. PARABLE: Proton beam therapy in patients with breast cancer: evaluating early and late effects.
https://www.isrctn.com/ISRCTN14220944
3. PROTIEUS: A clinical trial to investigate proton beam therapy with chemotherapy given before surgery for patients with oesophageal cancer that has spread to the surrounding tissues.
https://www.isrctn.com/ISRCTN50098578
4. APPROACH: The neurocognitive benefits of proton beam therapy for patients with oligodendroglioma.
https://www.isrctn.com/ISRCTN13390479
5. PROTIS: Can proton beam therapy improve survival and reduce late side effects compared with standard-of-care intensity-modulated radiotherapy in patients with sinonasal cancer?
https://www.isrctn.com/ISRCTN15983654
6. Hit-MESO: Hemithoracic Irradiation With Proton Therapy in Malignant Pleural Mesothelioma.
https://clinicaltrials.gov/study/NCT05655078

SERENITY: A European collaboration to evaluate the use of end-of-life antithrombotic medicines

In October 2022, **Horizon Europe** granted **€6 million funding to support the SERENITY study** through to September 2027, with £1.08 million of the total coming to Wales.

The project is being **co-led by teams from Cardiff University** (coordinated by Professor Simon Noble), **and Academisch Ziekenhuis Leiden, Netherlands**. Through a series of seven workstreams, a collaborative of researchers from nine European countries aim to produce a toolkit for healthcare professionals to use in collaboration with patients and caregivers to provide evidence-based direction on the use of antithrombotic medications at the end-of-life. The PPI workstream is being led from Cardiff University.[1]

The evaluation of real-world evidence will shape a patient-centric approach to antithrombotic management in terminal cancer, ultimately improving quality of life, treatment satisfaction, and informed decision-making in end-of-life care.

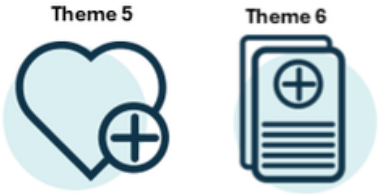
1. Edwards et al. Involving patients and the public in cancer associated thrombosis research: A strategy for success. *Thromb Update* 2025;18:100196

End-of-life care study using Wales' SAIL databank published

A study commissioned by Welsh Government via the Health and Care Research Wales Evidence Centre has been published in The Lancet Regional Health – Europe, giving insights into **how people in Wales access health and care services in their last year of life**.[1] It used anonymised, linked data from the **SAIL Databank**.

The research was led by a multidisciplinary team at **Swansea University**, in collaboration with **Cardiff University, Bristol University**, and the **Welsh National Clinical Programme for Palliative and End of Life Care**.

The team analysed data from over 267,000 individuals in Wales who died of non-sudden causes between 2014 and 2023, and modelled more than 1.8 million transitions between health and care settings. It found that the demand for urgent care increased rapidly towards the end of life; that 90% of emergency hospital admissions came from people's own homes; and that individuals on the palliative care register had an increased rate of urgent hospital admissions but decreased expected length of stay. Data sets at this scale enable studies like this that support policy making in Wales.



1. Owen et al. Health and care service utilisation in the last year of life before non-sudden death in Wales, 2014–2023, by palliative care registration: a population-based retrospective cohort study. *Lancet Reg Health* 2025;59:101479

QuicDNA study of liquid biopsy for lung cancer diagnosis completes recruitment

The QuicDNA[1] study, co-led by **Dr Magdalena Meissner** (Consultant Medical Oncologist at the Velindre Cancer Centre and Cardiff University) and Sian Morgan (All-Wales Medical Genomics Service) was launched in 2023, with **£1.9 million of funding** from Health and Care Research Wales, the Craig Maxwell Foundation, the Moondance Cancer Initiative, and industry partners.[2]

The aim of the study is to integrate a liquid biopsy (ctDNA blood test) into the lung cancer diagnostic pathway, reducing the time taken to make personalised treatment decisions for individual patients, and improving their outcomes. In November 2025, **patient recruitment into the QuicDNA study reached its target** of 760 patients.[3] The ctDNA test has since been approved, commissioned, and incorporated into Wales' optimal lung cancer diagnostic pathway.

The study team is now expanding the programme with QuicDNA Max, which will extend the use of liquid biopsy into a wider range of solid tumour types. QuicDNA Max is supported by **£2.52 million of funding**[4] from Welsh Government, the UK Office for Life Sciences, and five pharmaceutical companies. Ultimately, the aim is that liquid biopsy will become a standard tool in the diagnostic pathway, shortening the diagnosis-to-treatment timeline, and improving survival outcomes for cancer patients.

1. ISRCTN Search. https://www.isrctn.com/ISRCTN22734699 (2025)
2. Centre for Trials Research. QuicDNA. https://www.cardiff.ac.uk/centre-for-trials-research/research/studies-and-trials/view/quicdna (2025)
3. Life Sciences Hub Wales. QuicDNA liquid biopsy real world evaluation. https://lshubwales.com/projects/quicdna-liquid-biopsy-real-world-evaluation (2025)
4. Health and Care Research Wales. Major investment in groundbreaking programme to speed up cancer diagnosis in Wales. https://healthandcareresearchwales.org/about/news/major-investment-cancer-diagnosis-wales (2025)

Welsh patient honoured for fundraising that is accelerating genomic cancer research

Public awareness and funding of the QuicDNA study, as well as genomics research in Wales as a whole, has been increased by the efforts of **Mr Craig Maxwell**, a Penarth local who was diagnosed with terminal lung cancer in 2022.

Mr Maxwell has spent the time since his diagnosis undertaking various challenges. His efforts have so far **raised over £1.6 million for his foundation**,[1] **the Maxwell Family Genomics Fund**. £430k of this has gone directly to the **QuicDNA trial**, a study he hopes will help individuals with the same diagnosis as him in the future.

In recognition of his exceptional voluntary and charitable services to Improving Outcomes for People with Cancer, Mr Maxwell was awarded an **Order of the British Empire** medal in the 2025 New Year Honours.[2]

1. Cardiff and Vale University Health Board. Lung cancer patient Craig Maxwell to set sail on a 72-mile row to bring hope to cancer patients across Wales. https://cavuhb.nhs.wales/news/latest-news/lung-cancer-patient-craig-maxwell-to-set-sail-on-a-72-mile-row-to-bring-hope-to-cancer-patients-across-wales1 (2025)
2. GOV.UK. New Year Honours List 2025. https://www.gov.uk/government/publications/new-year-honours-list-2025 (2025)

Cardiff professor Sunil Dolwani takes on leadership role in UK's Cancer Data Driven Detection (CD3) initiative

Funding of £10 million for the **Cancer Data Driven Detection (CD3) programme** was announced in January 2025 by Cancer Research UK. This is a new, multidisciplinary and multi-institutional strategic national research programme dedicated to using data to transform our understanding of cancer risk and enable early interception of cancers. It is a flagship investment funded through a strategic programme award by Cancer Research UK, the National Institute for Health and Care Research (NIHR), the Engineering and Physical Sciences Research Council (EPSRC), and the Peter Sowerby Foundation; in partnership with Health Data Research UK (HDR UK) and the Economic and Social Research Council's Administrative Data Research UK programme (ADR UK).[1]

The programme is led by Prof Antonis Antoniou (University of Cambridge), and the initiative's **Chief Medical Officer** is **Professor Sunil Dolwani,** Professor of Gastroenterology in the Division of Population Medicine at Cardiff University and Honorary Consultant Gastroenterologist at Cardiff & Vale University Health Board.

CD3 aims to **generate new models and AI tools to predict cancer risk**, by accessing and linking data from health records, genomics, family history, demographics and behavioural data.

1. Warnock & Sneddon. £10m funding for new programme to help identify individual cancer risk. https://news.cancerresearchuk.org/2025/01/22/10m-funding-cancer-data-driven-detection-programme (2025)

Linked data sets in Wales to guide future cancer prevention and early detection interventions

A **Data Insight** report[1] from the **Administrative Data Research Wales** Major Societal Challenges research team[2] has assessed the feasibility of **linking cancer service data**, including screening and diagnosis records, **with additional administrative data within the SAIL Databank**. This is a step towards understanding how cancer incidence and cancer screening patterns differ across different groups of people.

The team used sources that collected data for breast and bowel cancer screening, the most common and fourth most common cancers in the UK. Study findings suggest that sociodemographic factors may influence cancer screening participation. In particular, the study team found that **single individuals, those with lower education, and those from more deprived areas could be less likely to engage in screening**.

The findings from this research will be used to inform data opportunities as part of the new Cancer Data-Driven Detection programme (CD3).

1. Chiovoloni et al. Exploring cancer inequalities in Wales through linked administrative data. https://adrwales.org/wp-content/uploads/2025/03/Exploring-cancer-inequalities-in-Wales-through-linked-administrative-data.pdf
2. Administrative Data Research Wales. https://adrwales.org/our-focus/major-societal-challenges/

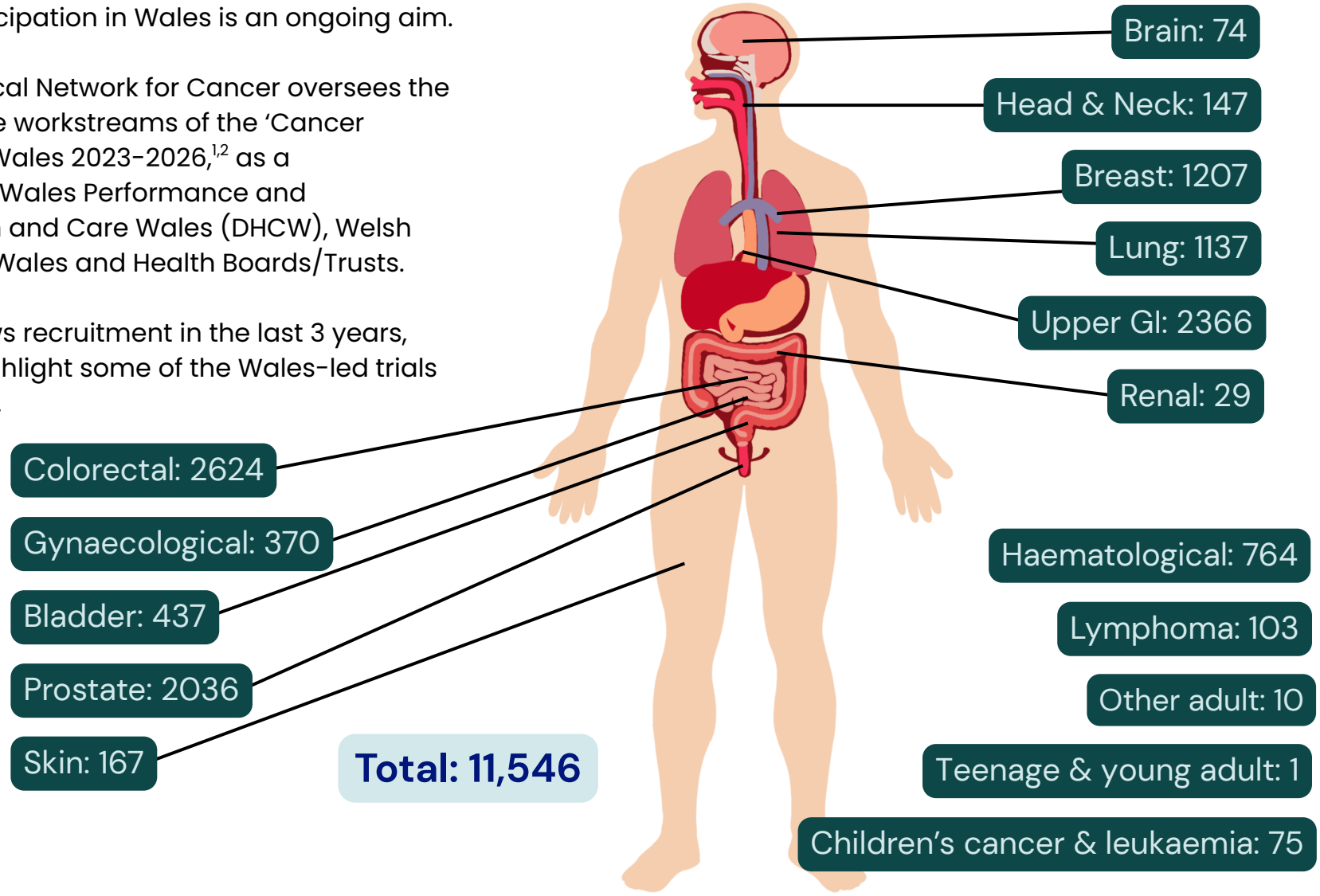
Cancer clinical research in Wales

Number of patients recruited into portfolio cancer studies in Wales (Jan 2022 - Dec 2025)

Driving up cancer trial participation in Wales is an ongoing aim.

The National Strategic Clinical Network for Cancer oversees the information and intelligence workstreams of the 'Cancer Improvement Plan for NHS Wales 2023-2026,[1,2] as a collaboration between NHS Wales Performance and Improvement, Digital Health and Care Wales (DHCW), Welsh Government, Public Health Wales and Health Boards/Trusts.

The diagram opposite shows recruitment in the last 3 years, and the following pages highlight some of the Wales-led trials and their recent milestones.



Theme 4

Recruitment data by primary sub-specialty provided by Health & Care Research Wales, from the UK Portfolio Management System.

1. NHS Wales Performance and Improvement. Cancer Information and Intelligence. https://performanceandimprovement.nhs.wales/functions/networks-and-planning/cancer/workstreams/information-and-intelligence/ (2025).
2. Digital Heath and Care Wales. Digital system for managing cancer data in Wales takes important step forward. https://dhcw.nhs.wales/news/latest-news/digital-system-for-managing-cancer-data-in-wales-takes-important-step-forward/ (2025).

PICCOS

First UK randomised controlled trial investigating intraperitoneal aerosol delivery of chemotherapy opened

A team at Cardiff and Vale University Health Board, led by Dr Sadie Jones and Prof Jared Torkington, has secured a £1.9 million grant from NIHR to fund the PICCOS trial.

This is the first randomised controlled trial in the UK to evaluate the efficacy of pressurised intraperitoneal aerosol chemotherapy (PIPAC), compared to standard systemic chemotherapy to treat peritoneal metastasis from colorectal, ovarian and stomach cancer, as well as assessing the impact on quality of life for these patients. If successful, this could be a new treatment avenue for these hard-to-treat cancers, offering more options to patients across the UK.

The trial started in November 2022 and is scheduled to run until 2026, with the aim of recruiting 216 patients across the three cancer types.

£1.9M NIHR grant

Open to recruitment

Currently recruiting

ISRCTN17575409

OPTIMISE-FLT3

£1.7 million Cancer Research UK grant for haematology trial in Cardiff

Recruitment for the phase 3 OPTIMISE-FLT3 trial opened in February 2025. Led by chief investigator Professor Steven Knapper (Cardiff University), it is funded by Cancer Research UK and runs until 2030.

The £1.7 million funding will be used to deliver the trial, looking into best treatment options for a subgroup of acute myeloid leukaemia (AML) patients with an activating mutation of the FLT3 gene. These patients make up about 30% of new cases of AML and are at increased risk of disease relapse following initial treatment. The current standard of care is chemotherapy with the tyrosine kinase inhibitor midostaurin; this trial will build on the findings of previous Cardiff-led AML studies by investigating the addition of gemtuzumab ozogamicin and the use of an intensified chemotherapy backbone (FLAG-Ida) with the aim of determining the most effective initial treatment option for this group of patients.

The main aims of the trial are to find out if any of the proposed combinations of treatment work better than standard treatment, and to understand more about the drug tolerability and side effects. If successful, this regimen will likely to be embraced as future standard of care for new patients.

£1.7M CRUK grant

Open to recruitment

Currently recruiting

ISRCTN34016918

COLOSPECT

1900-patient milestone surpassed in bowel cancer screening study

COLOSPECT, led by Professor Dean Harris (Swansea Bay University Health Board) has recruited over 1,900 of the total 2,000-patient target, and the project is on track to complete recruitment early in 2026. The study, funded by a £439,622 grant from Cancer Research Wales, is investigating the value of introducing a blood test (called the Raman test) into the bowel cancer screening pathway. Public Health Wales is supporting COLOSPECT through a One Site Wales model; they are the lead site supporting recruitment, with the Head of Programme at Bowel Screening Wales as the principal investigator.

Currently, screened participants who return a positive faecal immunochemical test (FIT) are invited for a colonoscopy. The introduction of an intermediary, highly-sensitive blood test could help clinicians to prioritise high-risk patients, which could ultimately lead to earlier diagnosis of cancer in individuals who return both a positive FIT and Raman blood test.

It's also estimated that up to 30% of colonoscopies could be avoided by using the Raman blood test in conjunction with FIT, thus saving NHS resource and preventing individuals from undertaking unnecessary procedures. The study aims to define the accuracy of the Raman blood test and to identify where it is best placed in practice.

£0.44M CRW grant

1900+ patients enrolled to date

Currently recruiting

RR7925

AML18

AML18 trial results promise new treatment options for AML patients with residual disease

The team at the Centre for Trials Research at Cardiff University, led by Mr Ian Thomas, was responsible for delivering the phase III AML18 trial in collaboration with the NCRI Acute Myeloid Leukaemia (AML) Working Group, with Professor Nigel Russell (University of Nottingham) as Chief Investigator and Professor Steve Knapper (Cardiff University) as co-Chief Investigator. The international trial, funded by Cancer Research UK, was developed to investigate treatment options for older patients with AML or high-risk myelodysplastic syndrome.

AML18 closed to recruitment in December 2022, after running since 2014. Patients were followed up until mid-2025, with 1935 patients enrolled; 335 more than the trial's target. There were a number of findings from the trial,[1] one of which showed that intensification of chemotherapy improved survival in patients with AML who had not responded to their first course, providing a potential future treatment option in this difficult-to-treat group.

1. Russell et al. Treatment Intensification With Either Fludarabine, AraC, G-CSF and Idarubicin, or Cladribine Plus Daunorubicin and AraC on the Basis of Residual Disease Status in Older Patients With AML: Results From the NCRI AML18 Trial. *J Clin Oncol* 2025;43:694–704.

£0.9M CRUK grant

1935 patients enrolled

Results reported

EUCTR2013-002730-21-GB

PATHOS

Global recruitment target reached in the PATHOS oropharyngeal cancer trial

The PATHOS trial, an international, phase III randomised controlled clinical trial, is led by Prof Mererid Evans (Cardiff University and Velindre University NHS Trust) and Prof Terry Jones (Liverpool University), run by the Centre for Trials Research (Cardiff University) and sponsored by Velindre and Cardiff University. It is funded by a £2.8M grant from Cancer Research UK's Stand Up to Cancer (SU2C) fund.

The aim of PATHOS is to investigate whether radiotherapy dose reduction or omission of chemotherapy can reduce long-term side-effects, without reducing cure rates, in patients with human papillomavirus (HPV)-associated oropharyngeal (throat) cancer who have undergone minimally invasive surgery. Inability to swallow properly following head and neck cancer treatment is a common side-effect, with around 10% of patients needing a feeding tube for months or years after treatment. If the results of PATHOS show that reducing adjuvant treatment reduces side-effects while maintaining high cure rates, PATHOS could change global treatment paradigms for the disease.

PATHOS completed recruitment of 1349 patients from 65 sites (39 UK, 26 international in France, Germany, the US and Australia) in October 2024, making it the world's largest head and neck interventional clinical trial. The results are expected to be reported in 2028, along with the results of associated translational sub-studies.

£2.8M SU2C grants

Global recruitment target met

Results expected by 2028

CTIS2024-516673-68-00

ELIPSE

Recruitment opened in largest surgical prostate cancer research study in the UK

The ELIPSE trial team, led by consultant urological surgeon Prof Krishna Narahari (Cardiff and Vale University Health Board) was awarded £2.3 million by the NIHR to undertake the research.

The study aims to recruit over 1000 men from 25 sites across the UK with high risk localised prostate cancer. The aim is to identify whether removal of lymph nodes alongside the prostate improves clinical outcomes for the patients. The study team will also assess what impact the additional procedure may have on the patients' quality of life.

The first patients were enrolled in 2024. The findings from the trial, which is expected to take 3 years, will inform clinical decision-making with reference to prostate cancer recurrence, quality of life, complication rates, survival and use of NHS resources.

£2.3M NIHR grant

Open to recruitment

Currently recruiting

ISRCTN14434966

POLARiS

Successful feasibility pilot leads to international rectal cancer surgery trial

Following a successful Bowel Research UK-funded feasibility pilot, the POLARiS study team has been awarded a further £3.7 million by NIHR and Australia's Health and Medical Research Council to expand their research. The POLARiS study, led by colorectal surgeon Professor Julie Cornish (University Hospital of Wales), has been designed to investigate the side effects of rectal cancer surgery, with a focus on poor bowel control. The team aims to investigate the effect of surgery on bowel function, and create a treatment pathway that will reduce these side effects.

Recruitment opened in September 2023, with a total recruitment target of 600 patients for the randomised controlled trial and a further 1,500 patients for an observational cohort study. Patients are being recruited from the UK and Australia.

£3.7M NIHR & AHMRC grant

Open to recruitment

Currently recruiting

ISRCTN12834598

BICCC

Clinical trial investigates low-dose cyclophosphamide to prevent colorectal cancer relapse

A Cardiff-based team led by Professor Andy Godkin (Cardiff University and Cardiff and Vale UHB) has been awarded £780k of funding by Cancer Research Wales to run the BICCC trial.[1] The aim of BICCC (Brief Intervention with Cyclophosphamide in patients with Colorectal Cancer) is to evaluate whether giving low-dose cyclophosphamide to patients over 18 years old who have completed surgery and/or chemotherapy will reduce their risk of relapse. It is recruiting any patient who has been treated for stage II-IVA CRC and deemed cured. It is now open in Singleton Hospital in Swansea, Velindre Hospital and UHW in Cardiff, Betsi Cadwaladr University Health Board in North Wales and eight other centres around the UK and Northern Ireland.

Previous studies have shown that low-dose cyclophosphamide was well tolerated and effectively primed the immune system in patients with incurable colorectal cancer. The hope is these results will be validated in this new cohort of patients in the adjuvant setting, triggering their immune cells to destroy any remaining cancer cells, therefore reducing the chance of the cancer returning post-treatment. The team aims to recruit 500 patients into the randomised trial, which will run until 2028.

£0.78M CRW grant

Open to recruitment

Currently recruiting

ISRCTN12508004

1. Velindre University NHS Trust. https://velindre.nhs.wales/news/latest-news/uks-first-patients-for-cardiff-led-biccc-study/

SCOPE2

Recruitment completed to world's largest chemoradiotherapy oesophageal cancer trial

The £1.6 million, Cancer Research UK-funded SCOPE2 trial, led by chief investigator Prof Tom Crosby (National Cancer Clinical Director for Wales, and consultant oncologist at Velindre Cancer Centre) has now closed to recruitment.

The study aims to elucidate the benefits of higher-dose radiotherapy, compared with standard dosing in inoperable oesophageal cancer. The investigators are also evaluating alternative chemotherapeutic drug combinations in the same cohort of patients.

Recruitment to the SCOPE2 trial closed in January 2024, with the target participant number exceeded, making SCOPE2 the largest chemoradiotherapy trial for oesophageal cancer worldwide. Results are expected in 2026, with outcomes evaluating the effects of treatment on the participants' survival and quality of life. The study team hope to use the results of this study to lead in to a larger trial, assessing the proposed chemotherapy combinations and radiotherapy doses on a bigger cohort of participants.

£1.6M CRUK grant

Recruitment target reached

Results expected 2026

ISRCTN97125464

THINKCANCER!

£1.6m funding award for trial of novel intervention for earlier diagnosis

Professor Clare Wilkinson is the Chief Investigator of the ThinkCancer! trial, a pragmatic randomised controlled phase III trial of a novel behavioural intervention for primary care teams to promote earlier cancer diagnosis with embedded process and economic evaluation.

The trial is centred within the North Wales Centre for Primary Care Research (NWCPCR) and funded by Cancer Research Wales and North West Cancer Research with a £1.6 million award from 2022-2027. The trial is currently in the data collection phase (thinkcancer@bangor.ac.uk).

£1.6M CRW and NW Cancer Research award

No longer recruiting

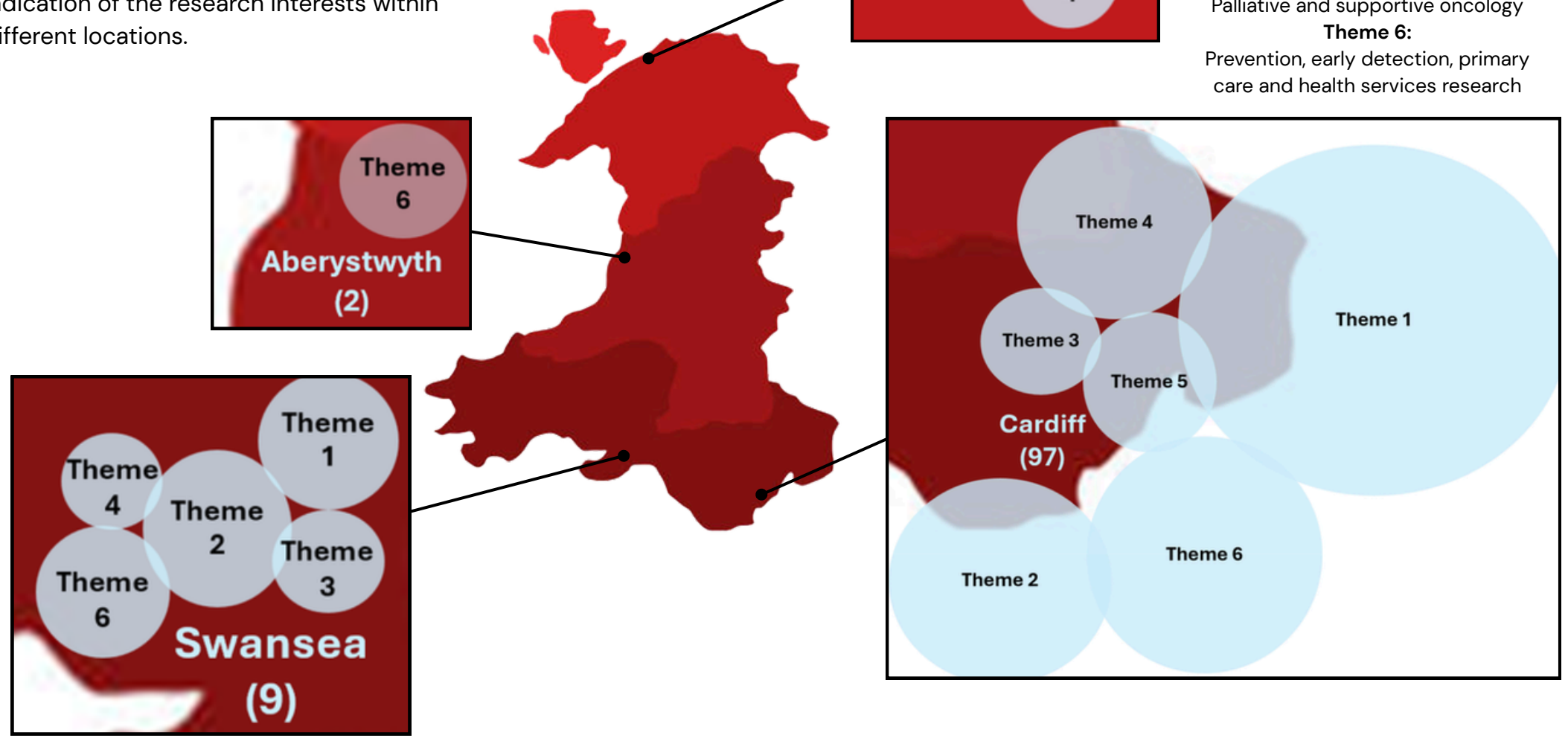
Data collection in progress

ISRCTN43757325

Wales' cancer research in 2025: A snapshot by CReSt theme

This snapshot analysis of cancer research in Wales is taken from the 110 abstract submissions to the Wales Cancer Research Conference held in March 2025. This gives an indication of the research interests within different locations.

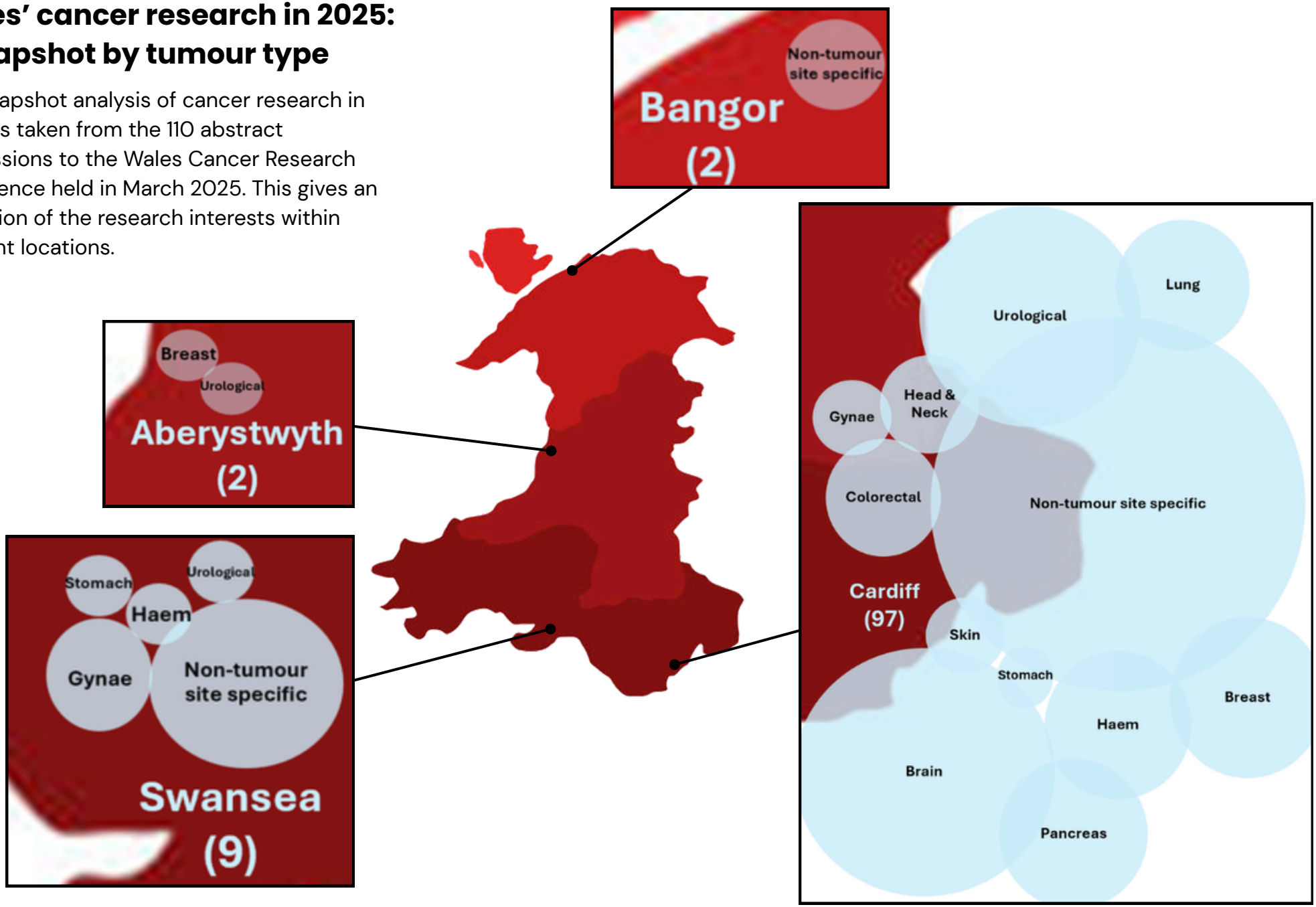
Theme 1:
Precision and mechanistic oncology
Theme 2:
Immuno-oncology
Theme 3:
Radiotherapy
Theme 4:
Cancer clinical trials
Theme 5:
Palliative and supportive oncology
Theme 6:
Prevention, early detection, primary care and health services research



Wales Cancer Research Conference 2025. Abstract listing https://walescancerresearchcentre.org/wales-cancer-research-conference/

Wales' cancer research in 2025: A snapshot by tumour type

This snapshot analysis of cancer research in Wales is taken from the 110 abstract submissions to the Wales Cancer Research Conference held in March 2025. This gives an indication of the research interests within different locations.



Wales Cancer Research Conference 2025. Abstract listing https://walescancerresearchcentre.org/wales-cancer-research-conference/

This report was compiled by the Wales Cancer Research Centre, but includes the work of many individuals, groups and organisations all across Wales.

We look forward to continuing to collaborate within and beyond Wales on the next chapters in cancer research, to advance the aims set out in the CReSt strategy.

Canolfan Ymchwil Canser Cymru | Wales Cancer Research Centre

Researchers from across Wales at the WCRC's 2024 and 2025 Wales Cancer Research Conferences

Thanks also to our CReSt leadership group members who are supporting implementation of the CReSt strategy: Prof Mererid Evans, Prof Duncan Baird, Dr Magdalena Meissner, Prof Awen Gallimore, Prof Alan Parker, Dr James Powell, Prof Richard Adams, Prof Steve Knapper, Prof Simon Noble, Prof Sunil Dolwani, Prof Katherine Brain, Dr Stephanie Smits, Dr Helen Pearson, Bob McAlister, Jenni Macdougall and Kathryn Spiers-Pritchard