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Partnering with an oncology clinical trials unit: key to a successful trial

Information for potential chief investigators

May 2025

Together we are beating cancer

Contents

1) Key acronyms

ATMP	Advanced Therapy Medicinal Product
CTIMP	Clinical Trial of Investigational Medicinal Products
CTU	Clinical Trials Unit
CI	Chief Investigator
CRF	Case Report Form
CSP	Coordinated System for NHS Permissions
CRO	Contract Research Organisation
CRUK	Cancer Research UK
DSUR	Development safety update report
ED	Early Detection
EDI	Equality, Diversity and Inclusion
FIH	First-in-Human
GCP	Good Clinical Practice
HRA	Health Research Authority
IC	Informed Consent
IDMC	Independent Data Monitoring Committee
ISRCTN	International Standard Randomised Controlled Trial Number
MHRA	Medicines and Healthcare Products Regulatory Agency

PPI(E)	**Patient and Public Involvement (& Engagement)**
PI	Principal Investigator
PIS	Participant Information Sheets
PV	Pharmacovigilance
QA	Quality Assurance
R&D	Research & Development
RT	Radiotherapy
REC	Research Ethics Committee
SOECAT	Schedule of Events Costs Attribution Tool (a non-commercial cost attribution tool designed to identify NHS-based activities vs research cost value and excess treatment cost value)
SOP	Standard Operating Procedure
SAE	Serious Adverse Event
SUSAR	Suspected Unexpected Serious Adverse Reaction
TSC	Trial Steering Committee
TMG	Trial Management Group
TMF	Trial Master File
UKCRC	UK Clinical Research Collaboration

What is a clinical trials unit?

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What is a clinical trials unit (CTU?)

CTUs are specialised research units that design, centrally coordinate and analyse clinical trials and other well-designed studies. They are multidisciplinary specialist units that have the specific remit to design, conduct, and report clinical trials.

CTUs are research partners, not service providers like CROs*.

CTUs also have expertise in rarer cancers or where the intervention has limited commercial interest.

**CROs are contracted to manage commercial clinical trials on behalf of Pharma and Biotech companies*

UK CTU infrastructure

There are approximately 50 UKCRC registered CTUs. This network facilitates high-quality, efficient, and sustainable research leading to better patient outcomes, establishing the UK as a world leader in clinical research across all disease areas.

To be registered as part of the network, CTUs must demonstrate a track record of experience in coordinating multi-centre trials with expert staff to develop studies, robust quality assurance systems and evidence of long-term viability of capacity for trials coordination.

The involvement of a CTU in a clinical study is mandatory by some funding agencies, including CRUK.

There are currently approximately 35 units conducting cancer trials, including seven Cancer Research UK-funded units.

Map of UKCRC locations

Key:

- UKCRC registered, CRUK-funded
- UKCRC registered

More information is available on the UKCRC website.

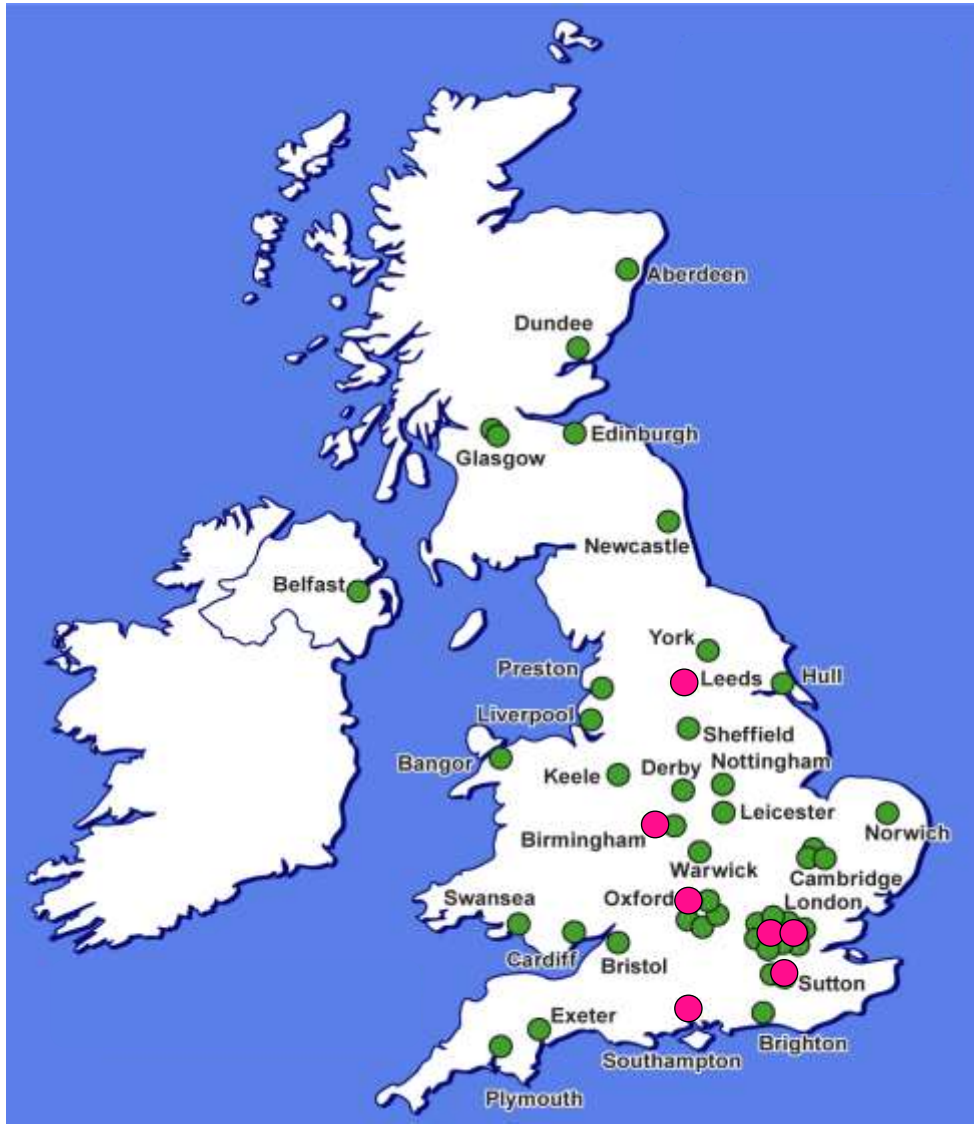

*Image accessed May 2025

"Our CTU network drives high-quality, patient-centred, practise-changing research. They drive innovation in methodology and trial design, make trials more cost effective , enhance trial efficiency increasing the chances of success and new therapies reaching patients faster. They play a critical role in ensuring our trials are ethical, safe and compliant to the highest regulatory standards. Our investment in our CTUs also helps them to generate significant further investment from Industry ensuring that every pound spent by Cancer Research UK goes that much further"

Dr Graham Cadwallader
Head of Clinical Research at Cancer Research UK

What does a clinical trials unit do?

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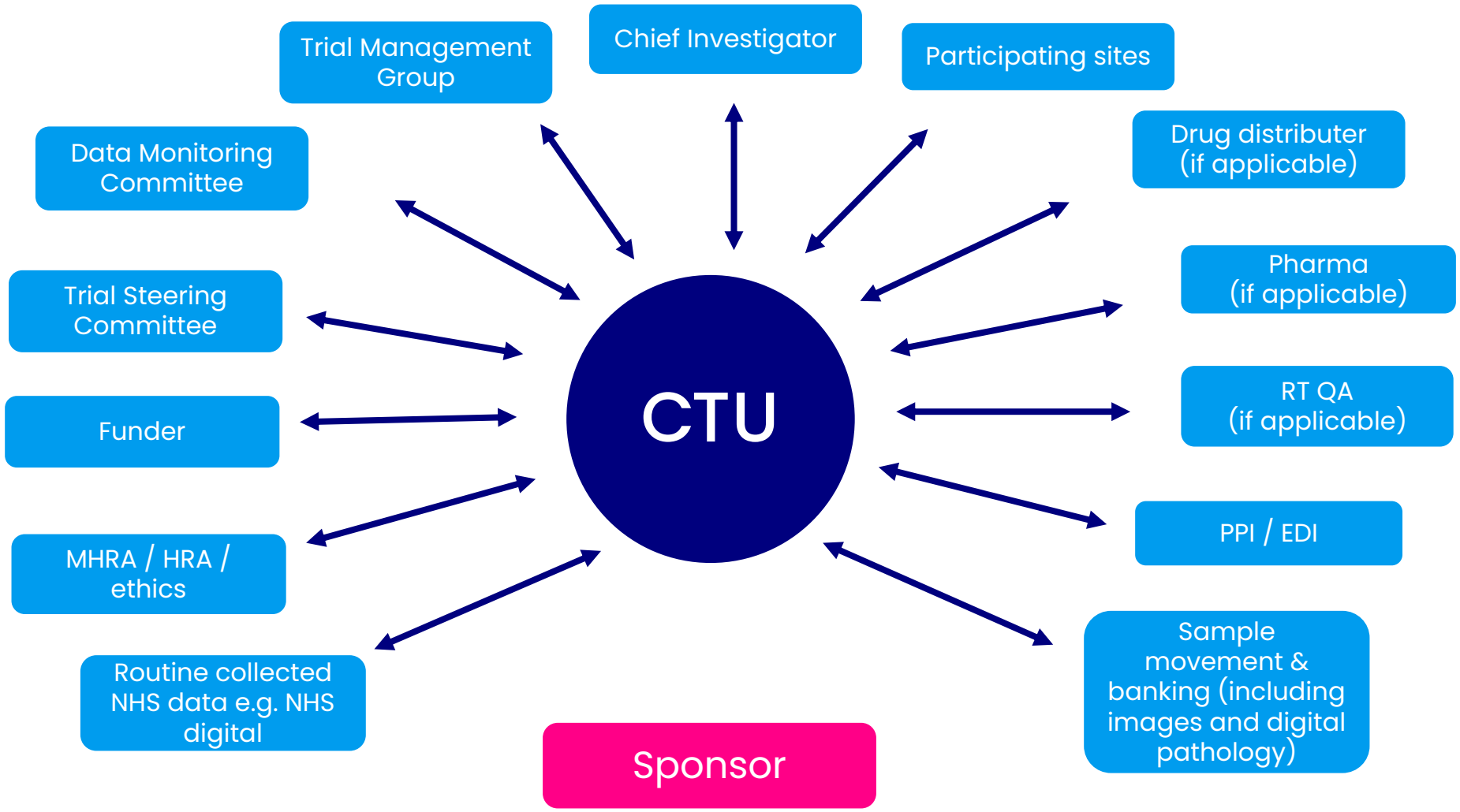
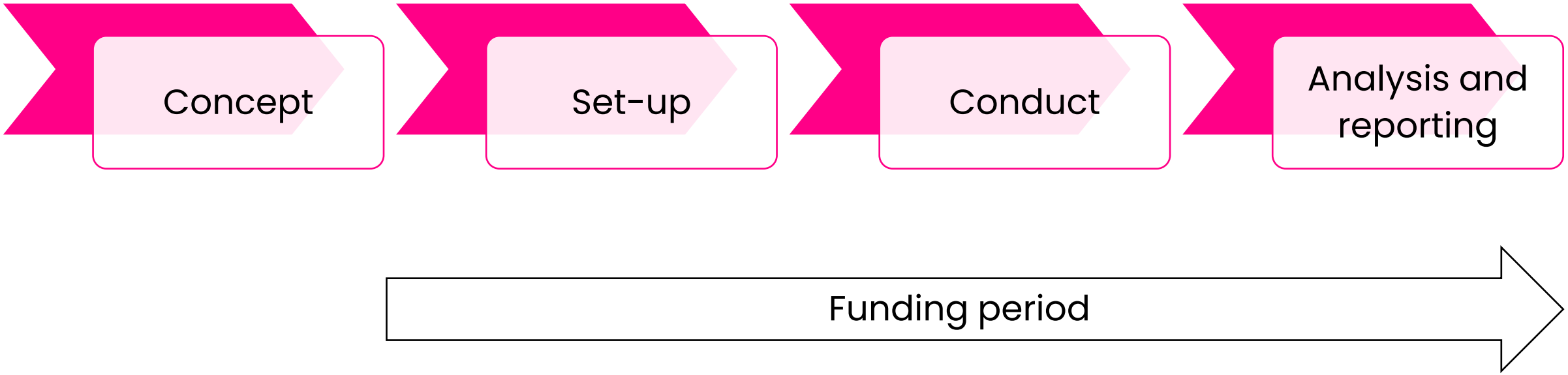
Key relationships within a CTU



What do CTUs do?



What do CTUs do: trial conceptualisation

- Advise on trial concept and trial design
    - Review available literature to inform sample size calculations and conduct feasibility assessments.
- Inclusion of PPIE.
- Manage completion of grant application.
- Calculate research costs (including costs to the NHS).

"The CTU concept review process and patient feedback is really helpful and once your project is accepted to be developed the Project Managers are an invaluable help and have lots of knowledge and experience between them. They will do as much as possible to help. In general though if you are asked to do something always get on with it. Projects take a long time from first idea to first patient in and the time you can control the most is when work is sitting with you to do."

Professor Janet Graham
NHS GG&C/University of Glasgow
CI: PRIMUS 001

What do CTUs do: setting up trials

- Develop all trial materials including protocol, PIS and risk assessments.
- Obtain regulatory, ethics and global NHS permissions.
- Ensure appropriate sponsorship arrangements
    - Oversee contract negotiations and development.
    - Ensure appropriate arrangements for treatment allocation and labelling and distribution of trial drugs.
    - Develop trial materials and guidance notes for investigator and pharmacy files.
- Ensure appropriate arrangements for sample collection and tracking
    - Develop plans for data management, central and on-site data monitoring and statistical analysis.
    - Develop CRFs and trial database.
- Develop databases to track and monitor data and sample flow.

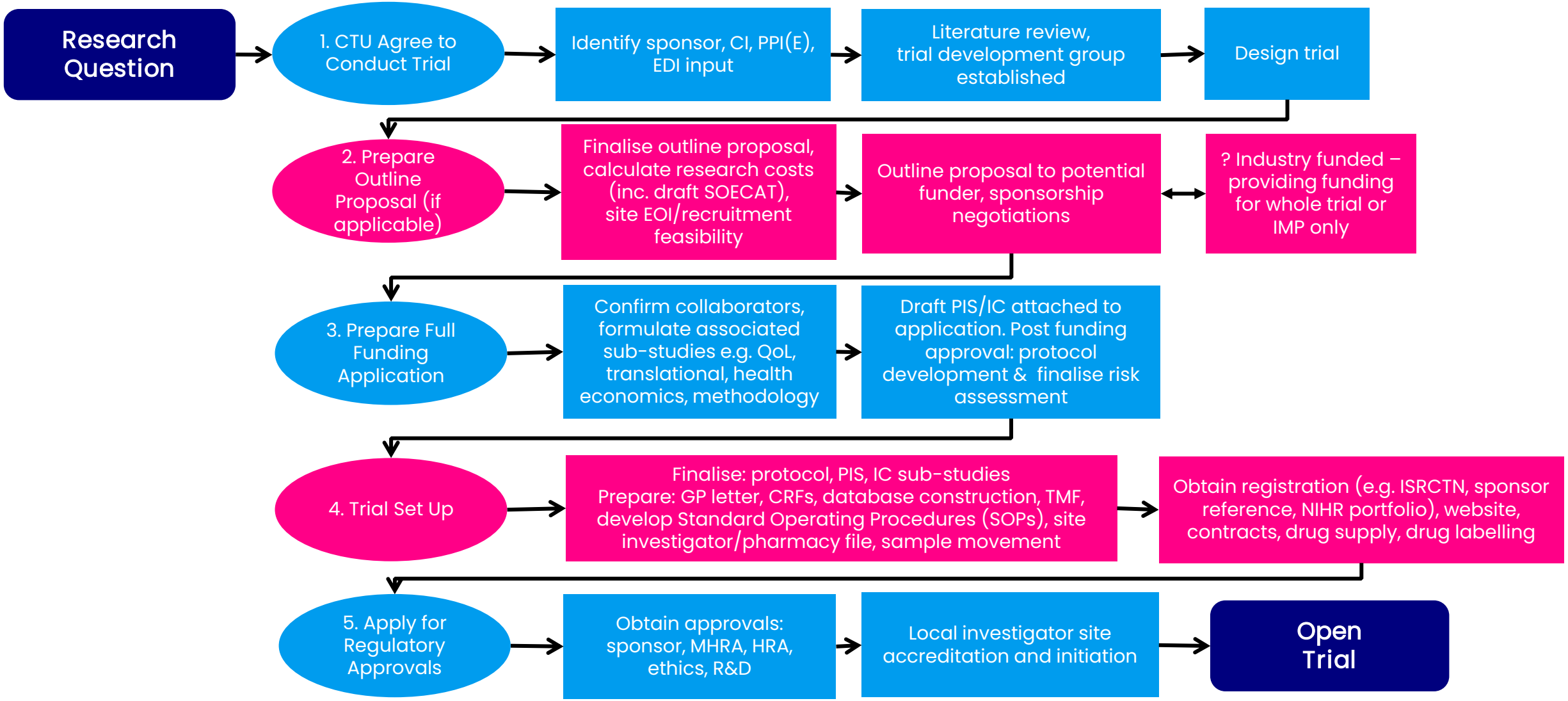
What do CTUs do: conducting trials

- Organise launch meetings and conduct initiations of participating sites, including providing a randomisation service.
- Provide on-going oversight & advice to participating sites, monitor and administer site payments, and centrally collate and enter data.
- Review data for completeness & accuracy - chasing data & querying where necessary
    - Conduct central and on-site monitoring, develop newsletters and promote the trial, help identify & address barriers to timely recruitment and conduct and manage pharmacovigilance activities in accordance with regulations.
- Arrange, contribute to and administer TMG/TSC meetings and maintain trial approvals.
- Prepare reports and essential documentation for funders, regulators, sponsors etc
- Facilitate audits and regulatory inspections and manage trial and site closure (when appropriate).

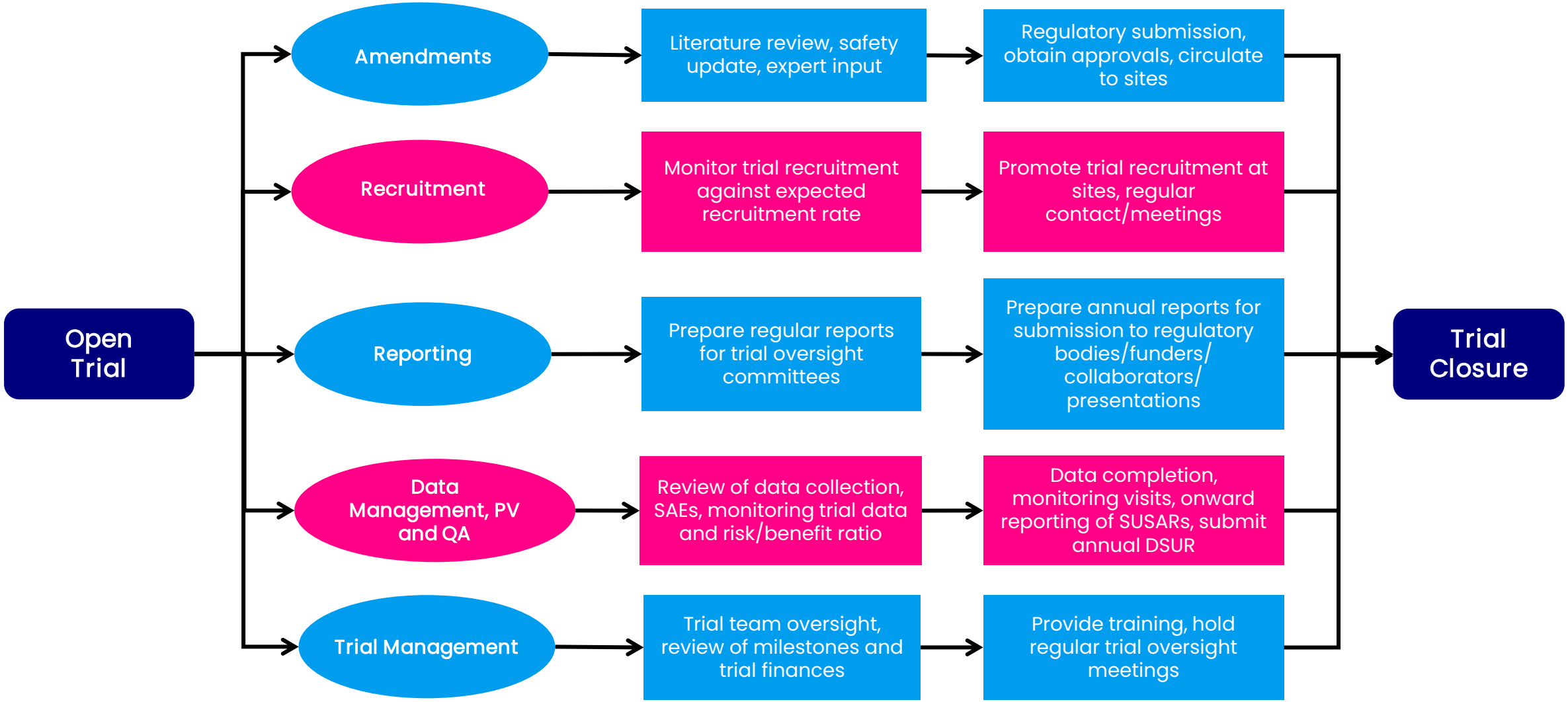
What do CTUs do: analysing and reporting on trials

- Conduct statistical analyses according to pre-defined analysis plans.
- Arrange, contribute to and administer IDMC meetings
    - Provide statistical reports for IDMC meetings and conduct additional exploratory analyses as agreed by the TMG.
    - Contribute significantly to drafting of manuscripts, abstracts and presentations.
- Administer the submission of manuscripts, abstracts and presentations and present at (inter)national symposia as required.
- As a research partner, CTU staff are authors on publications, usually agreed between the CI and CTU Director.

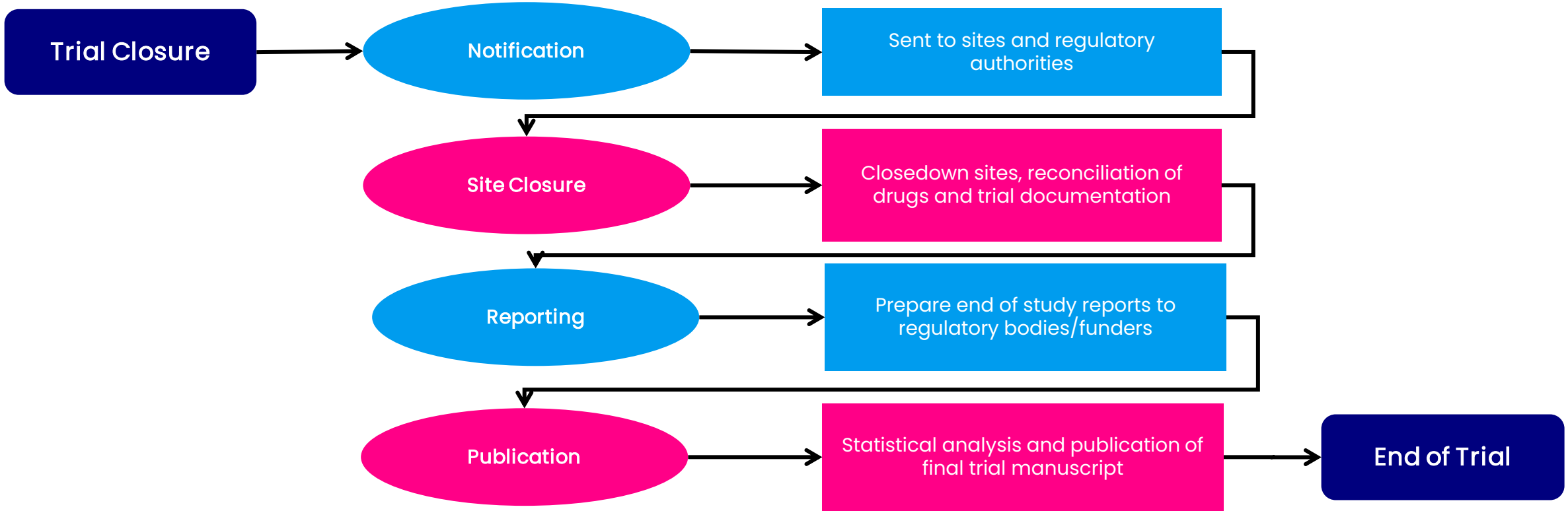
Trial development process



During the trial



End of the trial



Post Trial Closure Activities

- Archiving
- Sample / image storage
- Additional translational research
- Additional publications
- Data and sample sharing

"As an investigator you are keen to start the trial ASAP and obtain the results. However, there is a considerable amount of work to be done such as develop the concept, submit the funding application and then if funded deliver the trial. Involving the CTU team from the start is vital, as they bring methodological expertise, experience and know how to both trial design and delivery. Working closely with CTUs has enabled me to deliver a number of practice changing trials, which without involvement of a CTU would have been very challenging to achieve".

Dean Fennell FMedSCi
Professor in Thoracic Medical Oncology
University of Leicester &
University Hospitals of Leicester NHS Trust
CI: VIM, CONFIRM, PIN, NERO & SELECTMESO

What are the benefits of partnering with a clinical trials unit?

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When should you engage with a CTU?

Right from the start! Why engage with CTUs early?

- Academic collaboration and benefit from CTU experience (CTUs are not CROs!)
- It's not just about trial design, CTUs can support with:
  - contracts – can be complicated and involve many partners
  - costings – should be appropriate
  - navigating regulations – quality standards to be adhered to and all CTU staff GCP trained

Access to CTU infrastructure

Why is this important?

- Support with non-grant funded activities e.g. contract negotiations, specialist advice, such as regulatory.
- Staff training and continuity, providing accumulated knowledge and experience and expertise with problem solving and troubleshooting.
- Established systems processes such as SOPs in place for all aspects of trial management and delivery, pharmacovigilance infrastructure and expertise.
- Links with CRUK Centres, Institutes and Experimental Cancer Medicine Centres to maximise translational discovery from the trial.
- Obtaining funding through coordination and support in completing grant applications with a proven track record of successful funding.

Negotiating with industry

How can a CTU help?

- Prior experience with a variety of companies including understanding pitfalls.
- Requesting realistic funding not just for the CTU but also the costs needed for all those involved in delivering the trial e.g. NHS, regulatory authorities, laboratories, data and sample storage.
- Contract negotiation and understanding the wider implications.
- Investigational Medicinal Product management including what works and is needed, for instance drug supply alone is often insufficient to deliver a trial; drug labelling and distribution to sites is essential and very expensive to costs if the grant needs to cover, as is the cost to make a placebo.
- Data sharing and intellectual property; understanding who owns the data and what the company get back and what it is used for (CTUs should not just be a cheap CRO!)

"Clinical Trials Units are all about creating the evidence for change, to find new cancer treatments for our patients, ways to detect cancer earlier or even prevent it in the first place through clinical trials and other well-designed studies. Once we have conducted a study, we link with the discovery community to learn as much as possible about the cancer and who benefits the most from the trial treatment, which can generate the next new trial hypothesis to be tested.

We are highly regulatory compliant and as UK wide CTUs we are always looking to work with existing and new CIs with their trial concepts. With our complimentary expertise, know-how, systems and processes we work in a partnership with the CI to develop and conduct high quality clinical trials that maximise patient benefit. As UK research infrastructure ready and willing to work with CIs we encourage all potential CIs to get in touch with us early with their trial proposal."

Professor Gareth Griffiths
Director of the Cancer Research UK
Southampton Clinical Trials Unit

"CTUs provide a wealth of experience to support trials through every step of their journey, from concept to completion.

At Cancer Research UK, we require clinical trials to be designed and developed with the involvement of an UKCRC registered CTU to ensure the research we fund is of the highest quality and can deliver the best outcomes for patients."

Dr Graham Cadwallader
Head of Clinical Research at Cancer Research UK

Engaging with a clinical trials unit

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Engaging the right CTU

What factors should you consider?

- CTU expertise and track record
    - Determining the most appropriate funder.
    - Disease area, intervention, methodology.
    - Setting e.g. primary care, early phase units, international etc.
- How to determine which CTU to use
    - CTUs with experience in a similar trial.
    - Working as a network – CTUs can pass to other units if the CI wishes or if that CTU has insufficient capacity to take on the trial.
    - Ask around and explore the network (CRUK website- our Clinical Trials Units, UKCRC CTU infrastructure).

Key questions to ask a CTU

Will the CTU collaborate if…

- there is only one recruiting site?
- there are international sites?
- the trial is sponsored by Pharma?
- the trial is high risk? (e.g. a first-in-human or advanced therapy medicinal product)
- they haven't previously worked in disease area, setting etc?
- the trial is already funded?
- there are competing trials on the NIHR or CTU portfolio?
- the trial doesn't fit with the CTUs core funder's research strategy?
- the CI is external to the sponsor, e.g. the sponsor is the CTUs host institution?
- the proposed sponsor is not the CTUs host institution?

What types of trials do CTUs take on?

It depends on the CTU!

CTUs are the best option if the trial

- is multicentre
- is randomised
- involves an Investigational Medicinal Product (a CTIMP or ATMP)
- is high risk
- is early phase/phase I (FIH), phase II, phase III, early diagnosis, prevention
- is an observational study
- is translational rich – linking with the oncology discovery community
- has a complex statistical design and/or uses mixed methodology
- is in a disease, trial intervention or outcomes area where the CTU already has expertise

Appropriate trial costing

What impacts on cost*?

- risk of trial – monitoring requirements
- phase of trial
- duration
- intervention
- research costs to sites e.g. trial specific assessments
- number and location of sites e.g. international sites
- translational requirements as per design e.g. biomarker-guided
- sub studies eg QoL, sample collection, health economics, central quality control – pathology, imaging etc

*Note there may be some variation in institutional overheads and their assessment of job roles for research or administration pathways

Appropriate trial costing – staffing

Staffing at CTUs can differ in their titles and roles.

Examples of the types of roles which will be required (FTE depending on trial complexity) include:

- trial management (Senior Trial Manager or Project Manager, Clinical Trial Co-ordinator, administrative roles, etc)
- statistical support (prior, during and end to include IDMC reports and analysis)
- database construction, validation and maintenance
- data management
- quality management / trial monitoring
- pharmacovigilance

Appropriate trial costing – additional costs

Costs to be included in CTU funding requirements can vary.

Examples of additional CTU-related costs include:

- Running expenses such as computers, software, administrative costs, general office costs, database licenses and publication costs, etc.
- Translational costs such as sample collection, consumables, shipping and storage.
- PPIE costs including appropriate renumeration.
- Data sharing costs e.g. a trusted research environment or secure data environment.

Appropriate trial costing – non-CTU costs

There are additional costs to consider that are not specific to CTUs. Don't ask for too little - underfunding impacts on trial success as it may result in understaffing, can put patient safety at risk, may cause delays and is ultimately unethical.

Examples of additional non-CTU costs include:

- NHS site costs (detailed in SoECAT)
- Intervention (placebo)
- IMP packaging, labelling and distribution
- regulatory Fees (MHRA, HRA Radiation assurance etc)
- translational research / any other external collaborators

What are the responsibilities of a chief investigator?

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CI responsibilities: What's the difference between a CI and a PI?

- Principal Investigator
  - Responsible for the conduct of the trial at their site.
- Associate Principal Investigator
  - An associate PI can be appointed with the agreement between the CTU and CI.
  - This falls under the Associate Principal Investigator Scheme, an NIHR initiative which aims to develop doctors to become the PIs of the future.
- Chief Investigator
  - Responsible for the overall design, conduct (at all sites) and reporting.
  - Can also be a PI for their own site.

CI responsibilities: additional responsibilities

The CTU will support and co-ordinate these responsibilities in partnership with the CI:

- trial oversight / management of whole trial
- protocol development and trial design
- funding
- Trial Master File and all essential documents
- oversight of database content, validation and data management
- regulatory submission and compliance
- ethics submission
- risk assessment / safety / IMP oversight
- annual / end of trial reports and publication of trial results

CI responsibilities: time commitment

Prior to funding

- very variable but start more than 3 months ahead of deadline.
- it can take over a year to determine the right design.

Post funding

- estimate 2-4 hours a week - very variable depending on the trial.
- allow time to establish good working relationships (with CTU staff, the TMG, and site PIs).
- availability for troubleshooting including queries on eligibility, protocol, safety etc.

What should you expect from a CTU?

- To be a research partner to develop and conduct the trial.
- Expertise in trial design and funding applications; good track record in obtaining funding.
- Trial expertise
  - Support and guidance in preparing ethics applications, protocols, case report forms and essential documents.
  - Trial coordination, database development and data management.
- Communication and reporting
  - Kept informed of issues at sites.
  - Preparation of trial reports for relevant committees and bodies and preparation work for publications and presentations.
- Compliance
  - Navigation through relevant clinical trial regulations and guidance, best practice in clinical trial conduct from design to final publication and risk management.

What will a CTU expect from you?

The 4 Cs:

- Collaboration
  - Academic CTUs are partners not service providers.
- Communication
  - Keep the CTU in the communication loop eg messages for funder, R&D, RECs, MHRA, Investigators, trial queries etc.
- Clinical leadership
  - Timely input and oversight of all clinical issues/patient safety and trial management.
- Compliance
  - Comply with CTU & sponsor SOPs and policies to ensure compliance with appropriate clinical trial regulations, guidance and funder requirements e.g. formation of TSCs .

What clinical trials units do not do

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What CTUs don’t do

- Interface with trial participants.
  - Other than sending out patient reported outcome questionnaires e.g. quality of life where required.
- Store, label, dispatch IMPs, Advanced Therapy Investigational Medicinal Products or biological samples.
  - Processes may be managed by CTU.
- Generally, CTUs do not provide clinical advice or clinically review SAEs.

Acknowledgements

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Developed by the Cancer Research UK CI Training and Support Working Group

Including members from the following CTUs:

- Queen Mary University of London Cancer Research UK Cancer Prevention Trials Unit
- The Institute of Cancer Research Clinical Trials and Statistics Unit
- Cancer Research UK and UCL Cancer Trials Centre
- University of Birmingham Cancer Research UK Clinical Trials Unit
- University of Leeds Clinical Trials Research Unit
- Southampton Clinical Trials Unit
- Oxford Oncology Clinical Trials Office
- Glasgow Clinical Trials Unit
- Cardiff University Centre for Trials Research

Building on previous slides created by the now disbanded National Cancer Research Institute (NCRI) Cancer CTU Group.