

Glasgow Clinical Trials Unit Guideline

Guideline Number	51.004A	Version	3.0
Title	Clinical Trial and Medical Device Risk Assessment Guidance Document		

When undertaking the Risk assessment of a CTIMP or a CIMD which is either sponsored or co-sponsored by NHS GGC, the following guidance document can be used to serve as a prompt for the questions to be asked at the Risk Assessment meeting in order to capture and identify the risks appropriate to the trial. Capture any additional risks raised during discussion that may not fit into predefined categories. If no risks identified in a section, **state explicitly**.

Hazard/Risk	Key Considerations (prompts for discussion)
	1. Participant
1.1. Participant Rights, Consent and Eligibility List risks identified in relation to patient consent, eligibility documentation and data rights. Consent process and any unusual scenarios should be discussed at all risk assessments.	Informed Consent Process: • Timing of consent (before any trial procedures) • Version Control • AWI/emergency/minors consent - are there vulnerable populations or capacity issues that affect consent? • Will verbal, emergency, remote, or telephone consent be used? Is this documented in the protocol? • Capacity of researchers (should be documented at feasibility) • Are screening procedures or mandatory scans feasible within site timescales (should be documented at feasibility)? • Are PIS/ICFs sponsor-approved and compliant with data-handling requirements, including third-party transfer? • Who determines eligibility, and who takes consent? Is the process documented when these differ? • How will consent be stored (paper, electronic e.g. SCI-Store, TrakCare)? • How will sites ensure medical notes are updated promptly? Will guidance be given to sites? • Have multilingual PIS/consent needs been considered for multi-site trials? • How will you document that the patient has a copy of the signed consent form? • Re-consent procedures triggered appropriately e.g. new safety info, participant turns 16 in Scotland/UK context) • Capacity and assent process (appropriate for vulnerable populations)

	Eligibility: • Inclusion/exclusion clearly defined and feasible (avoids enrolling participants at unacceptable risk)
1.2. Data Protection Identify risks associated with storage, processing, and control of identifiable data during and after the trial.	• Is a Data Protection Impact Assessment (DPIA) in place and comprehensive? If not, please document why this is not required. • How will identifiable data (paper/electronic) be stored and secured (paper/electronic)? • If patient identifiable information is stored electronically, has IT risk assessment been done? • Are anonymisation/pseudonymisation processes robust? • Method of participant identification • Is it clear how data will be transferred, including to external organisations for monitoring, imaging or lab analysis? • Security and control of electronic systems • Have patient information sheet and consent forms clearly captured all future data uses, including regulatory submissions and also any data to be shared outside the UK/EEA? • Are any participant identifiers leaving the Trial location? • What are the processes for redacting personal identifiers without compromising source data? • Has GDPR training and communication been provided to all participating sites? • For multi-site trials, how will sites' rights to access or retrieve their own data be protected after the trial? • Transfers to third parties (labs, imaging, vendors) • Long-term accessibility and traceability of participant data
1.3. Tissue/Sample Collection and Storage	• Patient consent for sample storage, transfer, genetic analysis, and future research use • Availability and QA compliance of storage facilities; Biobank capacity • Sample tracking, chain of custody, and timely recording • Capacity of Biobank or equivalent repository • Processes for sample handling, logs, transport, and endpoint-specific storage • Lab manuals been provided as per Sponsor SOPs • Plan for samples requiring testing after study completion (e.g. long term retention and post-trial analysis)

	Is the custodianship of the samples to be transferred to CI or other Institutions once End of Trial has been completed?
1.4. Safety Related Risks List risks arising from trial design, IMP/device use, patient burden, or safety processes.	Intervention: - Phase of trial - Eligibility assessments—including visibility in medical notes - Licensing status of IMP and NIMP - Risks from unlicensed devices or data-producing apps - In patient medical supervision - Combination IMP/NIMP/concomitant medication interactions - Anticipated reactions and other AEs - Potential for unexpected reactions and other AEs - Device effects and deficiencies - Safety reporting process - PV processes, capacity, and reporting timelines - Implementation and QC of unblinding procedures - Whether participants carry alert cards; emergency procedures - Burden of safety review on CI and PV teams - Exit strategy / access to intervention beyond trial participation including SMC/NICE status - Reporting test/scan results and incidental findings - Unblinding - Timely laboratory tests as per SmPC / IB - Stopping rules/dose modifications criteria - Clear thresholds for pausing or discontinuing treatment - Includes toxicity grading criteria (e.g. CTCAE) For CIMDS only: Class of medical device - Invasive - App - Determining patient care - Disaster recovery process - Type of surgical intervention – novel/standard - Device effects and deficiencies - Safety Reporting Process

	• Device or intervention in addition to IMP • Risks compared to standard care • Consider whether first in human for this intervention/device/procedure or combination
1.5. Burden of Participation	• Self-administration of study intervention • Invasive or experimental administration • Procedures / monitoring / contact / risk exposure beyond standard of care • Changes to standard of care, e.g., length of stay in hospital, extra study visits • Is co-enrolment permitted – taking into account e.g. QoLs, extra CT scans (radiation risk) • PROMs – participant completion of data e.g. Quality of Life Questionnaires / diaries
2. Scientific Integrity	
2.1. Statistical Justification & Powering	• Is there a named statistician involved with the study • Appropriateness of powering • Was there a pilot study showing benefit?
2.2. Endpoints & Data Integrity	• Accurate measurement of primary endpoint (standardised methods e.g. central lab, blinded assessors) • Timing of endpoint assessment with protocol defined visit windows • Endpoint definitions (clear, unambiguous e.g. progression free survival definition) • Handling missing or inconsistent data (clear protocol defined approach) • Minimising missing data (follow up procedures clearly defined) • Independent assessment of data • Consistent method for data interpretation • Bias minimisation • Safety data as a primary or secondary endpoint • Experimental or non-standard investigation / tests • Third party or commercial company benefit addressed • Information for CE marking a device • Study-specific equipment
2.3. Data Capture, Storage & Analysis	• eCRF or CRF build and validation (data management centre or self-build)

	• Database Regulatory compliance • Identification of critical data and critical processes supporting, consent, eligibility, safety data, primary and secondary endpoints and the requirements for signal detection strategies. • Proportional data validation approach aligned to trial risk • Controls to ensure data accuracy, completeness, consistency, and traceability • Data verification requirement / feasibility • Validation of data generated by: eCRFs and clinical databases • User Acceptance Testing (UAT) • Review of data that may impact participant safety e.g IMP dose administered • Digital tools, apps, and devices • External laboratories and imaging providers • Oversight of data queries, corrections, and audit trails • Nature of source data • Control and format of CRFs • Central monitoring • Statistical analysis plan (SAP) • Database Management Plan (DMP) • Stakeholders to be made aware of any database lock, timelines and Clinical Trial Monitors to be consulted
2.4.Enrolment & Randomisation	• Randomisation system validity • Stratification factors applied correctly • Requirement for manual randomisation process and mitigations • Feasibility assessments across all sites • Recruitment projections and monitoring • Stability of CI/PI posts (temporary positions) • Statistical support, SAP planning, and documentation • Blinding - process to maintain the blind • Verifiable eligibility criteria • Recruitment target and feasibility
2.5.Study Design	• Crossover / Multiple arms /complexity (how will this be managed) • Dose modification/interruption • Dose escalation requirements including requirement to convene Safety Review Committee

	• Sample size justification • Type of trial • Potential for increase in number of trial locations; define maximum
2.6. Fraud Risks	• Risk of bias in data analysis • Robustness of blinding • Third-party rights over data or publications
2.7. Publication & Dissemination	• Plans for dissemination to participants and wider audiences. Is this described in PIS? • Trial registration (ISRCTN etc.) • Ownership of publication rights • Changes in Data Controller responsibilities (contracts required) • Journal selection and timelines
3. Management	
3.1. Research Teams	• CI's previous CTIMP experience and compliance (training in device regulations and/or CTIMP regulations) any need for additional oversight? • CI delegation of responsibilities has been signed off. • FIH/GMO experience (if applicable) • Suitability of PI and trial team at locations • Number of Trial locations & feasibility assessments (ensure feasibility has collected that PI has sufficient time, an adequate number of available and qualified staff and adequate facilities as per SOP 56.007) • GCP training requirements • Training adequacy of site teams across all sites • Past compliance issues at any participating site • Clarity of responsibilities for archiving, laboratory oversight, and safety reporting • GCP training requirements for each role • PIs should be familiar with the appropriate use of the IMPs as described in the protocol, in the current IB, in the product information and/or other information sources provided by the Sponsor • Plans for training ward/day-unit staff administering IMPs • Training on protocol, and non-standard procedures • International requirements • Capacity for archiving

3.2. Trials Unit & Project Management	• CTU involvement • Trial Steering Committee (TSC) formation timelines and charter • Independent Data Monitoring Committee (IDMC) formation timelines and charter • Safety review committee formation timelines and charter • International involvement/requirements • Trial Master File (TMF) preparation and maintenance applies to all staff responsible for TMF section see SOP 51.016_ • Site File preparation and maintenance • Training day covering Sponsor activity • Site initiation/training requirements • Handling non-compliances and breaches of GCP and safety requirements • Handling of modifications • Regulatory compliance and training of PMs
3.3. Vendors/Labs/Collaborators	• UKAS Accreditation/G(C)LP standards • Non-routine tests +/- non-standard sample analysis (Cat 3) <i>please ensure lab categorisation form (Form 51.028A)</i> • Suitability and qualification of vendors and labs • Imaging support and radiologist involvement at each site. Radiologist named at each site. • Incidental findings process • Laboratory reference ranges and Accreditation certificates collected for each location • Capacity and suitability of external labs or third-party vendors (e.g. GCP trained staff) via Vendor Assessment • Data quality and validation responsibilities for third-party-generated data • Medical Device Manufacturer • Types of contracts required
3.4. Sample Handling	• Are the timings of sample collection (e.g. PK/PD) clearly defined in the protocol • Laboratory manuals in place for trial locations/central labs detailing materials provided/required and Sponsor approved processes for shipment and storage of samples • Samples should be couriered via tracked means, shipping via normal mail is not acceptable • Chain of custody (traceability of samples) • Vendor assessments • Agreements/contracts with vendors

3.5. Monitoring strategy (on site monitoring, data monitoring, statistical monitoring and central	• Source data plan • Capacity of Sponsor monitors • Additional Trial Locations consider a cap e.g. 10% • Risk-based and targeted monitoring plan completeness (focusing on CtQ factors) • Central vs. on-site vs. remote monitoring feasibility • Support validation of critical data, not routine blanket SDV • Ability to monitor consent, eligibility, safety, and endpoints effectively (consider type of study e.g. dose escalation) • Source data verification challenges • Data-query processes and resourcing • Non-recruiting Trial Locations strategy • International Requirements • Central, statistical and data monitoring plan
3.6. Pharmacovigilance (or Safety Monitoring)	• PV responsibilities (Sponsor or third party) • Data management centre involvement Involvement • SAE/SAR/SUSAR reporting pathways, timelines, and documentation (clear definitions and timelines / immediate reporting pathways for SAEs) • Medical device safety reporting and capture • Dose-escalation review process • RSI selection and SmPC/IB updates • Access to and control and distribution of IB/SmPC • Contracts for PV data sharing with commercial partners • Unblinding procedures • Pregnancy reporting procedures and follow-up timelines • IDMC involvement and data flow processes • PV data sharing contracts • Burden on CI/PV teams • International requirements • Signal detection plans
3.7. Sponsor Pharmacy	• GMP considerations • Licensing status of IMP and comparator • Arrangements for manufacture / distribution

	• Arrangements/funding for IMP delivery, labelling, and shipment • Arrangements for the storage and distribution to Trial Location • Ordering processes for IMP provision to Trial Locations • Product interactions in protocol and PIS • Expected adverse effects and management in protocol and PIS • Pregnancy testing and contraception requirements for men and women • Complexity of dosing procedure (Correct dosing and administration dose, route, frequency clearly specified) • Requirement for Alert Card/Clinical Information Sheet or Diary Card • Emergency unblinding • Requirement for 24/7 Trial Location contact versus advice via NHS 24 • Delegation & training requirements for tasks related to prescribing, preparation and administration of IMP (including IRT considerations if relevant) • Additional equipment for IMP/NIMP storage, preparation and administration • Availability of clinical information and ongoing updates (IB/SmPC) • Environmental considerations / exposure mitigation • Oversight/audit readiness of pharmacy sites • Records for prescribing and administration • Accountability and traceability (Drug Accountability Drug accountability risks) • Prohibited / concomitant medications • Requirement for non-routine pharmacy arrangements e.g. out-of-pharmacy storage • Expiry date considerations • Correct dosing and administration route (dose, route, frequency clearly specified) • Arrangement for additional sites • Continuation of treatment post-trial • Short shelf life or supply chain instability • Manufacturing changes or withdrawal from market • Global or national shortages that could interrupt dosing
3.8. Unlicensed Medical Devices	• Labelling • GMP release by QP • Process for receiving • Accountability for device use and cross reference and cross reference to Patient ID • Manufacturer's GMP and QMS compliance

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	• Validation of device performance • Data transfer routes and security • Impact of device failure on trial endpoints and participant safety • Will trial contribute to CE marking device or market authorisation
3.9. QA/Non-Compliance	• GCP/QA oversight • Protocol Deviation / non-compliance reporting • International requirements • Specific requirements for CIMDS
3.10. Data Quality	• Visit schedule adherence – key visits (baseline, endpoint visits) must occur within defined windows • Critical assessments completed – Imaging, Labs, Questionnaires required for endpoints • How will these be monitored e.g. IDMC, data management
3.11. Contractual Risks	• Appropriate contract types (SMA, International Agreements, Co-Sponsorship, MTA, vendor contracts) • Documentation of deliverables, QC timelines, and non-compliance reporting • Royalties to NHS / research team • Regulatory responsibilities • IP ownership arrangements • Regulatory compliance for international sites
3.12. End of Trial / Archiving	• Documentation of early termination processes • Regulatory timelines for end-of-trial reporting • Archiving procedures and delegated staff • Data lineage from protocol through to analysis and reporting is demonstrable • Management of samples analysed post-study • Post-trial data access and responsibilities are clear
3.13. Funding & Liability	• Whether funding covers full trial lifecycle (ensure all costs are covered) • Regulatory submissions (inc. modifications) • Sponsor and site archiving • Monitoring and annual fees • Commercial contract sufficiency • Costs for IMP, labs, storage, vendors, and PV

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	• Excess treatment costs confirmation • Indemnity arrangements (CNORIS, NHSLA, insurer) • Accuracy of information in PIS • Additional insurance required e.g. for University-employed CIs or international sites. General exclusions from standard clinical trials insurance are as follows: ○ work involving the use of research participants outside of Great Britain, Northern Ireland, the Channel Islands or the Isle of Man ○ work within the United States of America, Canada or its territories; or companies domiciled/registered therein ○ the use of hazardous materials ○ certain non-CE marked medical devices ○ molecules or compounds developed and manufactured at the University of Glasgow ○ number of participants in excess of 5000 ○ work involving research participants known to be pregnant at the time of the project ○ Phase I clinical trials
3.14. Support Services	• Imaging support . radiologist per trial location • Capacity

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Guideline signatories

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Document history

Version	Date	Description	Retrospective Implementation
1.0	24/05/2018	Initial creation	No
2.0	05/10/2022	Update to move list of questions to Q-Pulse	No
3.0	23/10/2026	Update to move list of questions from Q-pulse back into Guidance Document Change in layout Additional information added to incorporate Critical to Quality factors to ensure these are being assessed as per the updated ICG CGP guidelines (April 2026)	No

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