1. Introduction

This Standard Operating Procedure (SOP) describes the process to be adopted when convening a Data Safety Monitoring Committee / Board for research studies sponsored by the University Hospitals of Leicester NHS Trust (UHL).

The outcome is that where required, a Data Safety Monitoring Committee / Board (DSMC/B) for research sponsored by UHL is managed and convened using a consistent process.

2. Scope

This SOP applies to all research studies where a DSMC/B is required.

3. Definition

A Data Safety Monitoring Committee (DSMC) is a group of people, independent of the trial team, who review accumulating data and advise the Sponsor (directly or indirectly) on the continuing and future management of a research study. A DSMC mainly review safety and efficacy data, but where appropriate may also be asked to review quality and compliance data.

The DSMC is usually 'unblinded' and therefore is privy to interim comparisons by arm. They often see data in a format that is not normally widely shared beyond the DSMC, or a statistical analysis team.

4. Which research studies require Data Safety Monitoring Committees?

The decision about whether or not a DSMC is required will depend on a number of factors including the patient population, indication, complexity, duration and end-points of the trial. The decision will be made in collaboration with the Chief Investigator and will be considered as part of the Sponsor risk assessment. There may also be a requirement from the funding award body as a condition of funding.

UHL as Sponsor would expect that a DSMC be established for research studies involving:

- Subjects with life-threatening illnesses
- Vulnerable populations
- Studies where there is prior knowledge or strong suspicion that a treatment under consideration has the potential to harm patients (even though being eventually more effective than treatments already available). or
- Unknown or uncertain risks.

DSMCs may be appropriate for all types of research studies, including those not using Investigational Medicinal Products e.g. research studies of surgical interventions or radiotherapy.

Where a discussion about whether a DSMC is required occurs, the evidence of the discussion must always be recorded in the Trial Master File (TMF). Subsequent plans to establish a DSMC or put other formal safety monitoring arrangements in place must be described in the protocol.

5. Who sits on a Data Safety Monitoring Committee?

DSMC members are generally experienced trialists and it is recommended that at least one member of a committee has served previously on a DSMC. A formal DSMC usually consists of three (3) or more people comprising clinicians and at least one statistician.

6. How is the role of the Data Safety Monitoring Committee described?

The role and function of the DSMC should be described in writing before the DSMC reviews any trial data. This can be described in a Charter which covers the membership, roles and remit, permissible recommendations, frequency and organisation of meetings, how decisions are reached, whether they are advisory or executive and who they report to (how and when). A DSMC should be fully functional before enrolment to enable it to respond to any safety signal.

A suggested template charter is provided in Appendix 1.

7. Independence of the Data Safety Monitoring Committee

The DSMC members must ensure that any potential competing interests are declared at the outset and any new competing interests recorded in the record of each DSMC Meeting.

DSMC meetings to review unblinded data will be "closed" meetings at which the Sponsor and trial team will not be present. The DSMC may also hold "open" meetings with the Sponsor to discuss conclusions and recommendations.

8. Reporting Responsibilities

It is the role of the DSMC to make recommendations to the Sponsor on trial conduct, such as the need to amend the protocol or to terminate the trial early. This is normally done directly with the Sponsor, unless a Trial Steering Committee (TSC) has also been set up, in which case the DSMC may report to the TSC.

It is the responsibility of the Sponsor to communicate DSMC recommendations to the Competent Authority and REC in an appropriate manner. If such recommendations require implementation of an urgent safety measure it must be ensured that this is reported to the Competent Authority and REC in the required timeframe. The Sponsor should notify the REC of any recommendations made by the DSMC and provide summary reports where appropriate. It is not necessary for the REC to see minutes of DSMC meetings.

Similarly it is important that any outputs from the DSMC are clearly documented to ensure that the data used to make decisions are robust and the decisions themselves are documented and retained. It is advised that the documentation verifies who prepared and checked any reports and listings - this being particularly important if unblinded reviews are taking place to provide evidence that the trial team remained blinded.

9. Responsibilities

	Responsibility	Undertaken by	Activity
1	Sponsor	Head of Research Operations or their delegate	Discuss with CI the requirements for a DSMC
2	Chief Investigator	Chief Investigator or their delegate	Coordinate with the Sponsor the set up of a DSMC

	Responsibility	Undertaken by	Activity
3	Chief Investigator & Sponsor	Head of Research Operations or their delegate	Ensure DSMC Charter is completed and Chair appointed
4	DSMC	DSMC Chair	Ensure Sponsor receives copies of open DSMC meeting minutes
5	Sponsor	Head of Research Operations or their delegate	Ensure appropriate regulatory authorities & REC are notified of any changes required as a result of DSMC discussions or Urgent Safety Measures.

10. Who Guideline Applies To

All staff within UHL and external to UHL who are delivering research.

11. Guideline Standards and Procedure

The SOP is detailed so the process can be clearly followed. No flowchart is provided / required.

12. Education and Training

None

13. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Sponsor Audit	Randomly chosen for audit	Carolyn Maloney	As and when	A report will be produced

14. Supporting Documents and Key References

SOP S-1025 Appendix 1

15. Key Words

Research, Innovation, EDGE, REC, MHRA, HRA, Data, Safety, Committee, Monitoring

16. Contact and Review Details

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title) Lisa Wann R&I manager	**Executive Lead** **Medical director**
Details of Changes made during review: **Review and update**	

17.

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This table is used to track the development and approval and dissemination of the document and any changes made on revised / reviewed versions

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September 2016	3	CM, LW, JJ	Checks for consistency adding HRA process.
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February 2019	5	CM / Clear Clinical	Consistency checks. Rewording to mirror national phrases
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