

Gentiaë

defining excellence in cardiac safety



Study Management Challenges

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Conference

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Overview

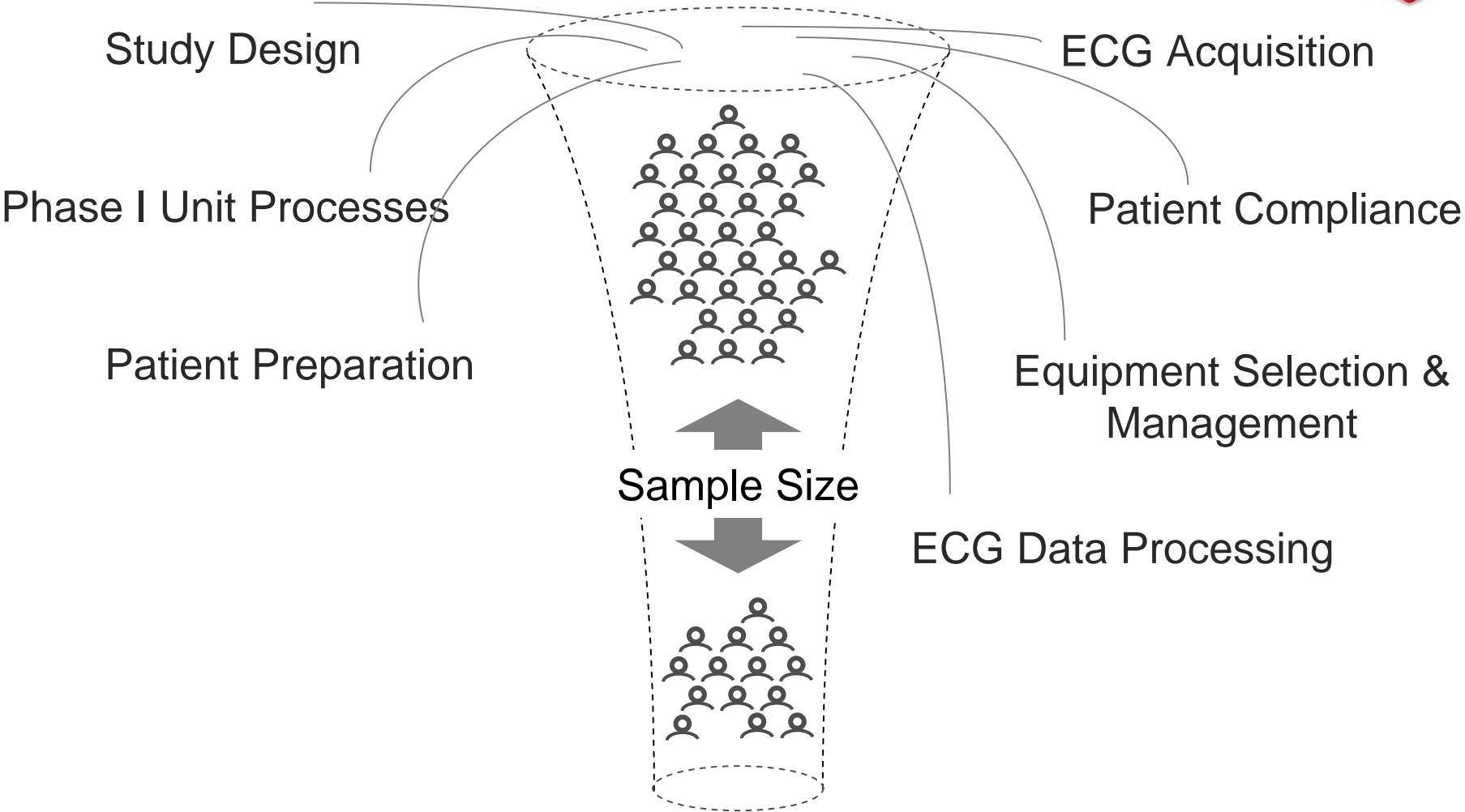


The main goal of any study is to gather quality data.

We will discuss how data variability is impacted by:

- Phase I site selection
- Study initiation process
- Site management
- Thorough QT study trends

Data Variability



Phase I Site Considerations



Inquire about a potential new site partner's...

- Modus Operandi
- Experience with CV trials / core lab function
- Experience conducting TQT studies
- Equipment infrastructure & familiarity
- Patient database / drop-out rate

Study Initiation



- Study design feedback
- Equipment selection
- Project management team building
- Site initiation

Study Initiation: Study Design Feedback



- Inclusion / exclusion criteria
- Time points
- Sample size
- Study conduct
- Randomization
- Drug management distribution
- Data reporting methods

Study Initiation: Equipment Selection



Holter recorders



Study Initiation: Equipment Selection



Holter recorder advantages:

- Extract ECGs at many time points
- Eliminates “missing time points” due to human error
- Control over hysteresys by selecting ECGs at same HR
- High resolution is possible at 1000 sps
- Preservation of data if delayed effects occur
- Episodes of arrhythmias easier to detect
- Method of choice if drug is given IV with rapid Cmax

Study Initiation: Equipment Selection



Holter recorder disadvantages:

- Limb leads electrode placement different from standard ECG
- Excessive motion artifact resulting in lost data
- Electrical interference from extraneous sources
- Flash card data corruption due to premature removal
- Must use ECG machine for safety ECGs
- Interference from dual headed electrodes
- ECG quality cannot be viewed during recording
- Difficult to transfer large files electronically
- Risk of losing data in the mail

Study Initiation: Equipment Selection



ECG devices



Study Initiation: Equipment Selection



ECG machine advantages:

- Very rapid & easy transfer of data
- Safety ECGs are always readily available
- Easy to address any TAT and alert criteria according to protocol
- Easy to view & correct artifacts
- Higher quality ECG recordings resulting in better measurements with reduced variability
- No postal charges

Study Initiation: Equipment Selection



ECG machine disadvantages:

- Intensive labor required
- Potential to miss arrhythmias from 10sec ECG recordings
- Patients must comply with ECG schedule


Study Initiation: Project Management Team Building



- Kick-off meeting
- Project Management Plan design
- Line of communication
- Setting realistic timelines
- Standardized conditions for acquiring ECGs during trial

Project Management Plan



1. Purpose.....	3
2. Scope of Services.....	3
3.  LifeSignals™	3
4. Change Control.....	3
5. Project Management Services.....	4
6. GENTIAE Team Contacts.....	6
7. <SPONSOR> Team Contacts	7
8. Protocol Information	8
9. Investigator List.....	8
10. Equipment and Training	9
11. ECG Schedule.....	10
11. Data Acquisition	10
12. Data Processing, Interpretation and Reporting	11
13. Clinical Quality Control	12
14. Data Management & Programming Services	13-14
15. Documentation and Data Archival.....	15
Approval	16
Document History.....	17

Attachments:

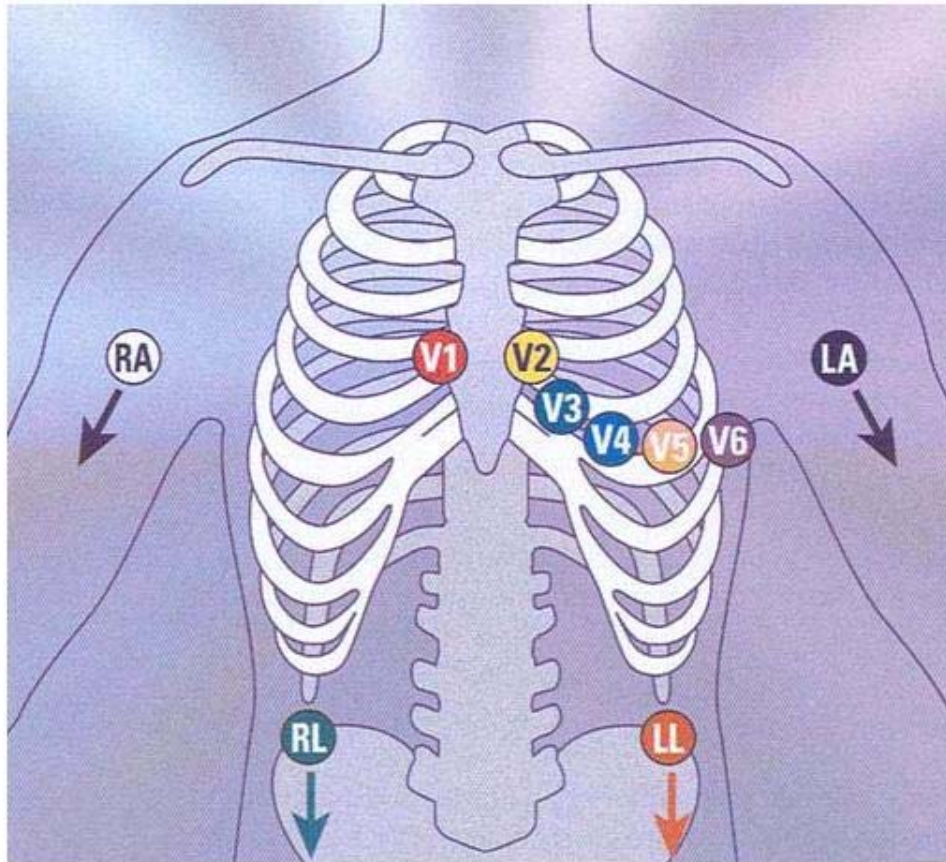
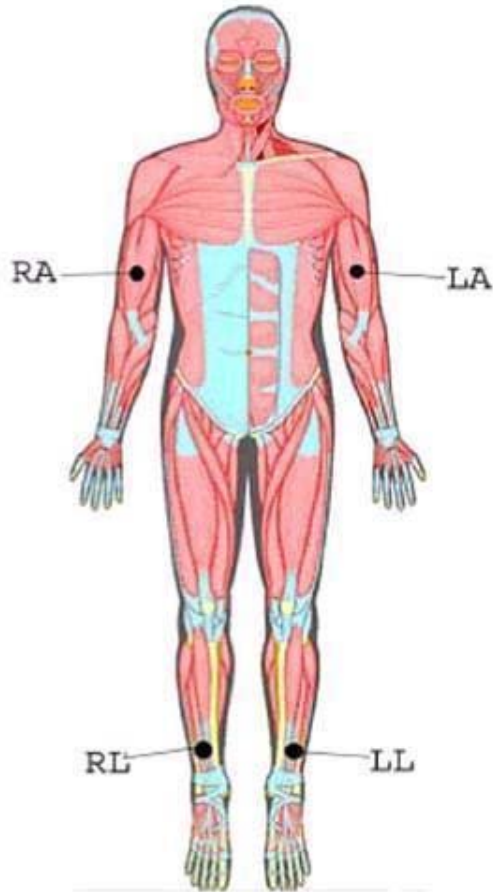
- A_Methodology For evaluating ECGs
- B_ECG Alert Form

Study Initiation: Site Initiation



- Customized manual
- Supplies
- On-site training
- Site qualification

Study Initiation: Site Initiation



Site Management



- Communication
- Turnaround time
- Alert reporting procedures
- Query management
- Ongoing quality control
- 24/7 assistance: Project & Data Managers, Cardiologists available
- Core lab presence at the site on dosing days

Single Site vs. Multiple Sites



SITE 1		SITE 2	
Analyzed	7309	Analyzed	7520
Non-evaluable	16	Non-evaluable	26
Somatic Tremor	2	Somatic Tremor	18
Baseline Drift	1	Baseline Drift	10
Poor Quality	0	Poor Quality	8
Leads Misplacement	15	Leads Misplacement	27
Missing Leads	1	Missing Leads	17
Total Technical ECG Issues	35/0.45%	Total Technical ECG Issues	106/1.4%
Queries	74/1.0%	Queries	142/1.9%

Thorough QT Study Trends



More biotech companies are being asked to do QT studies.

Clients require additional:

- Information
- Support & guidance
- Personnel assistance
- End-to-end service

Conclusion



Quality data is the ultimate goal of your clinical trial. We cannot control all variables that may affect data but with careful planning, we can minimize them.

Reducing cardiac data variability requires **careful attention** to equipment selection, study preparation, site training and project management.

Select a **good partner** to guide you through the study development and preparation process and you will be on your way to a successful trial!