

APPLICATION OF ECHOCARDIOGRAMS IN EARLY PHASE STUDIES

Matters of the Heart

Echocardiogram (echo) is a non-invasive ultrasound imaging test that uses high-frequency sound waves to create real-time moving images of the heart.

It provides a detailed visualization of:

- **Cardiac structure** — chambers, valves, walls
- **Cardiac function** — pumping ability, wall motion
- **Blood flow** — direction and velocity via Doppler techniques

ADVANTAGES OF INCORPORATING ECHOS IN EARLY PHASE STUDIES



Dynamic, real-time assessment of heart structure and performance



High clinical value in detecting even subtle cardiotoxicity signals



Non-invasive, repeatable measurements suited for longitudinal monitoring



Operational alignment with standardized workflows for data quality and safety oversight



CELERION DIFFERENTIATORS

- ✓ In-house echo capability - no need to send participants off-site
- ✓ Long-standing partnership with echocardiogram vendor
- ✓ Access to registered cardiac sonographers and board-certified cardiologists
- ✓ Relationship with Brigham and Women's Cardiac Imaging Core Laboratory (CICL)
- ✓ Us2.ai software provides standardized echo reads for retrospective, prospective, and longitudinal surveillance
- ✓ Same day echo reads available for increased safety oversight