Summary/Next Steps

Prediction of QT is NOT filling a public health need, the ‘gold standard’ outcome must shift to clinical arrhythmia.

High Level of Agreement

A robust and biologically relevant assessment of potential clinical arrhythmia should include assessment of multiple ion channels and the current s7b minimal standard does not reflect this.

High level of agreement

The current in vitro and nonclinical in vivo systems are in themselves sufficient for predicting clinical arrhythmia and can obviate TQT.

Not overall agreement. Depends on what package of data/ approaches are used and to what extent advanced techniques are used.

We are losing potentially valuable drugs from development because they are terminated early or never get into development.

General agreement about scope of the problem/mixed viewpoints on the size of the problem

We need a new paradigm that provides more accurate, more specific prediction of potential arrhythmia from drugs in specific populations, phenotypes, of clinical concern?

Agreement on Value, but mixed viewpoints on whether this is a next step vs aspirational goal.

The adoption of alternative in vitro and/or in silico modeling for arrhythmia would support the development of additional, new classes, and safer drugs at the present time.

For discussion

Is two years too generous a time frame?

- Phase 1 is important to assess if there are unexpected ECG effects, which would need to be understood
  - CSRC can contribute to these clinical efforts

ILSI HESI and Environmental Sciences Institute: HESI

- Nonprofit scientific organization
- Public-Private Partnerships to address human and environmental science issues
- Global activity- Impactful Science through Collaborative Research, Publications, Symposia & Thought Leadership

- Members include a wide range of academic institutions, corporate sponsors, government agencies, and scientific committees

- A track record of working on pre-clinical CV safety
  - Proarrhythmia and Cardiac Stem Cells Working Groups

HESI Proarrhythmia Committee Participants 2012-2013

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