

# WORKING GROUP 3: PARTICIPANT EDUCATION, RECRUITMENT, & INFORMED CONSENT

FORUM HIV CURE PROJECT: FOCUS ON THE REGULATORY PATHWAY

JUNE 17, 2014



#### COMMENTS FROM CO-CHAIRS

**DAVID EVANS AND TIMOTHY HENRICH** 



#### **SUBGROUPS**

Informed Consent

 Recruitment Issues: Surveys Among Potential Trial Participants





## THANKS TO WORKING GROUP MEMBERS

#### **Informed Consent**

David Evans, Sam Garner, Sara Goldkind, Golf, Gail Henderson, George Hanna, Tim Henrich, Richard Klein, Bernard Lo, Deborah Persaud, Seema Shah, Jeremy Sugarman, Jeff Taylor, Mark Wainberg

#### **Recruitment Issues: Surveys Among Potential Trial Participants**

Rachael Anatol, Mike Cohen, Karine Dube, David Evans, Kevin Fisher, Cynthia Grossman, Timothy Henrich, Andy Kaytes, Damian Kelly, Diane Lawrence, Sandra Nusinoff Lehrman, Paris Mullen, Anna-Laura Ross, Seema Shah, Jeremy Sugarman



#### **INFORMED CONSENT**

**TIMOTHY HENRICH** 



### FRAMING RISKS & BENEFITS FOR TRIAL PARTICIPANTS

- "Cure" Language
  - How do we balance aspirational language with the reality of first-in-human trials and low chance of individual medical benefit?
  - How do we justify to prospective participants the need for potentially risky studies given current state of standard of HIV-1 care?



#### RISK/BENEFIT RATIOS FOR TRIAL PARTICIPANTS

Possible risks of participation in HIV cure oriented trials include, but are not limited to:

- Risks involved with ART treatment interruption (see below for details)
- Drug toxicities and adverse effects and potential for long-term toxicities
- Unknown drug toxicities in studies involving more than one experimental agent or strategy
- · Long-term toxicities related to fertility
- Oncogenic potential of drug
- Development of drug resistance
- No clear way to predict the timing of viral rebound when off ART (see above)
- Risks associated with chemotherapy and stem cell transplantation
- Highly invasive procedures required (e.g. gut biopsy, lymph node biopsy, lumbar puncture)
- · Burdens related to study visits
- Inadequate protection of confidential or identifiable information
- Possible exclusion from future trial participation

Possible benefits of participation in HIV cure oriented trials include, but are not limited to:

- Reduction in the size of the HIV reservoir (although long-term benefit of this is unknown)
- Control of viremia in the absence of ART (a.k.a "functional cure")
- Absence of rebound viremia during an extended period of time
- Preservation of immune function or reconstitution of immune function
- Favorable alteration of the viral set point
- Decreased viral evolution and limited viral diversity
- Reactivation of latent replicationcompetent proviruses (e.g. latencyreversing agents)- followed by clearance of infected cells using combination agents/strategy



#### **EMERGING ETHICAL DEBATES**

#### Analytic Treatment Interruptions

What is the tradeoff for participants when there is greater potential harm from experimental treatments vs. standard of care?

#### Return of Results

 Do participants have the right to know individual results of a curative therapy that may have had an impact on HIV-1 persistence or reservoir size?

#### Reproductive Risks

Should standard practice for trial exclusion criteria be based on unknown factors or based on scientific evidence?

#### Patient Centered Concerns & Privacy Issues

- How do we ensure a participant-centered approach is represented in informed consent processes in HIV cure oriented trials?
- How do investigators ensure privacy in the context of intense media attention related to HIV cure oriented trials?

#### **ANALYTIC TREATMENT INTERRUPTIONS**

Table 1: Type of Analytical Treatment Interruption and Potential Risk to Participant				
	Immediate ART Re-Initiation after Rebound	Delayed ART Re-Initiation after Rebound		
ART Re- Initiation Criteria	Restart immediately after viral rebound or at specified interval if no rebound	Restart after specified interval regardless of viral rebound or after VL reaches stable setpoint		
Example	Start after confirmed VL >50 or 200 copies/ml	Continue treatment interruption until VL decay slope plateaus		
Potential Major Risks to Participant	ART resistance acute retroviral syndrome	ART resistance acute retroviral syndrome decrease in CD4 T cell counts opportunistic infections extensive cellular reservoir seeding disease progression		
Benefit to Participant	None	None		
Scientific Benefit	Tests potential for strategy to eradicate virus or lead to prolonged ART-free remission	Allows inter-patient comparisons of viral rebound kinetics/evolution and immune dynamics; may inform on peak and set-point VL during ATI		
Limitations and Logistical Issues	Requires frequent monitoring; does not inform on differences in immune control of virus or VL peak/nadirs during ATI	Potential need for management of AEs and retroviral syndromes, Ols, etc.		



#### RETURN OF RESEARCH RESULTS-EXAMPLE: SURROGATE ENDPOINTS

Table 2. Theoretical Risks of Returning Results to Patient in HIV Cure Oriented Studies: Surrogate  Endpoints					
Type of Result	Result	Potential Risks	Duration of Risk		
Quantitative	Significant decrease in reservoir measure	Patient independently stops ART leading to viral rebound; decreased medication adherence; Patient induced by result to participate in next step of tiered study (e.g. ATI)	Long-term		
measure of reservoir (e.g. SCA, CA-DNA	Significant increase in reservoir measure	Patient anxiety; ART change or intensification when not otherwise indicated	Long-term		
or RNA, VOA)	Inaccurate, insensitive or unspecific results from experimental assays	Patient anxiety; ART change or intensification when not indicated; Patient induced by result to participate in next step of tiered study (e.g. ATI)	Long-term		



### INFORMED CONSENT STRATEGIES TO SUPPORT INVESTIGATORS & PARTICIPANTS

#### "Cure" Language

 Create semantic parallels with known disease lexicons to describe goals of potential therapeutic strategies to patients & avoid misunderstanding or undue influence.

#### Institutional Review Boards

 Early cross talk during design phase of trials may streamline study design & facilitate handling of controversial.

#### Streamline and Increase Readability of Consent Forms

#### Controversies Related to Risks/ Benefits

 Administer a separate evaluation of risk/ benefit understanding; consider including written agreements to not participate in conception process for trial period.

#### Return of Research Results

 Clearly indicate return of results policy for the study. Ensure return of future research results are treated separately from study results.



## How To Portray Potential Risks of Participation and Differentiate Likelihood, Nature, Magnitude, & Severity\*

- Risks of genetic and other study interventions
- Risks of combinations of experimental agents
- Risks of highly invasive procedures
- Reproductive risks
- Risks of analytic treatment interruptions
- Risks of antibody formation, viral drift, mutagenesis, and blood cancer
- Risk of being ineligible for future trials or treatments
- Risk of lost of privacy or confidentiality of personal information



#### How to Portray Uncertainty\*

"There may be *unknown risks* associated with this clinical trial, including death."

"There may be adverse effects that are presently *unknown* and *unforeseeable*."

"Unknown frequency or theoretical risks'...insertion of the vaccine DNA into your body's DNA which possibly lead to cancer, or into the DNA of bacteria or virus in your body (which has unknown consequences). This can be serious, but is expected to be rare if it ever occurs."



## How to Portray Potential Benefits of Participation & Differentiate Likelihood & Nature\*

**Benefit Sections**: Minimize likelihood of direct medical Benefit

"Not the study purpose," "Very unlikely," "Should not expect to benefit"

### **Background & Study Purpose Sections**: Present study goals including:

- Surrogate endpoints: "modify CCR5 protein," "viral load changes"
- Clinical endpoints: "improve the body's ability to fight infection," "remain healthy."

### These may be interpreted as the nature of benefit to be expected



# RECRUITMENT ISSUES: SURVEYS AMONG POTENTIAL TRIAL PARTICIPANTS

**DAVID EVANS** 



# MAPPING POTENTIAL USES FOR HIV CURE ORIENTED RESEARCH SURVEYS

- Gauge willingness to participate in HIV cure oriented research
  - Specific motivations to participate (e.g., altruism, monetary compensation, perceived health benefit)
  - Explore willingness to participate across different populations (e.g., age, gender, income, geographic location, stage of disease, prior trial experiences)
- Assess medical literacy to guide clinical trial informed consent processes & reduce misconceptions



### PERCEPTIONS AND BARRIERS TO PARTICIPATION IN HIV CURE TRIALS

- Potential Factors Associated with Willingness to Participate
  - Desire to derive personal benefit
  - Unwilling to stop ARV therapy for clinical trial
  - Funding of trial
  - Degree to which trial will be available in the public domain
  - Randomization design for trial
  - Institutional Review Board approval
- Populations with Potential Systematic Barriers to Participation
  - Women
  - Ethnic/Racial Minorities



## APPLYING DECISIONAL SCIENCES TO HIV CURE ORIENTED RESEARCH SURVEYS

- Bias in Decision-Making
  - Regardless of education
  - Can differ by age, location & other demographics
- Information presented first has more weight
- Individuals prefer to evaluate their own risks & benefits
- Individuals report more altruism than they display



### STRATEGIES TO MITIGATE BIAS IN SURVEY DESIGN

- Conduct survey research within all target populations
- Create cognitive maps to identify gaps in knowledge that may hinder informed decisionmaking
- Tailor surveys according to familiarity with HIV cure oriented research
- Lessons learned from related disciplines
  - Oncology, Rheumatology, HIV prevention & treatment



# THEMES FROM RELATED SURVEY LITERATURE PREDICTING TRIAL PARTICIPATION\*

- Hope for therapeutic benefit and altruism frequently embedded in decision-making process
- HIV treatment & prevention literature
  - Barriers included: safety concerns, fear/mistrust of physician, pragmatic obstacles, discrimination
- Cancer literature
  - Factors promoting participation included: trusting relationships between researcher and patient & positive communication processes (including informed consent)



## WG RECOMMENDATIONS AND ACTION ITEMS

- Informed Consent Guidance Document
  - Risk/ Benefit Language
  - Return of Results
  - Data Sharing & Electronic Medical Records
  - Reproductive Risks
- Survey Research Recommendations for Potential Trial Participants
  - Survey Design Considerations
  - Target Populations for Survey Research
  - Funding Priorities and Next Steps



#### PANEL DISCUSSION

- David Evans (PI), moderator
- •Tim Henrich (HMS), moderator
- Nikos Dedes (EMA Managing Board)
- George Hanna (BMS)
- Gail Henderson (UNC)
- Richard Klein (OTC/FDA)
- Jeremy Sugarman (JHMI)



#### PANEL DISCUSSION

- As HIV cure oriented research evolves to the next generation of trials, what are the major bioethical challenges moving forward?
- There have been suggestions of language that should not be used to avoid coercion of trial participants. Are there specific suggestions of language that should be used?
- How can investigators improve participant education on the risks and benefits of HIV cure oriented research?