Building a National Research Network via Clinical and Translational Science Awards



Hepatitis C Therapeutic Registry and Research Network

ClinicalTrials.gov Identifier: NCT01474811





National CTSA Research Network

- **Mission**: to establish a nationwide registry of patients undergoing treatment with new therapies for HCV at both academic and community practices
- Specific aims
 - Improve information of populations underrepresented in phase III trials
 - Identify and remediate educational gaps and adverse event management
 - Serve as a core for collaborative, translational studies

• Structure

- Chairs:
 - Nelson (UF) : clinical coordinating center and biorepository
 - Fried (UNC): data coordinating center (REDCap-based)
- Trial network: 25 CTSA institutions and associated community engagement outreach; centralized data collection service

• Highlights

- Partnership: academia + industry + FDA
- Funding: \$12 million
- > 1,100 pts enrolled to date (approx 200/month)



HCV TARGET Organizational Chart







HCV-TARGET Phase I

- Longitudinal, observational study
 - Prospective and sequential, retrospective cohorts enrolling
- Inclusion criteria:
 - Adult patients (≥ 18 years) being treated with or who have been treated with antiviral regimens that contain telaprevir or boceprevir
- Exclusion criteria:
 - Inability to provide written informed consent unless waiver of informed consent granted by local IRB
- Biorepository: baseline DNA and serum at key timepoints
 - Baseline, week 2, 4/8, 12/16, EOT (protocol or breakthrough/relapse), follow-up SVR (12 or 24)



Primary Specific Aims

- Safety and efficacy in populations represented and underrepresented in phase III clinical trials
 - African Americans / Hispanics, cirrhosis, null responders, age > 65
 - Subgroup analyses to determine the cumulative influence of IL28B, fibrosis, viral subtype (1a vs 1b), other co-morbidities
- To refine point estimates and narrow confidence intervals
- Adverse event surveillance and management
 - Anemia, rash, anorectal, dysgeusia, etc
- Virologic breakthrough and resistance
 - Biorepository sample collection
- Impact of viral load measurement on treatment efficacy
 - Compliance / utility of current futility rules
 - Clinical relevance of "detectable / BLOQ" vs "undetectable"
- Evaluate/inform FDA pharmacometric modeling
 - Unstudied populations and dosing regimens



HCV-TARGET

Commitment to Highest Quality Data and Samples

- Utilizing CTSA Consortium REDCap data management software
 - Includes standard features of advanced clinical research data management systems:
 - Custom design and configuration of data input elements
 - Interactive web-based data entry with centralized abstraction
 - Database integrity checks, security, and encrypted data transmission
 - Compliance with 21 CFR Part 11
- Biorepository
 - Use of "best practices" in biobanking to ensure the highest quality specimens
 - Development of SOPs in compliance with Good Laboratory Practice guidelines
 - Biobanking CAP accreditation program
 - Sample tracking: REDCap database linked to OnCore sample database



HCV-TARGET Enrollment Summary

Major Characteristics	N=1150
Male	59%
Age 18-64	90%
Age ≥ 65	7%
White	73%
Black	20%
Asian	2%
Hispanic	7%
Geno 1a	55%
Geno 1b	20%
Geno 2, 3, 4	1%
Cirrhosis	29%



HCV-TARGET and the FDA Opportunities

- Enable high quality, more efficient and well powered phase IV (FDA-mandated post-marketing requirements) clinical studies
 - Examples of observational registries to address a PMR/PMC
 - HBV: Truvada maternal and fetal outcomes
 - Gaucher: Elelyso (recombinant Human G) long-term safety and efficacy
- Inform benefit/risk of new therapies in a pragmatic setting
- Inform the design of clinical trials for next generation HCV drugs and current approved drugs
- Serve as a platform for biomarker, bioinformatics, and quantitative pharmacology methods and tools to explore unanticipated clinical responses and generate hypothesis



Benefit of HCV-TARGET Summary

- Academic, Industry, and NIH partnership
 - Translational research opportunities
 - Explore FDA link
- Leverages existing national research infrastructure
 - Biorepository, design and analysis, regulatory, etc
- Standardizes data acquisition using CTSA open source database (REDCaP) and sample collection
- Engages community-based providers geographically related to academic centers
 - Unique T2-T4 research and educational opportunities
- Potential for rapid recruitment of patients

