Alphabet Soup: Trial Funding and Support Mechanisms and How to Use Them Within the Alliance

NCI Community Oncology Research Program (NCORP)

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Division of Cancer Prevention
New Generation of Clinical Trials and Related Research

Drivers
Biology

Technology

Economic and Demographics
Challenges to the Physician-Scientist Team

• Demand for oncology services is expected to rise rapidly, driven by aging, growth of the population and improvements in cancer survival rates

• The oncology workforce is aging and retiring in increasing numbers

• Demand is expected to rise 48% between 2005 and 2020. This translates into a shortage of 9.4 to 15.0 million visits, or 2,550 to 4,080 oncologists—roughly one-quarter to one-third of the 2005 supply.

Clese Erikson, JOP 2007
Different economic and educational drivers affect the training and career paths of the physician-scientist workforce than the PhD workforce.

Changing landscape of health care and its effects on academic medical centers will affect future physician-scientist workforce.
Charge to the Physician-Scientist Workforce (PSW) Working Group

• Develop approaches that can inform decisions about the development of the U.S. PSW

• Analyze the size and composition of the PSW; consider impact of NIH funding policies

• **Assess needs and career opportunities for PS**

• **Identify incentives and barriers to entering the PSW**
Trial Funding and Support Mechanisms
Today’s Discussion

• Overview: NCORP through year 3

• Funding of Trials/Studies
  - NCORP Research Bases
  - NCORP Community & Minority/Underserved Sites
  - Non-NCORP Research Base Members

• Other NCI Resources
Brief NCORP Overview
NCORP: 3 Components

Research Bases
- Design and conduct multi-center trials in cancer prevention, control, screening and post-treatment surveillance clinical trials and cancer care delivery studies
- Provide scientific and statistical leadership
- Data management, administration, regulatory compliance

Community Sites
- Accrue participants to NCORP trials/studies (may include providers, organizations) and to NCTN treatment/imaging trials

Minority/Underserved Community Sites
- Accrue participants to NCORP trials/studies (may include providers, organizations) and to NCTN treatment/imaging trials
- Communities are composed of 30% Minority/Underserved
NCI Community Oncology Research Program (NCORP) is an Academic/Community Partnership

**Clinical Trials** for prevention, control, health-related quality of life, comparative effectiveness, and screening

- 7,527 patients in Year 1 and 2 combined (includes enrollments to QOL sub-studies to Treatment Trials)

**Accrual** to National Clinical Trials Network (NCTN) treatment and imaging trials

- 6,742 patients in Year 1 and 2 combined
NCI Community Oncology Research Program (NCORP) is an Academic/Community Partnership focused on patient-provider and organization-level influences on cancer outcomes.

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<tr>
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<th>Study Title</th>
<th>Status</th>
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<tr>
<td>SWOG S1417CD</td>
<td>Implementation of a Prospective Financial Impact Assessment Tool in Patients with Metastatic Colorectal Cancer (n=374)</td>
<td>Activated and enrolling participants. Now open to all NCORP sites on CTSU (no longer only SWOG affiliates)</td>
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<tr>
<td>SWOG S1415CD</td>
<td>A Pragmatic Trial to Evaluate a Guideline-Based Colony Stimulating Factor Standing Order Intervention (TRACER)(n = 32 practices and 3960 patients)</td>
<td>Activated and enrolling participants. Open on CTSU</td>
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<td>COG ACCL15N1CD</td>
<td>Improving the use of Evidence-Based Supportive Care Clinical Practice Guidelines in Pediatric Oncology (n=450 patients/32 health care providers)</td>
<td>Activated and enrolling participants. COG affiliates</td>
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<td>Alliance A191402CD</td>
<td>Testing Decision Aids to Improve Prostate Cancer Decisions for Minority Men (n=175)</td>
<td>Approved. Awaiting activation at Alliance. Will be on CTSU - Looking for additional sites to participate especially those with African American and Native American populations</td>
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<tr>
<td>COG ACCL16N1CD</td>
<td>Documentation and Delivery of Guideline-Consistent Treatment in Adolescent and Young Adult (AYA) Acute Lymphoblastic Leukemia (n=270 patients/ as well as health care provider focus groups)</td>
<td>Protocol under review @ NCI. Will be on CTSU.</td>
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NCI Community Oncology Research Program (NCORP) is an Academic/Community Partnership

Incorporation of cancer disparities research into clinical trials and cancer care delivery research

- Wake Forest U: Improving Resection Rates Among African Americans with NSCLC
- Early onset malignancies in 6 cancer in racial/ethnic populations
  - Breast, colon, prostate, renal, liver, multiple myeloma
- Expanded demographic and accrual data: DCP 001
## Precision Medicine NCTN Trials: ALCHEMIST Accrual as of 4/28/17

### Accruals by Organization Type (Swim Lane)

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<th>Name</th>
<th>Accrual</th>
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<td>Michigan Cancer Research Consortium NCORP</td>
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<td>Georgia NCI Community Oncology Research Program</td>
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<td></td>
<td>Metro-Minnesota NCI Community Oncology Research Program</td>
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<td>Catholic Health Initiatives NCORP</td>
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<td>Heartland Cancer Research NCORP</td>
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<td>Baptist Health System/Mid South Minority Underserved NCORP</td>
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<th>% of A081105 pts</th>
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<tr>
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<td>40</td>
<td>38%</td>
<td>10</td>
<td>29%</td>
<td>37</td>
<td>38%</td>
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NCORP Community Site, MU Community Site and Research Bases Geographic and Organizational Diversity

**Investigators (4,025)**

**Components/Subcomponents (938)**

**Community Sites (34)**
- Distributed network (25)
- Integrated System (7)
- Small Network (2)

**MU Community Sites (12)**
- Academic (8)
- Non-Academic (4)

**Research Bases (7)**
- Research Bases
Funding Mechanisms
NCORP Study and Enrollment Funding

- Concept & Protocol Development
- Reimbursement for Patient Enrollments
- Funding from NCORP Research Base Grant
  - Study Development
  - Statistical Support
  - Committee Support
  - Data Safety Monitoring Committee(s)
  - Auditing
  - Data Analysis
- NCORP Community Sites
  Annual grant award funds cover enrollments
- LAPS, Main Members, Affiliates, etc.
  Per case reimbursement from Research Base grant
Investigator-Initiated Grants in NCORP

• Must be conducted via the Research Base

• Federally grants are reviewed at the protocol level

• Non-Federally funded grants are reviewed at the concept level

• NCI has recently released guidance for the following:
  - Time-line from grant approval to submission of protocol
  - Strategies to obtain feasibility and level of interest input from NCORP community and academic investigators
Feasibility of Omega-3 Supplementation for Cancer-Related Fatigue (Peppone, R03 CA 175599)

**Primary Aims:**
1) Collect preliminary statistical data (mean changes & standard deviations) on two Omega-3 supplementations vs. placebo for reducing CRF

**Secondary Aims:**
1) Determine adherence and adverse events, and
2) Collect preliminary statistical data on possible mechanisms of action to inform the design of future trials

**URCC 13091 – NIH funding was needed to purchase the agent**
Primary Aim:
To compare the use of primary prophylactic colony stimulating Factor according to recommended clinical practice guidelines among pts registered at intervention components vs. usual care components

Secondary Aims:
To determine the neutropenia rate among low risk patients

PCORI Funding
A221505: Phase III Randomized Trial of Hypofractionated Post Mastectomy Radiation with Breast Reconstruction

Primary Objective: To evaluate whether the reconstruction the complication rate at 24 mos. post radiation is noninferior with hypofractionation compared to standard fractionation

Secondary Objective: To evaluate the incidence of acute and late radiation complications

Use of IROC– mechanism- supplement to NCTN U-24
BIQSFP Funding

- **Goal:** Enhance the scientific quality of NCI-funded clinical trials by improving prioritization, funding and standardization of associated biomarker and quality of life studies

- **Initiative 1:** Assure that **adequate funding** is available for clinical trials involving biomarkers, imaging, and quality of life

- **Initiative 2:** Establish **quality control standards** for laboratory assays and imaging procedures used in association with NCI-funded clinical trials
2017 Eligibility

- NCTN Groups and NCORP Research Bases
- Phase 2 (≥100 patients) and 3 treatment clinical trials with integral or integrated biomarker or imaging or QOL/PRO studies
- Phase 3 Cancer Prevention clinical trials with integral or integrated biomarker or imaging studies
- Randomized Symptom Science trials with efficacy endpoints
- Cost-Effectiveness Analysis (CEA) studies: randomized phase 3 treatment or prevention clinical trial with a comparator arm or a symptom science/supportive care clinical trial with a comparator arm.
Funding & Review

Biomarker
Imaging
QOL
CEA

Integral
Integrated

NCI Steering Committee evaluation

CTROC prioritization and funding approval

Periodic CTAC review

CTROC: Clinical & Translational Research Operations committee
NCORP Launch to Present: Accrual Successes

**A221303**: Early Palliative Care vs Standard Oncology Care

- 400+ patients

**Alliance 221304** - Phase III Placebo-Controlled, Randomized Three-Arm Study of Doxepin and a Topical Rinse in the Treatment of Acute Oral Mucositis Pain in Patients Receiving RT with/without Chemotherapy

- 272 patients

**ECOG/ACRIN 4112** – Prospective Study of Magnetic Resonance Imaging and Multi-parameter Gene Expression Assay in DCIS

- 362 patients
Additional NCI Resources
NCI Resources

- NCORP Program Directors
  - Diane St. Germain and Iman Martin
- Coverage Analysis and Partnership with CMS
- NCORP CCDR Landscape Data
- NCORP will have trial specific data about accrual (Log)
- https://ncorp.cancer.gov/
Summary from NCI DCP Cancer Prevention Think Tank Published in AACR Cancer Prevention Research

Identifying and Creating the Next Generation of Community-Based Cancer Prevention Studies: Summary of a National Cancer Institute Think Tank

Worta McCaskill-Stevens, Deborah C. Pearson, Barnett S. Kramer, Leslie G. Ford, and Scott M. Lippman

DOI: 10.1158/1940-6207.CAPR-16-0230 Published February 2017

Abstract

In late 2015, the NCI Division of Cancer Prevention convened cancer prevention research experts and stakeholders to discuss the current state of cancer prevention research, identify key prevention research
Working Groups

Radiation Oncology
Adolescent and Young Adult
Non-Oncology Specialists
Disparities Integration
Non-Oncology Specialists WG GOALS

• Create and share strategies to engage primary care physicians and other non-oncology specialists (e.g. gastroenterologists, gynecologists, primary care practitioners) and connect with organizations (e.g. NMA, AAFP, etc.)

• Support these connections with researchers and other relevant organizations

• Invite member representatives from these organizations to act as champions for cancer prevention research trials across their organizations.
Thank you!
Concept Approval S.C.

3-month deadline

Study Team/Research Base develops protocol responding to outstanding issues from the concept review

Submits to DCP

DCP reviews
Sends response
Approve, Revise/resubmit, disapproval

2-month deadline

Revise, responding to review comments
Submit to DCP

Central IRB Review
Protocol is activated by research base

FDA finalization
Intervention prep

Revise & Resubmit

Accrue!

Unlimited times, can also be disapproved

SC Concept & BIQSFP Review and Approval:
Genesis of a Protocol

Integrative BIQSFP submitted and reviewed by SC

FDA submit in parallel if applicable

Delays can occur from:
CIRB review pending
CIRB requested changes

*Integral BIQSFP submitted and reviewed by SC along with initial concept and concept revisions
Evaluation of NCORP Research Concepts

- The concept is the most important document from which the scientific merit for an idea is evaluated.
- All concepts are reviewed internally.
- NCI has a Steering Committee (SC) review process for disease and nondisease concepts.
- Following a concept approval by a SC, the protocol development is managed internally.
NCORP Concept Review

Concept Received in Protocol Information Office

Steering Committee Review or Internal Review

DCP Internal Review

Chairperson, Reviewers and PIO Team
- Medical Officers
- Nurse Consultants
- DCP Biometry
- Experts from DCCPS, DCTD, CRCHD
- Other Expertise: NIH, NCI CCR, Extramural Community
**Concept Evaluation Process**

- **Steering Committee Evaluation of Concept**
  - Approval
    - Protocol Development by Research Base
  - Disapproval
    - Revise & Resubmit Pending
    - Concept may be revised & submitted once
  - Disapproval
    - Consensus Review
What Does Not Go to the Steering Committees?

- Longitudinal studies, surveys, cancer prevention
- Pediatric cancer control
- Studies ≤100 participants
- Research studies for which there is no established scientific SC
- Studies reviewed & funded by Federal Agencies
  - Investigator Initiated Studies are reviewed at the protocol level
- Phase 0 and 1 Trials
Protocol Review

- Includes all information and procedures necessary for conducting a successful trial/study
- Assesses IND status, credits, rosters, accrual plans, non-federal funding
- Evaluates the inclusion of scientific input from the concept review

A lot has happened “behind the scenes”
Investigator Initiated Grants

- Must Come through the Research Bases
- Reviewed at the Protocol Level
- No phase III RCTs for Prevention
The world we created today has problems which cannot be solved by thinking the way we thought when we created them..... Albert Einstein
Minority Enrollment to NCI Cooperative Group Clinical Trials

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<th>Minority</th>
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- Majority: Red
- Minority: Blue
- Unknown: Green