## National Cancer Advisory Board

## Biennial Review of Inclusion of Women and Minorities in Clinical Research

February 2013

## NIH Policy on Inclusion of Women and Minorities in Clinical Research

Why does NIH have this policy?

- Mandated by Congress in 1993, Public Law 103-43.
- Ethical principle of justice and importance of balancing research burdens and benefits.


## Public Law PL 103-43

- Women and minorities must be included in all clinical research studies.
- Women and minorities must be included in Phase III clinical trials, and the trial must be designed to permit valid analysis.
- For the purpose of this policy, Valid Analysis means an unbiased assessment that does not require high statistical power and should be conducted for both large and small studies.


## Public Law PL 103-43

- Cost is not allowed as an acceptable reason for exclusion.
- NIH supports outreach efforts to recruit and retain women, minorities, and their subpopulations in clinical studies.


## NIH Revitalization Act of 1993

"The Advisory Council of each National Institute shall prepare biennial reports describing the manner in which the institute has complied with this section."

- Reported in odd-numbered years.


## NIH Report Approach

A summary report is prepared centrally by the NIH Office of Extramural Research and includes a statement that the NCAB reviews.

- NCI procedures for implementation of the NIH policy for inclusion of women and minorities in clinical studies.
- The results of that implementation.
- NCI compliance.


## NCI Coordination Division of Extramural Activities

Implements Inclusion Policy at NCI

- Institute-wide coordination and communication
- Accrual Working Group -Division Reps
- Information, Training, Problem Solving


# NCI Procedures for Implementation of NIH Policy 

## POLICY DISSEMINATION

- ESAs work with applicants to disseminate requirements (NIH Guide and NCI and NIH Websites).
- NCI extramural staff are kept up-to-date via trans-NIH education programs and desktop distribution of policies and procedures.


## NCI Procedures for Implementation of NIH Policy

## PRE-AWARD ACTIVITIES

- Peer reviewers receive instruction on policies and evaluate inclusion plans.
- Where concerns are noted, bars to award are put in place. NCI staff work with applicants to ensure appropriate revisions are made.
- Applications with bars are identified in a closed NCAB session, and a subsequent resolution is reported.


# NCI Procedures for Implementation of NIH Policy POST-AWARD MONITORING 

- Awardees report cumulative accrual annually.
- Progress of studies and cumulative accruals are reviewed by Program Directors.
- Target and enrollment numbers are entered into the NIH Population Tracking application.
- Staff provide oversight, advice, and assistance and work with awardees to disseminate findings and encourage new studies.


# NCI Procedures for Implementation of NIH Policy 

## AGGREGATE REPORTING

- NIH requires a format that aggregates all clinical trials whether treatment, behavioral, or epidemiologic observation.
- Individual clinical trials vary considerably.
- Large population-based screening trials dominate aggregate data.


## Instructions in PHS 398

Inclusion of women and minorities sections must include:

- Subject selection criteria and rationale.
- Rationale for any exclusions.
- Enrollment dates (start and end).
- Outreach plans for recruitment.
- Proposed composition using tables.


## Accrual to NCI Clinical Trials

- Data include epidemiological, population-based interventions and therapeutic trials according to the NIH definition of clinical research.
- Subset analyses by race, ethnicity, and sex/gender are required of all Phase III clinical trials with initial funding after 1995.
- Current reporting cycle covers data reported in FY2011 and 2012, which represents subjects enrolled in FY2010 and 2011.


## Requirements for NIH-Defined Phase III Clinical Trials

Definition: Broadly based prospective Phase III clinical investigation,

- usually involving several hundred or more human subjects,
- for the purpose of evaluating an experimental intervention or comparing two or more existing treatments.
- Often the aim of such investigation is to provide evidence leading to a scientific basis for consideration of a change in health policy or standard of care.


## US Cancer Incidence for All Cancers 2005-2009

|  | White | Black | Asian/ <br> PI | American <br> Indian | Total <br> (All Races/ <br> Sexes) | Hispanic <br> $\% * \%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Incidence <br> Rate per <br> 100,000 | 471.7 | 489.5 | 315.0 | 328.9 | 465.2 | 353.7 |
| Number <br> of <br> Incidence <br> Cases | $1,577,573$ | 194,295 | 111,376 | 7,255 | $1,922,239$ | 175,955 |
| Estimated <br> Percent of <br> Total* | $82.1 \%$ | $10.1 \%$ | $5.8 \%$ | $0.4 \%$ | $100 \%$ | $9.2 \%$ |

*US Cancer Percent estimated from SEER Number of Incidence Cases for 2005-2009.
**Hispanic incidence included in other categories.

## NCI Enrollment for FY 2011 and 2012 Extramural Research Studies by Sex/Gender

| 2011 | Sex/Gender | Enrolled | Percent | US Cancer Incidence* |
| :---: | :---: | :---: | :---: | :---: |
| 2,392 Studies | Female | 4,279,066 | 70.5\% | 48.4\% |
|  | Male | 1,758,184 | 29.0\% | 51.6\% |
|  | Unknown | 28,225 | 0.5\% |  |
|  | Total | 6,065,475 | 100\% | 100\% |
| 2012 <br> 2,169 Studies | Sex/Gender | Enrolled | Percent | US Cancer Incidence* |
|  | Female | 3,359,328 | 53.9\% | 48.4\% |
|  | Male | 2,858,916 | 45.8\% | 51.6\% |
|  | Unknown | 19,620 | 0.3\% |  |
|  | Total | 6,237,864 | 100\% | 100\% |

[^0]
## NCI Sex/Gender Enrollments FY 2011 and 2012 excluding All Male and All Female Studies

2011-1,695 Studies

2012-1,561 Studies

| Sex/ Gender | Enrollment | Percent of <br> Total | US Cancer <br> Incidence* |
| :--- | :--- | :--- | :--- |
| Female | 693,041 | $50.3 \%$ | $48.4 \%$ |
| Male | 655,652 | $47.6 \%$ | $51.6 \%$ |
| Other/Unknown | 28,225 | $2.1 \%$ |  |
| Total | $1,376,918$ | $\mathbf{1 0 0 \%}$ | $100 \%$ |
| Sex/ Gender | Enrollment | Percent of US Cancer |  |
|  |  | Total | Incidence* |
| Female | $2,109,101$ | $52.9 \%$ | $48.4 \%$ |
| Male | $\mathbf{1 , 8 5 9 , 4 4 3}$ | $\mathbf{4 6 . 6 \%}$ | $51.6 \%$ |
| Other/Unknown | $\mathbf{1 9 , 6 2 0}$ | $0.5 \%$ |  |
| Total | $\mathbf{3 , 9 8 8 , 1 6 4}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0 0 \%}$ |

FY 2011-2,392 Studies FY 2012-2,169 Studies

| Race/Ethnicity | 2011 <br> Count | 2011 <br> Percent | 2012 <br> Count | 2012 <br> Percent | US Cancer <br> Incidence*\% |
| :--- | ---: | ---: | ---: | ---: | :---: |
| White | $4,123,883$ | $68.0 \%$ | $3,772,476$ | $60.5 \%$ | $82.1 \%$ |
| Asian | 817,196 | $13.5 \%$ | 591,279 | $9.5 \%$ | $5.8 \%$ |
| Unknown/Not <br> Reported | 545,393 | $9.0 \%$ | $1,237,091$ | $19.8 \%$ |  |
| Black or African <br> American | 452,198 | $7.5 \%$ | 537,974 | $8.6 \%$ | $10.1 \%$ |
| Hispanic or | $(391,220)$ | $(6.5 \%)$ | $(549,827)$ | $(8.8 \%)$ | $(9.2 \%)$ |
| Latino* | 59,849 | $0.8 \%$ | 24,502 | $0.4 \%$ | $0.4 \%$ |
| American Indian/ <br> Alaska Native | 18,581 | $0.3 \%$ | 28,548 | $0.5 \%$ |  |
| More Than One <br> Race | $6,065,475$ | $100 \%$ | $6,237,864$ | $100 \%$ | $100 \%$ |
| Native Hawaiian/ <br> Pacific Islander | $1.0 \%$ | 45,994 | $0.7 \%$ |  |  |
| Total |  |  |  |  |  |

*Hispanic or Latino counts are not exclusive and may be included in other categories.
**US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.

# FY 2011 and 2012 NCI Enrollment Extramural Phase III Research Studies by Sex/Gender 

|  | Sex/Gender | Count | Percent of Total | US Cancer <br> Incidence* |
| :--- | :--- | ---: | ---: | ---: |
| 306 Trials | Female | $\mathbf{8 6 , 3 1 7}$ | $58.3 \%$ | $48.4 \%$ |
|  | Male | 61,718 | $41.7 \%$ | $51.6 \%$ |
|  | Unknown | 50 | $0.03 \%$ |  |
|  | Total | 148,085 | $100 \%$ | $100 \%$ |
|  | Sex/Gender | Count | Percent of Total | US Cancer |
| 267 Trials | Male | 67,312 | $58.1 \%$ | Incidence* |
|  | Female | 48,312 | $41.7 \%$ | $48.4 \%$ |
|  | Unknown | 159 | $0.1 \%$ | $51.6 \%$ |
|  | Total | 115,783 | $100 \%$ | $100 \%$ |

*US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.

# NCI Extramural Phase III Research Studies FY 2011 - 306 Studies FY 2012-267 Studies 

| Race/Ethnicity | 2011 <br> Count | $\begin{gathered} 2011 \\ \text { Percent } \end{gathered}$ | 2012 <br> Count | $\begin{gathered} 2012 \\ \text { Percent } \end{gathered}$ | US Cancer Incidence ${ }^{* \%}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| White | 118,896 | 80.2\% | 87,661 | 75.7\% | 82.1\% |
| Asian | 11,311 | 7.6\% | 9,490 | 8.1\% | 5.8\% |
| Black or African American | 11,103 | 7.5\% | 12,761 | 11.0\% | 10.1\% |
| Hispanic or Latino** | $(9,261)$ | (6.3\%) | $(7,381)$ | (6.4\%) | (9.2\%) |
| Unknown/Not Reported | 5,465 | 3.7\% | 4,569 | 3.9\% |  |
| Amer. Indian/Alaska Native | 623 | 0.4\% | 516 | 0.4\% | 0.4\% |
| Hawaiian/Pacific Islander | 359 | 0.2\% | 270 | 0.2\% |  |
| More Than One Race | 328 | 0.2\% | 516 | 0.4\% |  |
| Total | 148,085 | 100\% | 115,783 | 100\% | 100\% |

[^1]
## NCI Intramural Research Studies

FY 2011-522 Studies FY 2012-565 Studies

| Race/Ethnicity | 2011 <br> Count | 2011 <br> Percent | $2012$ <br> Count | 2012 <br> Percent | US Cancer Incidence $\%$ * |
| :---: | :---: | :---: | :---: | :---: | :---: |
| White | 1,543,245 | 69.4\% | 1,653,693 | 45.6\% | 82.1\% |
| Unknown/Not Reported | 262,438 | 11.8\% | 1,510,138 | 41.6\% |  |
| Black or African American | 212,682 | 9.6\% | 243,094 | 6.7\% | 10.1\% |
| Asian | 195,464 | 8.8\% | 205,930 | 5.7\% | 5.8\% |
| Hispanic or Latino* | $(78,129)$ | (3.5\%) | $(110,638)$ | (3.1\%) | (9.2\%) |
| American Indian/ Alaska Native | 6,339 | 0.3\% | 7,018 | 0.2\% | 0.4\% |
| More Than One Race | 1,582 | 0.1\% | 4,102 | 0.1\% |  |
| Hawaiian/Pacific Islander | 1,096 | 0.1\% | 2,083 | 0.1\% |  |
| Total | 2,222,846 | 100\% | 3,626,058 | 100\% | 100\% |

*Hispanic or Latino counts are not exclusive and may be included in other categories.
**US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.

## CTEP Treatment Trials Enrollment

FY 2011-596 Studies FY 2012-541 Studies

| Race/Ethnicity | 2011 <br> Count | 2011 <br> Percent | 2012 <br> Count | 2012 <br> Percent | US Cancer <br> Incidence** |
| :--- | :---: | :---: | :---: | :---: | :---: |
| White | 19,020 | $81.1 \%$ | 19,663 | $81.8 \%$ | $82.1 \%$ |
| Black or African |  |  |  |  | $10.1 \%$ |
| American | 2,217 | $9.5 \%$ | 2,157 | $8.9 \%$ |  |
| Hispanic or Latino\% | $(1,844)$ | $(7.9 \%)$ | $(1,920)$ | $(8.0 \%)$ | $(9.2 \%)$ |
| Unknown/ Not |  |  |  |  |  |
| Reported | 1,092 | $4.7 \%$ | 1,066 | $4.4 \%$ |  |
| Asian | 852 | $3.6 \%$ | 887 | $3.0 \%$ | $5.8 \%$ |
| American Indian/ |  |  |  |  | $0.4 \%$ |
| Alaska Native | 114 | $0.5 \%$ | 124 | $0.5 \%$ |  |
| Native Hawaian/ |  |  |  |  |  |
| Pacific Islander | 81 | $0.3 \%$ | 78 | $0.3 \%$ |  |
| More Than One Race | 53 | $0.2 \%$ | 59 | $0.2 \%$ |  |
| Total | 23,429 | $100 \%$ | 24,034 | $100 \%$ | $100 \%$ |

[^2]
## CTEP Treatment Trials Enrollment by Gender

|  | Sex/Gender | Count | Percent of Total | US Cancer Incidence* |
| :---: | :---: | :---: | :---: | :---: |
|  | Female | 14,103 | 60.2\% | 48.4\% |
| FY 2011 | Male | 9,303 | 39.7\% | 51.6\% |
| 596 Studies | Unknown | 23 | 0.1\% |  |
|  | Total | 23,429 | 100\% | 100\% |
|  | Sex/Gender | Count | Percent of Total | US Cancer Incidence* |
|  | Female | 14,321 | 59.6\% | 48.4\% |
| FY 2012 | Male | 9,696 | 40.3\% | 51.6\% |
| 541 Studies | Unknown | 17 | 0.1\% |  |
|  | Total | 24,034 | 100\% | 100\% |

*US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.

# CTEP Treatment Trials Enrollment by Gender 

(excluding Gender Specific Trials)


Subset of studies reported for 2011 and 2012; Studies include both Males and Females.

* US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.

| DCP Trials Enrollment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2011-63 Studies 2012-70 Studi |  |  |  |  |  |
| Race/Ethnicity | $\begin{array}{r} 2011 \\ \text { Count } \end{array}$ | 2011 Percent | $\begin{array}{r} 2012 \\ \text { Count } \end{array}$ | 2012 <br> Percent | US Cancer Incidence* |
| White | 5,503 | 83.3\% | 8,514 | 85.2\% | 82.1\% |
| Black or African American | 664 | 10.1\% | 939 | 9.4\% | 10.1\% |
| Hispanic or Latino* | (350) | (5.3\%) | (454) | (4.5\%) | (9.2\%) |
| Asian | 196 | 2.8\% | 246 | 2.5\% | 5.8\% |
| Unknown/ Not Reported | 165 | 2.6\% | 198 | 2.0\% |  |
| American Indian/ Alaska Native | 52 | 0.8\% | 62 | 0.6\% | 0.4\% |
| Native Hawaiian/ Pacific Islander | 17 | 0.3\% | 14 | 0.1\% |  |
| More Than One Race | 8 | 0.1\% | 21 | 0.2\% |  |
| Total | 6,605 | 100\% | 9,994 | 100\% | 100\% |

*Hispanic or Latino counts are not exclusive and may be included in other categories.
** US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.

## DCP Trials Enrollment by Gender

|  | Sex/Gender | Count | Percent of Total | US Cancer Incidence* |
| :---: | :---: | :---: | :---: | :---: |
|  | Female | 4,553 | 68.9\% | 48.4\% |
| FY 2011 | Male | 2,019 | 30.6\% | 51.6\% |
| 63 Studies | Unknown | 33 | 0.5\% |  |
|  | Total | 6,605 | 100\% | 100\% |
|  | Sex/Gender | Count | Percent of Total | US Cancer Incidence* |
| FY 2012 <br> 70 Studies | Female | 6,036 | 60.4\% | 48.4\% |
|  | Male | 3,938 | 39.4\% | 51.6\% |
|  | Unknown | 20 | 0.2\% |  |
|  | Total | 9,994 | 100\% | 100\% |

* US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.


## DCP Trials Enrollment by Gender

(excluding Gender Specific Trials)

|  | Sex/Gender | Count | Percent of Total | US Cancer Incidence* |
| :---: | :---: | :---: | :---: | :---: |
|  | Female | 2,784 | 58.1\% | 48.4\% |
| FY 2011 | Male | 1,971 | 41.2\% | 51.6\% |
| 45 Studies | Unknown | 33 | 0.7\% |  |
|  | Total | 4,788 | 100\% | 100\% |
|  | Sex/Gender | Count | Percent of Total | US Cancer Incidence* |
|  | Female | 3,068 | 44.8\% | 48.4\% |
| FY 2012 | Male | 3,761 | 54.9\% | 51.6\% |
|  | Unknown | 20 | 0.3\% |  |
| 44 Studies | Total | 6,849 | 100\% | 100\% |

Subset of studies reported for 2011 and 2012; Studies include both Males and Females.

* US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.


## NCI Population Tracking Accrual Working Group

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[^0]:    *US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009

[^1]:    *Hispanic or Latino counts are not exclusive and may be included in other categories.
    **US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.

[^2]:    *Hispanic or Latino counts are not exclusive and may be included in other categories.
    **US Cancer Incidence estimated from SEER Number of Incidence Cases for 2005-2009.

