Enhancing the Diversity of Clinical Trial Populations- From FDA Guidance to Implementation

January 14, 2021
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Welcome & Introductions

Melissa West
Senior Director, ASN Research, Discovery and Innovation
Kidney Health Initiative

Barbara S. Gillespie, MD, FASN
KHI Board of Directors
Vice President, Therapeutic Head of Nephrology, Covance and
Adjunct Professor, University of North Carolina

Today’s Moderator
A public-private partnership between the American Society of Nephrology, the U.S. Food and Drug Administration, and over 100 companies and organizations in kidney disease.

**Established September 2012**
Mission
To catalyze innovation and the development of safe and effective patient-centered therapies for people living with kidney diseases.
Support efforts to address systemic racism in nephrology and address health disparities in kidney disease by ensuring the Equity, Equality, Diversity and Inclusion of People with Kidney Disease in Clinical Trials.

Specifically, we hope to cultivate patient engagement and partnerships to ensure participants in clinical trials reflect the community most impacted by the disease.
Today’s Speakers

RADM Richardae Araojo, PharmD
FDA Office of Minority Health and Health Equity

Kirk N. Campbell, MD, FASN
Icahn School of Medicine at Mount Sinai

Owen Garrick, MD, MBA
Bridge Clinical Research

Lauren Lee
NephCure Kidney International

David M. White
KHI Patient and Family Partnership Council
1. Review the background and elements of this FDA Guidance (finalized Nov 2020)
2. Outline key issues that are relevant to kidney diseases and associated trials.
3. Share past experiences, discuss future implementation strategies, and provide associated resources.

Enhance the *Diversity*... to increase enrollment of *underrepresented* populations... this guidance considers:

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>Non-Demographic Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex*</td>
<td>Patients with organ dysfunction</td>
</tr>
<tr>
<td>Race</td>
<td>Comorbid conditions</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Disabilities</td>
</tr>
<tr>
<td>Age</td>
<td>Extremes of weight range</td>
</tr>
<tr>
<td>Location of residency</td>
<td>Low prevalence diseases or conditions</td>
</tr>
</tbody>
</table>

*These are the examples provided, but other characteristics should be considered*

*Women composed 45% of pivotal trials participants that led to FDA approvals from 2007-2017, short of the expected 49%*
Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity ("to be used in medical and clinical research")

<table>
<thead>
<tr>
<th>Race</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. American Indian or Alaska Native</td>
<td>1. Hispanic or Latino</td>
</tr>
<tr>
<td>A person having origins in any of the</td>
<td>A person of Cuban, Mexican, Puerto Rico,</td>
</tr>
<tr>
<td>original peoples of North and South</td>
<td>South or Central American, or other</td>
</tr>
<tr>
<td>America (including Central America), and</td>
<td>Spanish culture or origin, regardless of</td>
</tr>
<tr>
<td>who maintains tribal affiliation or</td>
<td>race. The term, &quot;Spanish origin,&quot; can be</td>
</tr>
<tr>
<td>community attachment.</td>
<td>used in addition to &quot;Hispanic or Latino.&quot;</td>
</tr>
<tr>
<td>2. Asian</td>
<td>2. Not Hispanic or Latino</td>
</tr>
<tr>
<td>A person having origins in any of the</td>
<td></td>
</tr>
<tr>
<td>Far East, Southeast Asia, or the Indian</td>
<td></td>
</tr>
<tr>
<td>subcontinent including, for example,</td>
<td></td>
</tr>
<tr>
<td>Cambodia, China, India, Japan, Korea,</td>
<td></td>
</tr>
<tr>
<td>Malaysia, Pakistan, the Philippine</td>
<td></td>
</tr>
<tr>
<td>Islands, Thailand, and Vietnam.</td>
<td></td>
</tr>
<tr>
<td>3. Black or African American. A person</td>
<td></td>
</tr>
<tr>
<td>having origins in any of the black racial</td>
<td></td>
</tr>
<tr>
<td>groups of Africa. Terms such as &quot;Haitian&quot;</td>
<td></td>
</tr>
<tr>
<td>or &quot;Negró&quot; can be used in addition to</td>
<td></td>
</tr>
<tr>
<td>&quot;Black or African American.&quot;</td>
<td></td>
</tr>
<tr>
<td>4. Native Hawaiian or Other Pacific</td>
<td></td>
</tr>
<tr>
<td>Islander. A person having origins in any</td>
<td></td>
</tr>
<tr>
<td>of the original peoples of Hawaii, Guam,</td>
<td></td>
</tr>
<tr>
<td>Samoa, or other Pacific Islands.</td>
<td></td>
</tr>
<tr>
<td>5. White. A person having origins in any</td>
<td></td>
</tr>
<tr>
<td>of the original peoples of Europe, the</td>
<td></td>
</tr>
<tr>
<td>Middle East, or North Africa.</td>
<td></td>
</tr>
</tbody>
</table>

“Are Arabs and Iranians white? Census says yes, but many disagree”: Samira, of Iranian heritage, will have to choose white or other, and thinks that “erases a community” (LA Times article, 2019)

Race matters in CKD: understanding APO1 genetic variants in CKD patients with African heritage can facilitate drug development in a personalized and precision medicine based manner if we study the right patients

“it’s important to remember that race is a social construct and not just a biologic factor; we need to do a better job of tracking the social determinants that follow our arbitrary definitions of race”

—Dr. Keisha Gibson

Panico and Thompson in AJKD 2018 and Tuttle in CJASN 2018
FDA PERSPECTIVE

RADM Richardae Araojo, PharmD
The FDA Office of Minority Health and Health Equity:

Working to Advance Clinical Trial Diversity

www.fda.gov/healthequity
Disclaimer

• This presentation represents the personal opinions of the speaker and does not necessarily represent the views or policies of FDA

• No conflicts of interest to declare
Objectives

• Provide an overview of the U.S. Food and Drug Administration’s Office of Minority Health and Health Equity (OMHHE)

• Provide an update on FDA’s efforts to advance clinical trial diversity

• Describe OMHHE’s Diversity in Clinical Trials Initiative
Mission
FDA is responsible for protecting the public health by assuring the safety, efficacy and security of human and veterinary drugs, biological products, medical devices, our nation’s food supply, cosmetics, and products that emit radiation.

FDA also regulates the manufacturing, marketing, and distribution of tobacco products to protect the public health and to reduce tobacco use by minors.

Consumer Protection Agency
Provide information on regulated products to ensure safe and effective use to consumers/patients/health care providers.

Regulatory Agency
Intersection of commerce, laws and public health
FDA Office of Minority Health and Health Equity (OMHHE)

**Mission**
To promote and protect the health of diverse populations through research and communication that addresses health disparities.

**Vision**
To create a world where health equity is a reality for all.
FDA OMHHE Goals

Goal 1: Improve regulatory science by increasing clinical trial data available on racial and ethnic minorities; improve data quality to determine how minorities react to medical products; and increase transparency and access to available data

Goal 2: Strengthen FDA’s ability to respond to minority health concerns

Goal 3: Promote health and safety communication to minority populations who often experience low health literacy and/or speak English as a second language
<table>
<thead>
<tr>
<th>Research and Collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Intramural Research</td>
</tr>
<tr>
<td>- Extramural Research</td>
</tr>
<tr>
<td>- FDA Centers of Excellence in Regulatory Science and Innovation (CERSI) Projects</td>
</tr>
<tr>
<td>- Broad Agency Announcement (BAA)</td>
</tr>
<tr>
<td>- Other research opportunities</td>
</tr>
<tr>
<td>- Internships and Fellowships</td>
</tr>
<tr>
<td>- Academic Collaborations</td>
</tr>
<tr>
<td>- Stakeholder Input into Research Agenda</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outreach and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Programs/Initiatives/Campaigns</td>
</tr>
<tr>
<td>- Diversity in Clinical Trials Initiative</td>
</tr>
<tr>
<td>- Language Access Program</td>
</tr>
<tr>
<td>- Health Education Materials</td>
</tr>
<tr>
<td>- Social Media</td>
</tr>
<tr>
<td>- Newsletter &amp; E-alerts</td>
</tr>
<tr>
<td>- Website</td>
</tr>
<tr>
<td>- Health Equity Lecture Series &amp; Webinars</td>
</tr>
<tr>
<td>- Stakeholder Meetings/Symposiums/Exhibits</td>
</tr>
<tr>
<td>- Collaborations and Partnerships</td>
</tr>
</tbody>
</table>
The Need for Diverse Participation

• Racial and ethnic minorities have been historically under-represented in clinical trials

• Need representation to study the effects of medical products in the people who will ultimately use them

• Persons of different ages, races, and ethnicities could react differently to certain medical products

• To understand health disparities - diseases that occur more frequently or appear differently in diverse populations
### Examples of Information Provided in FDA-Approved Product Labeling Directed at Specific Races/Ethnicities

<table>
<thead>
<tr>
<th>Recommendation in FDA approved labeling</th>
<th>Example drug</th>
<th>Racial/ethnic information in the labeling</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicated for a specific racial population</td>
<td>Isosorbide dinitrate/hydralazine</td>
<td>Indicated for self-identified blacks</td>
<td>Based on retrospective analyses, an effect on survival was reported in blacks, with little evidence to suggest an effect in the whites</td>
</tr>
<tr>
<td>Contraindicated in case of G6PD deficiency which is present in a higher frequency in specific racial populations</td>
<td>Rasburicase</td>
<td>Contraindicated in G6PD deficiency. Screen patients at a higher risk for G6PD deficiency (e.g., patients of African or Mediterranean ancestry) prior to starting therapy</td>
<td>Recommendations to screen patients at a higher risk for G6PD deficiency (e.g., patients of African or Mediterranean ancestry) prior to starting therapy because of the increased risk of hemolysis in patients with G6PD deficiency</td>
</tr>
<tr>
<td>Warnings and precautions directed at a specific racial population</td>
<td>Carbamazepine</td>
<td>Boxed warning for HLA-B*1502 in Asian patients</td>
<td>Incidence of adverse event and prevalence of genetic factor are higher in Asian populations</td>
</tr>
<tr>
<td>Recommendations for considering alternative therapy for a specific racial population</td>
<td>ACE inhibitors or Angiotensin II antagonists, e.g., candesartan and losartan</td>
<td>A general statement for African-Americans/Blacks in the labeling of a number of drugs belonging to this class because of the smaller effect size observed</td>
<td>Pathophysiologically, hypertension is driven less by the renin-angiotensin-aldosterone system in African-Americans/Blacks</td>
</tr>
<tr>
<td>Different dosing recommendation for a specific racial population</td>
<td>Rosuvastatin</td>
<td>Lower initial starting dose in Asians</td>
<td>Based on clinical observation of ~2-fold higher exposure in Asians compared to Caucasians</td>
</tr>
</tbody>
</table>

G6PD: glucose-6-phosphate dehydrogenase; HLAB: human leukocyte antigen B; ACE: angiotensin-converting enzyme; CYP3A5: Cytochrome P450 3A5.

### Barriers to Clinical Trial Participation

- Mistrust and distrust of the medical system due to historical abuses
- Lack of awareness of what a clinical trial is and what it means to participate
- Inadequate recruitment and retention efforts
- Lack of minority physicians, researchers, and clinical investigators
- Misunderstanding of racial/ethnic minorities’ beliefs and values that contribute to their decision making process
- Lack of culturally and linguistically appropriate communication

- Perception that racial/ethnic minorities do not want to participate
- Physicians/providers may not talk to their patients about clinical trials
- Enrollment criteria
- Return of Results
- Privacy concerns
- Lack of access
- Time and resource constraints for patients
2012 FDA Safety and Innovation Act (FDASIA)

• **Section 907** - Reporting of Inclusion of Demographic Subgroups in Clinical Trials and Data Analysis in Applications for Drugs, Biologics, and Devices

  – Report to determine the extent of demographic subgroups in applications, in FDA reviews for safety and efficacy; if information is publicly available on FDA website or in labeling; **report posted August 2013**

  – Publish and provide to Congress an action plan outlining recommendations for improving the completeness, quality and availability of demographic subgroup data; **action plan posted August 2014**
2012 FDA Safety and Innovation Act (FDASIA) Section 907
Action Plan Priorities & Strategies

Priority One
Improve the completeness and quality of demographic subgroup data collection, reporting and analysis (Quality)

Priority Two
Identify barriers to subgroup enrollment in clinical trials and employ strategies to encourage greater participation (Participation)

Priority Three
Make demographic subgroup data more available and transparent (Transparency)

FDA Guidance Documents
Collection of Race and Ethnicity Data in Clinical Trials
Evaluation and Reporting of Age-, Race-, and Ethnicity-Specific Data in Medical Device Clinical Studies

Public Meetings
Tools to support diverse clinical trial participation

Drug Trials Snapshots
(Center for Drug Evaluation and Research)
<table>
<thead>
<tr>
<th></th>
<th>WOMEN</th>
<th>BLACK or AFRICAN AMERICAN</th>
<th>ASIAN</th>
<th>WHITE</th>
<th>HISPANIC</th>
<th>AGE 65 AND OLDER</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>55%</td>
<td>7%</td>
<td>11%</td>
<td>77%</td>
<td>14%</td>
<td>32%</td>
<td>34%</td>
</tr>
<tr>
<td>2018</td>
<td>56%</td>
<td>11%</td>
<td>10%</td>
<td>69%</td>
<td>14%</td>
<td>15%</td>
<td>47%</td>
</tr>
<tr>
<td>2019</td>
<td>72%</td>
<td>9%</td>
<td>9%</td>
<td>72%</td>
<td>18%</td>
<td>36%</td>
<td>40%</td>
</tr>
</tbody>
</table>

https://www.fda.gov/drugs/drug-approvals-and-databases/drug-trials-snapshots
2015-2019: FDA DRUG TRIALS SNAPSHOTS
Five-Year Summary and Analysis of Clinical Trial Participation and Demographics
2015-2019: FDA DRUG TRIALS SNAPSHOTS
Five-Year Summary and Analysis of Clinical Trial Participation and Demographics

Demographics of Trial Participation

Demographic Categories
Clinical trial participation is broken down into four categories: sex, race, age, and ethnicity. *

Sex Distribution
- Female: 51%
- Male: 49%

Race Distribution
- White: 76%
- Black or African American: 11%
- Asian: 5%
- Other: 7%
- American Indian or Alaska Native: 1%

Age Distribution
- < 65 Years: 69%
- >= 65 Years: 31%

Ethnicity Distribution
- Hispanic or Latino: 13%
- Not Hispanic or Latino: 20%
- Missing: 67%

*Definitions for race and ethnicity used in the document can be found in the Terminology section.
2015-2019: FDA DRUG TRIALS SNAPSHOTS
Five-Year Summary and Analysis of Clinical Trial Participation and Demographics

**Ethnicity Composition**

*How Does Participation by Ethnicity Differ by Geographic Location?*

The highest proportion of Hispanics (15%) was reported by participants from the U.S.

**Ethnicity Distribution**

- **Global**
  - Total Participants: 292,537
  - Country data missing for 229 participants

- **United States**
  - Total Participants: 102,596
  - 76%
  - 9%
  - 15%

- **Rest of the World**
  - Total Participants: 189,941
  - 63%
  - 11%
  - 26%
2015-2019: FDA DRUG TRIALS SNAPSHOTS
Five-Year Summary and Analysis of Clinical Trial Participation and Demographics

Race Composition
How Does Participation by Race Differ by Geographic Location?

Most Asian trial participants were enrolled at non-U.S. sites; in contrast, most Black or African Americans were from U.S. sites.
Guidance Documents for Industry

Collection of Race and Ethnicity Data in Clinical Trials

Guidance for Industry and Food and Drug Administration Staff

Evaluation and Reporting of Age-, Race-, and Ethnicity-Specific Data in Medical Device Clinical Studies

Guidance for Industry and Food and Drug Administration Staff

Enhancing the Diversity of Clinical Trial Populations — Eligibility Criteria, Enrollment Practices, and Trial Designs

Guidance for Industry

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)
November 2020
Clinical/Medical
Guidance Documents for Industry

- Provides the agency’s current thinking on steps to broaden eligibility criteria in clinical trials through inclusive trial practices, trial designs, and methodological approaches.

- Provides recommendations for how sponsors can increase enrollment of underrepresented populations in their clinical trials and improve trial recruitment so that the participants enrolled in trials will better reflect the population most likely to use the drug, if the drug is approved, while maintaining safety and effectiveness standards.

- Provides recommendations for broadening eligibility criteria and encouraging recruitment for clinical trials of investigational drugs intended to treat rare diseases or conditions.
Other Regulations and Guidance

• IND regulations, at 21 CFR 312.33(a)(2), require that IND data regarding subjects’ participation in clinical trials be presented in annual reports by gender, age, and race.

• NDA regulations, at 21 CFR 314.50(d)(5)(v) and (vi)(a), require sponsors of NDAs to include summaries of effectiveness and safety data presented by gender, age, and race.

• Other guidance documents
COVID-19
Inclusion of Diverse Populations

• FDA Guidance for Industry on Development and Licensure of Vaccines to Prevent COVID-19; June 2020
  
  ▪ “FDA encourages the inclusion of diverse populations in all phases of vaccine clinical development. This inclusion helps to ensure that vaccines are safe and effective for everyone in the indicated populations.”

  ▪ “FDA strongly encourages the enrollment of populations most affected by COVID-19, specifically racial and ethnic minorities.”

• FDA Guidance for Industry on COVID-19: Developing Drugs and Biological Products for Treatment or Prevention; May 2020

  ▪ “Racial and ethnic minority persons should be represented in clinical trials. Sponsors should ensure that clinical trial sites include geographic locations with a higher concentration of racial and ethnic minorities to recruit a diverse study population.”
Strategies to Support Diverse Participation

• There is not a one size fits all approach
• All actions should begin and end with the patient in mind
• A plan to address inclusion should be developed early on
• Consistent and continued community engagement
• Engage patients in trial design, logistics, and recruitment and retention practices

• Site locations where there are more racial and ethnic minorities
• Workforce diversity
• Engage providers
• Cultural sensitivity, competency, and awareness
• Eliminate language barriers
• Organizational goals that support diversity
Diversity in Clinical Trials Initiative

Developed an ongoing multi-media public education and outreach campaign to raise awareness around the importance of diverse participation in clinical trials.
Motivators for Campaign

- Reinforce the importance of diverse participation
- Educate consumers about key issues
- Help stimulate dialogue among peers and patient-provider
Diversity in Clinical Trials Campaign

BE A #CLINICALTRIALSCHAMPION

Videos
Newsletters & E-alerts
Webpage
Stakeholder Collaboration
Podcasts
Social Media
Communications Toolkit
Culturally & Linguistically Tailored
Diverse Participation in Clinical Trials
Videos I Podcast I Social Media
Shirley’s Story: Diversity is Critical to Making Better Medical Products
Veterans in Clinical Trials

Quinyardo McClain
Staff Sergeant (US Army Res)}

Zulma Santiago
Clerical Sergeant Major (US Army Res)

Javier Chávez
First Sergeant (US Army Reserve)
Diversity in Medical Device Clinical Trials Video
Clinical Trial Diversity Resources

Factsheet: Clinical Trials are research studies that determine whether medical products like drugs, vaccines, or devices are safe and effective. These studies may include people of different ages, ethnicities, and health conditions. Ensuring diversity in clinical trials is key to advancing health equity.

Research Needs You

4 Ways to Be a #ClinicalTrialsChampion

1. Share the ClinicalTrialsChampion website

2. Talk to your friends and family about clinical trials

3. Look for clinical trials at ClinicalTrials.gov

4. Ask your health care provider if a clinical trial is right for you

Ensuring diversity in clinical trials is key to advancing health equity.

Racial and Ethnic Minorities in Clinical Trials

Clinical trials are research studies that determine whether medical products like drugs, vaccines, or devices are safe and effective for people. Participation in clinical trials is often voluntary, and patients may be asked to make changes to their lifestyle or take medications. Ensuring diversity in clinical trials is essential to advancing health equity.

Clinical Trial Resources:

- About: The importance of diverse participation in clinical trials
- Search for trials: ClinicalTrials.gov
- For more information on health equity: Visit www.fda.gov/healthequity
Examples of Stakeholder Engagement Activities

- FDA CDER Small Business and Industry Assistance webinar on *Diversity in Clinical Trials: Learn about Enrollment Trends and Resources from FDA*
  - December 16, 2020 from 1:00 - 2:30 p.m. Eastern ([link to recording](#))
Examples of Stakeholder Engagement Activities

Clinical Trials and Kidney Disease
American Kidney Fund Webinar
Speaker: Jovonni R. Spinner, FDA OMHHE

Estudios clínicos y enfermedad renal
Speaker: Cariny Nuñez, FDA OMHHE
COLLABORATING TO ADVANCE HEALTH EQUITY FOR DIABETES AND CHRONIC KIDNEY DISEASE

February 10, 2021

Workshop Objectives:

• Leveraging patient experience data and community/system approaches to inform care, drug development and overall research agenda to improve patient outcomes and reduce health inequities for diverse communities with diabetes and chronic kidney disease (CKD).

• Explore barriers to diversity in clinical trials for CKD and diabetes and strategies to improve diversity in clinical trials.

• Utilization of real-world data to inform strategies and decision making on the management of diabetes and CKD.
Examples of Stakeholder Engagement Activities

• The Alliance of Multicultural Physicians and FDA OMHHE Memorandum of Understanding
  • Collective of the Association of American Indian Physicians (AAIP), Association of Black Cardiologists (ABC), National Council of Asian Pacific Islander Physicians (NCAPIP), National Hispanic Medical Association (NHMA), and National Medical Association (NMA). Opportunities to collaborate on developing educational, outreach, and training initiatives for physicians and the patients they serve to advance health equity.

• Yale and FDA OMHHE Memorandum of Understanding
  • To advance the Yale Cultural Ambassadors Program, an engagement of community partners to increase diverse participation in clinical research
Examples of Stakeholder Engagement Activities

• The Multi-Regional Clinical Trials Center and Harvard, “Achieving Diversity, Inclusion, and Equity in Clinical Research” Workgroup and Diversity Framework
  – Heterogeneity of Treatment Effects in Clinical Trials: Methods and Innovations; November 30 - December 1, 2020.

• Clinical Trials Transformation Initiative (CTTI) Diversity Project
  • CTTI is a Public-Private Partnership Co-founded by Duke University and FDA

• Society for Clinical Research Sites (SCRS) Diversity Awareness Program
Thank You!

Follow us at: @FDAHealthEquity

Email us at: OMHHE@fda.hhs.gov

Visit us at: FDA.gov/HealthEquity

Join webinars and stakeholder calls
CULTURE SHIFT IN NEPHROLOGY: TRIAL PARTICIPATION IS AN OPTION FOR CARE

Barbara S. Gillespie, MD, FASN
Chapter 1: General Principles in Glomerular Disease Management

Practice Point 1.16.1. Patients with GN should be offered participation in a disease registry and clinical trials, whenever available.

All patients who remain at high risk of progressive CKD despite maximal supportive care should be offered the opportunity to take part in a clinical trial.

Offer trial participation to patients in which IgAN is most prevalent and more likely to cause kidney failure: 

East Asian > Caucasians >> African descent (rare)

Trial participation is an option for clinical care...and now recommended in clinical practice guidelines!

“Asian Americans are the fastest growing minority group in the US, yet the least represented in [US] clinical trials”

per communications with Dr. Jon Barratt;
https://cebp.aacrjournals.org/content/26/2_Supplement/A16

12017 Lam et al abstract A16, Cancer Epidemiology, Biomarkers & Prevention (a publication of American Association for Cancer Research)
PATIENT PERSPECTIVE

David M. White
The KHI PFPC is charged with driving patient-centered innovation in every stage of the development of devices, drugs, and biologics by:

- Assisting with the development of strategic priorities and goals that can help FDA, KHI members and patients partner to drive patient-centered innovation;
- Empowering patients and care partners to have equal and fair representation in product development conversations by developing and leveraging current educational and training tools;
- Advising KHI members on project proposals and identifying patients and care partners to serve on KHI or FDA related projects and initiatives; and
- Developing patient-centered project(s) to submit for KHI endorsement.

The KHI PFPC is not a decision making group. KHI PFPC’s ideas and recommendations will be made to the KHI Board of Directors for review and approval.

Celeste Castillo Lee

KHI Patient and Family Partnership Council
Founding Chair
July 26, 1965 - February 9, 2017

www.kidneyhealthinitiative.org
2021 KHI PFPC Membership

- Mary Baliker
- Vanessa Evans (Incoming)
- Derek Forfang
- Patrick O. Gee, Sr., PhD, JLC
- Amanda Grandinetti, *KHI PFPC Vice Chair*
- Nichole Jefferson
- Jack Lennon
- Glenda Roberts
- David M. White, *KHI PFPC Chair*
- Leigh-Ann Williams (Incoming)

Photo Credit: 2019 & 2020 KHI PFPC, ASN Kidney Week 2019, Washington, DC
NEPHROLOGIST’S PERSPECTIVE

Kirk N. Campbell, MD, FASN
Kidney Disease Underrepresentation in Clinical Trials

Table 2. Inclusion and Exclusion of Patients With Renal Disease in Cardiovascular Trials

<table>
<thead>
<tr>
<th>No. of trials</th>
<th>Patients excluded</th>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>153</td>
<td>86 (56)</td>
<td>No renal disease</td>
<td>No renal disease</td>
</tr>
<tr>
<td></td>
<td>73 (48)</td>
<td>Reported as excluded</td>
<td>Reported as excluded</td>
</tr>
<tr>
<td></td>
<td>13 (8)</td>
<td>via personal communication</td>
<td>via personal communication</td>
</tr>
<tr>
<td>Serum creatinine ≥1.5-2.0 mg/dL (133-177 μmol/L)</td>
<td>19 (12)</td>
<td>No creatinine given (nonspecific exclusion)</td>
<td>24 (16)</td>
</tr>
<tr>
<td>Serum creatinine ≥2.0-3.0 mg/dL (178-286 μmol/L)</td>
<td>16 (10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serum creatinine ≥3.0 mg/dL (265 μmol/L)</td>
<td>3 (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eGFR ≤30 ml/min per 1.73 m²</td>
<td>22 (14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No creatinine given (nonspecific exclusion)</td>
<td>8 (5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported as excluded</td>
<td>14 (9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported in original article</td>
<td>15 (10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported in subsequent article</td>
<td>4 (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trials including baseline creatinine or eGFR for each group</td>
<td>81 (53)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average number of non-null subgroup analyses performed in original article, mean (SD)</td>
<td>5.8 (4.6)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Subgroup analysis performed on patients with renal disease

<table>
<thead>
<tr>
<th>Renal disease</th>
<th>BNT</th>
<th>Placebo</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>123 (0.7)</td>
<td>133 (0.7)</td>
<td>256 (0.7)</td>
<td></td>
</tr>
</tbody>
</table>

Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine

Coca et al JAMA 2006

Polack et al. NEJM 2020
Low Minority Enrollment in Recent High Impact Nephrology Clinical Trials
Positive Data Not Always Generalizable - IgAN

**Tonsillectomy**

Group A vs. B, $P = 0.047$
(mixed effect model)

<table>
<thead>
<tr>
<th>GROUP A</th>
<th>Baseline</th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steroid only</td>
<td>33</td>
<td>31</td>
<td>33</td>
<td>32</td>
<td>29</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>Steroid + tonsillectomy</td>
<td>39</td>
<td>38</td>
<td>36</td>
<td>37</td>
<td>34</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

**Hydroxychloroquine**

Liu et al., AJKD 74: 15-22, 2019

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Month 2</th>
<th>Month 4</th>
<th>Month 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCQ group</td>
<td>17.9%</td>
<td>42.9%*</td>
<td>50.0%*</td>
</tr>
<tr>
<td>Placebo group</td>
<td>3.3%</td>
<td>10.3%</td>
<td>14.8%</td>
</tr>
</tbody>
</table>

Kawamura et al., NDT 29:1546-53. 2014
Lessons from the ALMS Lupus Nephritis Study

Similar response to MMF versus Cyclophosphamid overall, but Black and Latino patients had a superior response to MMF

Isenberg et al., Rheum, 2010
PATIENT ADVOCACY GROUP PERSPECTIVE

Lauren Lee
If you don’t talk to your customers, how will you know how to talk to your customers?

- Study design and patient burden insights
- Fears, beliefs, perceptions around clinical trials
- Build bridges to support groups and advocacy organizations

Study Team Alignment
- Champion ‘Trials are for everyone’
- Trust, respect and transparency
- Overcommunicate (PI to patient, PI to sponsor)
A Grassroots approach to equity and inclusiveness

- Community extends far beyond the trial site
  - Physician to physician
  - Faith based groups
  - Social Media outlets
  - Community Centers
  - Smart partnerships with like-minded organizations
CRO PERSPECTIVE

Owen Garrick, MD, MBA
New Aspects of the Guidance

Make Trial Participation Less Burdensome for Participants

Adopt Enrollment and Retention Practices That Enhance Inclusiveness by:

- “Consideration may be given to paying participants in exchange for their participation in research”
- “Remain engaged with communities after the conclusion of the clinical research and share trial updates”
- “Consider . . . community-based participatory research . . . which promotes the design of clinical research with the assistance of community members and leaders to more effectively meet the needs of potential participants.”
- “Consider holding [recruitment] events in non-clinical but trusted locations (such as places of worship or community centers), social commercial venues (such as barbershops and beauty salons) . . . as a means of connecting with diverse populations.”
As part of the overall study design, sponsors can improve the diversity of enrolled participants by accounting for logistical and other participant-related factors that could limit participation in clinical trials.

- Onus is on us as a research enterprise
- Need to consider cost versus efficiency interplay
  - Additional services are upfront and costs are pretty clear
  - Efficiency gains are on the back end and financial impact may need to be imputed
- These are nonbinding recommendations
Panel Discussion

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FDA Office of Minority Health and Health Equity

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Icahn School of Medicine at Mount Sinai

Owen Garrick, MD, MBA
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Lauren Lee
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