Cardiovascular Risk Across the Lifespan for Polycystic Ovary Syndrome Workshop Agenda

October 13 and 22, 2021

Videocast Day 1 link: https://videocast.nih.gov/watch=43911
Videocast Day 2 link: https://videocast.nih.gov/watch=43913

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the National Heart, Lung, and Blood Institute (NHLBI) and the NIH Office of Research on Women's Health (ORWH) and with scientific input from the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD), the National Cancer Institute (NCI), the NIH Office of Disease Prevention (ODP), and the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

Co-Chairs:

• C. Noel Bairey Merz, M.D., Cedars-Sinai Medical Center

Professor of Medicine

Irwin and Sheila Allen Trust Chair in Women's Heart Research

Director, Barbra Streisand Women's Heart Center, Smidt Heart Institute

Director, Erika J. Glazer Women's Heart Research Initiative, Smidt Heart Institute

Anuja Dokras, M.D., M.H.C.I., Ph.D., Perelman School of Medicine at the University of Pennsylvania

Professor, Obstetrics and Gynecology

Director, PENN Polycystic Ovary Syndrome (PCOS) Center

Medical Director, Reproductive Surgical Facility

Executive Director, Women's Health Center for Clinical Innovation (WHCCI)

Andrea Dunaif, M.D., Icahn School of Medicine at Mount Sinai and Mount Sinai Health System

Lillian and Henry M. Stratton Professor of Molecular Medicine

System Chief, Division of Endocrinology, Diabetes, and Bone Disease

Objectives:

- Present epidemiological and pathophysiological links between cardiovascular disease (CVD) risk factors and PCOS, and the lifespan relationship between CVD and PCOS
- Review current PCOS diagnostic and clinical care guidelines
- Discuss mechanisms underlying cardiovascular risk across the lifespan of women with PCOS
- Identify knowledge gaps and opportunities in PCOS-related CVD research
- Outline next steps in developing a coordinated 5-year research plan relevant to CVD in PCOS that addresses identified research gaps

Day 1: October 13, 2021

11:00 a.m. Workshop Goals and Expectations

Jasmina Varagic, M.D., Ph.D., Program Director, Vascular Biology and Hypertension Branch, Division

of Cardiovascular Sciences (DCVS), NHLBI, NIH

11:05 a.m. **Opening Remarks**

David Goff, M.D., Ph.D., Director, DCVS, NHLBI, NIH

11:15 a.m. – 12:25 p.m. Session 1: Overview of the Epidemiology and Updates on Diagnostic and Clinical Care

Guidelines of PCOS

Introduction / Session Goals

Anuja Dokras, M.D., Ph.D.

Hospital of the University of Pennsylvania

Patient Story

Ashley Levinson PCOS Challenge

2012 Conference Overview

Andrea Dunaif, M.D.

Icahn School of Medicine at Mount Sinai

Diagnostic and Clinical Care Guidelines of PCOS

Helena Teede, MBBS, Ph.D.

Monash University School of Public Health and Preventive Medicine (Australia)

PCOS Epidemiology

Ricardo Azziz, M.D., M.P.H., M.B.A.

Heersink School of Medicine at University of Alabama at Birmingham

Racial/Ethnic Disparities and Social Determinants of Health Relevance in PCOS

Lawrence Engmann, M.D.

University of Connecticut School of Medicine

Moderated Discussion

Marcelle Cedars, M.D.

University of California at San Francisco School of Medicine

12:25 p.m. Keynote Lecture: PCOS-related CVD: State of the Evidence

JoAnn Manson, M.D., M.P.H., D.Ph.

Harvard Medical School

1:05 p.m. Lunch

1:45 – 5:00 p.m. Session 2: State of the Science on Mechanisms Underlying PCOS-related CVD Risk

1:45 – 3:25 p.m.

Session 2A

Introduction / Session Goals

Andrea Dunaif, M.D.

Icahn School of Medicine at Mount Sinai

Patient Story

Diaonne M. Taylor PCOS Challenge

Genomic Insights into the Etiology, Diagnosis and Long-term Health Consequences of PCOS

Andrea Dunaif, M.D.

Icahn School of Medicine at Mount Sinai

Metabolic Morbidities and Sleep Disturbances in PCOS

David A. Ehrmann, M.D.

University of Chicago Pritzker School of Medicine

Androgens and Cardiometabolic Risk in Women

Pamela Ouyang, MBBS, M.D.

Johns Hopkins University School of Medicine

Moderated Discussion

Richard Legro, M.D.

Penn State College of Medicine

3:25 p.m.

Break

3:35 – 5:00 p.m.

Session 2B

Introduction / Session Goals

Andrea Dunaif, M.D.

Icahn School of Medicine at Mount Sinai

PCOS and Hypertension Risk

Nina S. Stachenfeld, Ph.D.

Yale School of Medicine

Coagulation Abnormalities and PCOS

Sven Skouby, M.D., D.M.Sc.

Faculty of Health and Medical Sciences, University of Copenhagen (Denmark)

Depression, Anxiety, and Emotional Wellbeing in PCOS

Anuja Dokras, M.D., M.H.C.I., Ph.D.

Perelman School of Medicine at the University of Pennsylvania

Cancer and CVD in PCOS: Overlapping Mechanisms

Holly Harris, M.P.H., Sc.D.

Fred Hutchinson Cancer Center

COVID 19 in PCOS Women

Wiebke Arlt, Ph.D.

College of Medical and Dental Sciences at the University of Birmingham (United Kingdom)

Moderated Discussion

Roger A. Lobo, M.D.

Columbia University Irving Medical Center

5:00 p.m. Summary of Day 1

Marcelle Cedars, M.D.

University of California at San Francisco School of Medicine

Richard Legro, M.D.

Penn State College of Medicine

Roger A. Lobo, M.D.

Columbia University Irving Medical Center

5:20 p.m. Announcement of Day 2

Charlotte Pratt, Ph.D., M.S., R.D., Deputy Branch Chief, Clinical Applications and Prevention

Branch, DCVS, NHLBI, NIH

DAY 2: October 22, 2021

11:00 a.m. Workshop Goals and Expectations: Day 2

Patrice Desvigne-Nickens, M.D., Medical Officer, DCVS, NHLBI, NIH

11:05 a.m. **Opening Remarks**

Janine Clayton, M.D.

NIH Associate Director for Research on Women's Health; Director, NIH ORWH

11:10 a.m. – 12:50 p.m. Session 3: Cardiovascular Risk Across the Lifespan of Women with PCOS

Introduction / Session Goals

Noel Bairey Merz, M.D. Cedars-Sinai Medical Center

Women's Primary Care Physician Experience

Kathrine D. Sherif, M.D.

Sidney Kimmel Medical College, Thomas Jefferson University

CVD in Menopausal Women with PCOS

C. Noel Bairey Merz, M.D. Cedars-Sinai Medical Center

CVD in Reproductive Age of Women with PCOS

Erin Michos, M.D., M.H.S.

Johns Hopkins University School of Medicine

Subclinical CVD in Women with PCOS

Chrisandra Shufelt, M.D., M.S.

Cedars-Sinai Medical Center

Adverse Pregnancy Outcomes in PCOS and Later CVD

Enrique F. Schisterman, Ph.D.

Perelman School of Medicine at the University of Pennsylvania

Developmental Origin of CVD in Offspring of Mothers with PCOS

Laura Torchen, M.D., M.S.

Northwestern University Feinberg School of Medicine

Childhood Screening for Cardiometabolic Risks

Carissa M. Baker-Smith, M.D., M.P.H., M.S.

Nemours Children's Health

Moderated Discussion

Kathy Rexrode, M.D., M.P.H.

Harvard Medical School

12:50 p.m. Lunch

1:30 p.m. Session 4: Needs Assessment for Studying CVD Across the Lifespan in PCOS

Introduction / Session Goals

Andrea Dunaif, M.D.

Icahn School of Medicine at Mount Sinai

Can PCOS Be Accurately Determined Using Electronic Health Records?

Corrine Welt, M.D.

Weill Medical College of Cornell University

What Study Design Is Needed to Demonstrate Increased CVD Risk in PCOS?

David Siscovick, M.D., M.P.H.

New York Academy of Medicine

Can We Use Existing Cohorts in Studying CVD Across the Lifespan in PCOS?

Jennifer Stuart, M.D.

Harvard Medical School

Alternative Methodology ("Omics" Approaches) Addressing Pathogenesis of PCOS

Mark Goodarzi, M.D., Ph.D.

Cedars-Sinai Medical Center

Feasibility of Early Interventions to Prevent Cardiometabolic Outcomes in PCOS

Melanie Cree-Green, M.D., Ph.D.

School of Medicine, University of Colorado

Moderated Discussion

Janet Rich-Edwards, Sc.D., M.P.H. Harvard Medical School

2:55 p.m. Break

3:05 p.m. Session 5: Breakout Rooms

Co-chairs lead three separate, simultaneous discussions on the implications for future research, stimulation of collaborations, and next steps for developing a coordinated research plan

relevant to CVD in PCOS to address identified research gaps.

4:00 p.m. Session 6: Report from Breakout Rooms and Discussion

Co-Chairs

4:45 p.m. Session 7: Summary of Day 2 & Closing Remarks

Co-Chairs

5:15 p.m. Adjourn