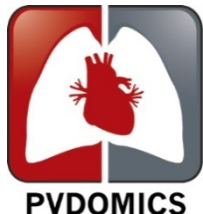


Recruitment and Consenting

MOP Chapter 4



NHLBI Pulmonary Vascular Disease Phenomics Program

Funded by the National Heart, Lung, and Blood Institute of the National Institutes of Health with support from the Pulmonary Hypertension Association

Target Enrollment

Enroll all WHO Groups of PH [N=1000]

- Group 1 – Pulmonary arterial hypertension (PAH) N=300
- Group 2 – PH associated with left heart disease N=300
- Group 3 – PH associated with lung diseases and/or hypoxemia N=300
- Group 4 – PH attributed to chronic thromboembolic disease (CTEPH) N=50
- Group 5 – Miscellaneous N=50

Comparator groups of PH [N=400]

- WHO 1 = 120; WHO 2 = 125; WHO 3 = 125; WHO 4 = 30

True healthy controls [N=100]

We anticipate at least 25% incident disease enrollment.

Partners or spouses or accompanying friends of patients participating in the study will be recruited to serve as true healthy controls. An effort will be made to maintain parity with regard to race, ethnicity, age and BMI with the patient population being recruited. Obesity will not be an exclusion criterion.

Center Target Enrollment

Target Enrollment for WHO Groups

WHO Group	1	2	3	4	5
Target/ctr	50	50	50	8-9	8-9
Target/total	300	300	300	50	50
Incident cases/total	75	75	75	12-13	12-13

Target Enrollment for WHO Group Comparators

WHO Comparators	1	2 mild-none	2 moderate	3 mild-none	3 moderate	4 mild-none
Target/center	20	10.4	10.4	10.4	10.4	5
Target/total	120	62.5	62.5	62.5	62.5	30

Target for Healthy Controls = 16.7/center

Comparators

- Who Group 1:
 - Borderline PH mPAP 21 to <25 mmHg (if symptomatic or at risk)
 - Exercise induced (ePAH)
- Who Group 2:
 - Mild PVD risk
 - Left heart disease with mPAP <25 mmHg
 - Moderate PVD risk
 - Isolated post-capillary PH: mPAP $\geq$ 25 mmHg, PVR <3 WU, DPG <7 mmHg
- WHO Group 3:
 - Parenchymal or non-parenchymal lung disease without resting PH
 - Mild to no: mPAP <21
 - Moderate: mPAP 21 to <25
- WHO Group 4:
 - Chronic thromboembolic disease with mPAP <25

Recruitment Goal $n = 1500$

- 24 months
- = 10.4/month/center
 - (Columbia/Cornell count as one center)
- Weekly recruitment feedback from DCC

Recruitment Strategies

- Electronic Medical Record Searches
- Database Searches
- Clinic schedule review
- Dear Dr. Letters
- Brochures
- Grand Rounds
- Research Conferences
- Social Media
- Support Groups

Public PVDOMICS Study Information

- www.phassociation.org or
- www.phassociation.com
- <https://clinicaltrials.gov/>

ID: NCT02980887

Inclusion Criteria: Form 100

Inclusion Criteria

- ≥ 18 years of age
 - Able to perform diagnostic testing
 - Able to consent
- and*
- Referred for right heart catheterization for known PVD
- or*
- At risk for PVD due to established cardiac or pulmonary disease

Exclusion Criteria

- Dialysis dependent renal function
- Too ill to perform protocol testing
- Pregnant or nursing

Keep Screening Log!

PVDOMICS: 3 Consent Forms

1. Main consent for participants with pulmonary vascular disease or those at-risk or suspected to have pulmonary vascular disease.
2. Healthy controls consent
3. Biobank consent for permission to retain and use samples from study participants that remain at the end of the PVDOMICS study in future studies (optional)

All participants in PVDOMICS will be asked to sign two consent forms: PVD and at-risk PVD will be asked to sign (1) and (3), and healthy controls will be asked to sign (2) and (3).

Send copy of clean, stamped, approved consent form to the DCC.

Consenting Logistics

- Consent within 30 days prior to 1st study visit (date of enrollment), Form 100
- Maintain participant contact information
- Redact participant's PHI on signature page and re-label with PVDOMICS ID and alpha code and then scan/send to pvd-systems@bio.ri.ccf.org.

Consent considerations:

- Genomics is an integral part of the study.
- Anyone who is not comfortable with this should not be enrolled (no opt out from omics studies).
- Purpose of the genomics studies:
 - we all have differences in our genetic material
 - some of these differences can make us more or less susceptible to certain diseases
 - in this study, we will look for genetic changes related to pulmonary hypertension, or response to pulmonary hypertension drugs

PVD Assessment

- Form 102:
 - Completed after study visits are over
 - WHO Group Review
 - Will allow for “multifactorial” PH
 - Reviewed by Adjudication Committee
- Form 103:
 - Comorbidities

Incidental Findings

- Participant contact information to be kept at the study site upon entrance into the study
- Participant will identify a PCP and their contact information upon entrance into the study
- PI is responsible for notification of participant of incidental finding
 - Communicate with PCP per participant's request
- DCC will notify PI if incidental finding discovered during research analysis
- Actionable genetic testing results will be reported only if subject agrees at start of study
- Study site will provide acknowledgement to the DCC of their receipt of an incidental finding

Incidental Genetic Findings

- If we sequence all of the genetic material, we may find changes that predict risk for another serious disease, such as breast cancer.
- Participants can choose if they want to know about clinically actionable genetic findings.
- Clinically actionable = some kind of screening or prevention is available (e.g. certain cancers, cardiomyopathy, aortic aneurysms).
- Risk for Alzheimer's disease is not actionable.
- List of genes that are actionable is defined by the American College of Medical Genetics.

Validation of Genetic Incidental Findings

- Results generated in the PVDOMICS research labs cannot be given directly to participants.
- Report to the site PI would be general: “possible pathogenic variant found in gene X; referral to clinical genetics recommended”.
- Participant is then recommended to have genetic counseling and decide whether to undergo clinical testing of gene X in a CLIA-approved lab.
- ***Costs can be significant and are not covered by the study, so they would be the responsibility of the participant or their insurance.***



FOR QUESTIONS, PLEASE CONTACT

JACQUELINE SHARP, CNP, STUDY
COORDINATOR

- Email: pylej@ccf.org
- Phone: 216-636-0000