



PVDOMICS STUDY

Pulmonary Function Core Site Exam

Instructions: Each Clinical Center Pulmonary Function Lab must complete and submit one exam prior to testing any participants for the PVDOMICS Study. The exam can be completed by multiple PFT techs within each center. Please scan and return this exam within one week. Email PVDOMICS Lung Core Director, Mitchell Olman, M.D. at olmanm@ccf.org and copy pvd-lung@bio.ri.ccf.org. Successful completion of this exam will be documented in the database for your site.

1. Date this exam completed (mm/dd/yyyy)..... ____/____/____

PVDOMICS SITE INFORMATION

2. Site number ____

11=Brigham and Women's Hospital, Boston, MA

21=Columbia University, New York, NY

22=Cornell University, New York, NY

31=Johns Hopkins University, Baltimore, MD

41=Mayo Clinic, Rochester, MN

51=University of Arizona, Tucson, AZ

61=Vanderbilt University, Nashville, TN

3. Name(s) and contact number(s) of technician(s) completing this exam; please print clearly:

Name	Email	Phone #

PFT QUESTIONS – Circle one correct response unless otherwise indicated.

10. According to ATS guidelines for repeatability, if the highest recorded FEV1 is less than 1 liter, what is the maximal allowable difference between 2 highest measured FEV1's guidelines for repeatability?

- a. 50 ml
- b. 100 ml
- c. 150 ml
- d. 200 ml

11. If an adult exhales for 15 seconds, but there is not plateau, is this maneuver considered acceptable by ATS guidelines?

- a. No
- b. Yes

12. A subject coughs within the first second of the FVC spirometry maneuver, but then gives a good effort and continues to blow for the next 15 seconds, is this maneuver considered acceptable by ATS guidelines?

- a. No
- b. Yes

13. Which of the following can affect the measure DLCO value? (*Circle all that apply*)

- a. COHb level
- b. Anemia
- c. Restrictive lung disease
- d. Obesity
- e. Obstructive lung disease

14. During the calibration of a differential pressure pneumotach, you obtain the following results:

Flow (LPS)	Volume (L)
0.8	2.55
4.0	2.85
8.0	2.95

What would you do? (*circle the best answer*):

- a. Repeat using only fast flows
- b. Remove the viral/bacterial filter and repeat
- c. Dry the screen and repeat the calibration
- d. Check for a hole in the pneumotach screen

15. A biological control subject shows the following results over a two month period. The subject indicates that on the test dated Feb 1 they felt ill.

Date	FVC	FEV1
January 2	5.43	4.23
January 15	5.38	4.11
February 1	4.78	3.44
February 15	5.28	4.03
March 1	5.22	4.00

What should the mean value for FVC be for this biological control subject?

- a. 5.33
- b. 5.21
- c. 5.16
- d. 5.41

16. For informational purposes, does your laboratory apply the rule for the time to peak flow of less than or equal to 0.12s when evaluating the quality of the start of a forced exhalation?

- a. No
- b. Yes

17. The following data are obtained from a SB DLCO test:

Trial 1	14.1 mL CO/min/mmHg
Trial 2	10.0 mL CO/min/mmHg
Trial 3	15.2 mL CO/min/mmHg

What would you do?

- a. Report the average of all 3 trials
- b. Report the average of the 2 trials with the largest values
- c. Repeat the test 3 more times later in the day
- d. Immediately repeat the test 3 more times

18. A biological control subject has an FRCpleth of 3.60L at panting frequencies of 30-60/minute against the shutter. During a QC test, the subject pants at a frequency of 105/minute and an FRCpleth of 4.31L is recorded. Which of the following is the most appropriate action to take?

- a. Continue using the system as it is within control limits
- b. Recalibrate the mouth pressure transducer and repeat the test
- c. Repeat the test coaching the subject to pant more slowly
- d. Take the plethysmograph out of service pending corrective action

19. In which order should the PFT tests and 6 MWT be performed?

- a. Spirometry, DLCO, Body Box volumes, 6 MWT
- b. 6 MWT, Body Box volumes, Spirometry, DLCO
- c. DLCO, 6 MWT, Spirometry, Body Box volume
- d. Spirometry, Body Box volume, DLCO, 6 MWT