



PVDOMICS STUDY

Center Cycle Ergometer Invasive Cardiopulmonary Exercise Test (iCPET) Procedure Notes #291

Instructions: Review PVDOMICS MOP Chapters 110 (non-invasive CPET) and 111 (invasive CPET) prior to completing Invasive Cardiopulmonary Exercise Test (iCPET). This worksheet/form is used to report **invasive CPET results**. *Non-invasive CPET results are reported on Form 290.*

Note: Form 280 (RHC) must be entered into the database before this form (F291) can be entered.

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1. Identification Number

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2. Alphacode

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3. Date of iCPET (mm/dd/yyyy)

4. Did this participant undergo an iCPET? (0=No, 1=Yes).....

a. If no, why was the iCPET not done?

1=Abnormal resting ECG

2=Physically unable to cycle (e.g. arthritis)

3=Known contraindication to exercise (e.g. exercise induced arrhythmia or exertional syncope)

4=Other contraindication or physician judgment (provide explanation in comments box at end of form)

5=Logistics issue (provide explanation in comments box at end of form)

5. Did participant exercise within the last 8 hours? (0=No, 1=Yes).....

6. Participant position during iCPET? (1=Upright [recommended], 2=Supine).....

7. Is participant using oxygen at the time of this iCPET? (0=No, 1=Yes, 8=N/A, never on O2).....

a. What O₂ flow is being used during iCPET (L/min)?

8. How was blood pressure measured during the iCPET?

(1=Manual blood pressure cuff, 2=Automatic blood pressure cuff, 3=Arterial line)

For the following question, one interval is defined as the time spent at a work load (wattage).

9. Which ramp protocol is being used for this test?.....

1=10 watts/interval

2=15 watts/interval

3=20 watts/interval

4=25 watts/interval (*this response is considered a PVDOMICS Study DEVIATION*)

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All data should be captured during the last 30 sec of each interval

Time Elapsed	Work Rate	Heart Rate	SpO ₂	SBP	DBP	Dyspnea (Borg scale)	RPE (Borg scale)	mPAP	PCWP	SvO ₂	SaO ₂	RAP
(min)	(Watts)	(bpm)	(%)	(mmHg)	(mmHg)	(0-10)	(0-10)	(mmHg)	(mmHg)	(%)	(%)	(mmHg)
Pre-Exercise (Resting)												
-1	Rest											
Exercise												
0	0											
Start ramp												
2												
4												
6												
8												
10												
12												
Recovery												
+1	0											
+2	0											
+3	Rest											
+4	Rest											
+5	Rest											
Peak												
____ : ____ minutes : seconds												

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Peak Exercise OMICS Blood Draw

10. Blood draw time (hh:mm, use 24-hour clock) :

Post-Exercise OMICS Blood Draw

11. Blood draw time (hh:mm, use 24-hour clock) :

Direct Fick Cardiac Output: Cardiac output is calculated via the direct Fick method using co-oximeter measured SaO₂ and S $\bar{v}$ O₂ and measured VO₂.

12. Were Direct Fick Cardiac Output Measurements done during this iCPET? (0=No, 1=Yes)

	At Baseline	At Peak Exercise	At Recovery
a. VO ₂ value used (ml/kg/min)	____.____	____.____	____.____
b. Direct Fick Cardiac Output (L/min)	____.____	____.____	____.____
c. Direct Fick Cardiac Index (L/min/m ²) (calculated by PVDOMICS database; record on this form)	____.____	____.____	____.____

iCPET TEST RESULTS:

13. Did RER reach or exceed 1.10? (0=No, 1=Yes, 9=Unknown)

14. Primary reason for exercise termination (select one).....

1=End of iCPET protocol

5=Lower Extremity Pain

2=Fatigue

6=Syncope/Near Syncope

3=Dyspnea

7=Physician's or technician's discretion

4=Chest Pain

15. Symptoms at end of exercise? (0=No, 1=Yes).....

a. Chest pain (0=No, 1=Yes)

b. Dizziness (0=No, 1=Yes).....

c. Dyspnea (0=No, 1=Yes)

d. Near syncope (0=No, 1=Yes)

e. Lower extremity claudication (cramping) (0=No, 1=Yes)

f. Lower extremity joint/leg pain (0=No, 1=Yes)

g. Other musculoskeletal pain (e.g. back or hip pain) (0=No, 1=Yes)

16. a. Username of staff performing this iCPET evaluation
(Note: staff username is the first 6 letters of last name and first initial of first name.)

b. Username of physician who either completed this form **OR** reviewed
and verified accuracy of the data reported on this form
(Username of physician is the first 6 letters of last name and first initial.)

17. Username of staff transferring iCPET data to CPC Core
(Note: staff member information must be entered on Form 10 in the database before
username can be selected from database list of values menu)

18. Date iCPET data transferred to CPC Core (mm/dd/yyyy)/...../.....

19. Are any comments documented? (0=No comments, 1=Yes, specify below)

Comments

200. Date form completed (mm/dd/yyyy)/...../.....

201. Username of person completing/reviewing completeness of this form.....

Clinical Center Use Only

Date Form Entered (mm/dd/yyyy) ____/____/____

Username of person entering this form____

Modified Borg Scale for use during CPET or iCPET**Modified Borg Scale**

0	Nothing at all
0.5	Very, very slight
1	Very mild
2	Mild
3	Moderate
4	Somewhat severe
5	Strong
6	-
7	Severe
8	-
9	Extremely severe
10	So severe you need to stop

Use this scale to measure both perceived dyspnea and rate of perceived exertion (RPE) before, during, and after exercise.

To assess dyspnea score ask the participant: “Using this scale from 0-10, where 0 is none at all and 10 is maximal, what number best describes your current shortness of breath?”

To assess the rate of perceived exertion (RPE) score ask the participant: “Using this scale from 0-10, where 0 is none at all and 10 is maximal, what number best describes your current level of fatigue?”