08595

GRADED EXERCISE TEST FORM

VERSION 3

73127

O.M.B. 68-S72041

Form Approved O.M.B. No. 68-S73044
68-S72041

Subject ID Number (6-14)

E | | ~~1~~ | 3 | 1 (1-5)

Place ID Number Label in Box Above

For CPR Use Only (49-54)

## A. IDENTIFICATION

1. PATIENT SCHEDULER: *Enter the appropriate number in the Form identifier as indicated:*
   *Enter "1" - if this is not a Reschedule of a previous Exercise ECG*
   *Enter "2" - if this is a Reschedule of a previous Exercise ECG*

2. *For Prevention Trial subjects enter the visit number; for Population Study subjects, enter PS:* (15-16)

*In items 3-6 enter one character per box, beginning with the leftmost box. Enter all letters as capitals. Mark through the boxes with a single stroke if the item does not apply.*

3. Last Name: (17-28)

4. First Name: (29-36)

5. Second Name: (37)

6. Third or Maiden Name: (38-40)
   *Code JR, SR, I, II, etc. here.*

## B. FASTING AND MEDICATION

7. Date of Visit: 7. Month / Day / Year (41-46)

8. When was the last time you took anything by mouth excepting water?
   *See instructions for use of wheel to determine fasting time.* 8. (47-48)

9. During the past two weeks have you taken or had prescribed:

| | 9. No | Yes | Unk | |
|---|---|---|---|---|
| 1) High blood pressure pills? . . . . . | 1 | 2 | 9 | (55) |
| 2) Diuretics (water pills)? . . . . . | 1 | 2 | 9 | (56) |
| 3) Medicine for angina (nitroglycerine or other coronary dilators)? . . . . . | 1 | 2 | 9 | (57) |
| 4) Digitalis preparations? . . . . . | 1 | 2 | 9 | (58) |
| 5) Medicine for irregular heart beats (antiarrhythmic agents)? . . . . . | 1 | 2 | 9 | (59) |
| 6) Inderal (propranolol)? . . . . . | 1 | 2 | 9 | (60) |

## C. CHEST PAIN ON EFFORT

*If an answer circled in section C is marked with an asterisk (*), go to section D.*

10.
a. Have you ever had any pain or discomfort in your chest?

| | 10. a. | |
|---|---|---|
| 1 No . . . . . | 1 | |
| 2 Yes . . . . . | 2 | (61) |

*If "Yes," go to item 11.*

b. Have you ever had any pressure or heaviness in your chest?

| | b. | |
|---|---|---|
| 1 No . . . . . | 1 | |
| 2 Yes . . . . . | 2 | (62) |

*If "No," go to section E.*

11. Do you get it when you walk uphill or hurry?

| | 11. | |
|---|---|---|
| 1 No* . . . . . | 1* | |
| 2 Yes . . . . . | 2 | |
| 3 Never hurries or walks uphill . . . . . | 3 | (63) |

NEW CARD--DUPLICATE COLUMNS (1-4)
[2] (5)
DUPLICATE COLUMNS (6-14)

12. Do you get it when you walk at an ordinary pace on the level? — 12.
1 No . . . . . 1
2 Yes . . . . . 2 (64)

13. What do you do if you get it while you are walking? — 13.
1 Stop or slow down . . . . . 1
2 Carry on . . . . . 2 (65)
*Circle "1," "Stop or slow down" if subject carries on after taking nitroglycerine.*

14. If you stand still, what happens to it? — 14.
1 Relieved . . . . . 1
2 Not relieved* . . . . . 2*
3 Does not stand still . . . . . 3 (66)
*If "3," "Does not stand still," go to item 16.*

15. How soon? — 15.
1 Ten minutes or less . . . . . 1
2 More than ten minutes* . . . . . 2* (67)

16. Will you show me where it was? — 16. No Yes
a. Sternum (upper or middle)? . . . . . a. 1 2 (68)
b. Sternum (lower)? . . . . . b. 1 2 (69)
c. Left anterior chest? . . . . . c. 1 2 (70)
d. Left arm? . . . . . d. 1 2 (71)
e. Other? . . . . . e. 1 2 (72)

17.
a. Has there been a change in your chest discomfort during the past four weeks? — 17. a. 1* 2 (73)
b. Has your chest discomfort become more frequent or more severe? — b. 1 2 (74)
c. Has your chest discomfort become easier to bring on? — c. 1 2 (75)
d. Has your chest discomfort begun occurring while you are at rest? — d. 1 2 (76)

## D. POSSIBLE INFARCTION

*If an answer circled in this section is marked with an asterisk (*), go to section E.*

18. Have you ever had a severe pain across the front of your chest lasting for half an hour or more? — 18. No 1* Yes 2 (15)

19.
a. Did you see a doctor because of this pain? — 19. a. 1 2 (16)
*If "No," go to item 20.*
b. What did he say it was? — b.
1 Heart attack . . . . . 1
2 Other disorder* . . . . . 2* (17)

20. Have you had such a chest pain in the last three months? — 20. No 1 Yes 2 (18)

## E. SYNCOPE AND DYSPNEA

21. Have you fainted in the past hour? — 21. No 1 Yes 2 (19)
22. Have you ever fainted while exercising? — 22. 1 2 (20)
23. Do you become more short of breath than others your own age during normal activity? — 23. 1 2 (21)
24. In the past did you become more short of breath than others your own age during normal activity? — 24. 1 2 (22)

## F. TARGET HEART RATE

25. Do you regularly engage in strenuous exercise or hard physical labor? — 25. No 1 Yes 2 (23)
*If "No," classify the subject as sedentary for determining GXT target heart rate and proceed to item 27.*

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26. Do you exercise or labor at least three times a week?

1 No . . . . . 1

2 Yes . . . . . 2 (24)

*If "No," classify the subject as sedentary for determining GXT heart rate.*

*If "Yes," classify the subject as trained for determining GXT target heart rate.*

27. Year of birth: 27. ☐☐ (25-26)

28. Target heart rate: 28. ☐☐☐ (27-29)

G. CARDIOPULMONARY EXAM

29. Record the subject's blood pressure (standing, right arm):

Systolic 29. ☐☐☐ (30-32)

Diastolic V ☐☐☐ (33-35)

30. Does the subject exhibit symptoms of acute illness sufficient to interfere with testing?

1 No . . . . . 1

2 Yes . . . . . 2 (36)

31.
a. Does the subject have some difficulty which might interfere with stress testing on the treadmill? 31. a.

1 No . . . . . 1

2 Yes . . . . . 2 (37)

*If "No," go to item 32.*

b. Specify the difficulty: _____

_____

32. Lungs:

a. Moist basilar rales? . . . . . 32. a. No 1 Yes 2 (38)

b. Other abnormalities? . . . . . b. 1 2 (39)

*If "Yes," specify:* _____

_____

33.
a. Does subject have perceptible cardiac apical impulse? 33. a.

1 No . . . . . 1

2 Yes . . . . . 2

9 Uncertain . . . . . 9 (40)

*If "No" or "Uncertain," go to item 34.*

b. Point of maximum impulse (PMI) b. Letter ☐ (41)

*Refer to the figure on page 16 of the instructions.*

Number ☐ (42)

c. Diameter of apical impulse in whole centimeters c. ☐☐ (43-44)

d. Apical impulse quality or contour d.

1 Normal. . . . . 1

2 Prolonged outward systolic component as in left ventricular hypertrophy . . . . . 2 (45)

34.
a. Is there a palpable cardiac "bulge"? 34. a.

1 No . . . . . 1

2 Yes . . . . . 2 (46)

*If "No," proceed to item 35.*

b. Specify the location: b. Letter ☐ (47)

Number ☐ (48)

*Refer to the figure on last page of the instructions.*

35. Is a third or ventricular filling gallop present? — 35.
   1 No . . . . . 1
   2 Yes . . . . . 2 (49)

36.
a. Is a grade two or louder systolic murmur present? — 36. a.
   1 No . . . . . 1
   2 Yes . . . . . 2 (50)

*If "No," go to item 37.*

b. Quality — b.
   1 Regurgitant . . . . . 1
   2 Ejection . . . . . 2
   9 Uncertain . . . . . 9 (51)

37.
a. Is a definite diastolic murmur present? — 37. a.
   1 No . . . . . 1
   2 Yes . . . . . 2 (52)

*If "No," go to item 38.*

b. Quality — b.
   1 Regurgitant . . . . . 1
   2 Stenotic . . . . . 2 (53)

38. Is congenital heart disease suspected? — 38.
   1 No . . . . . 1
   2 Yes . . . . . 2 (54)

H. RESTING ECG

*Check all of the appropriate boxes.*

39. Possible Ischemia: J-ST amplitude $\geq$ 1.0 mm, depression in I, $V_4$, $V_5$, $V_6$. — 39. ☐ (55)

40.
a. Possible Acute Lateral or Inferior Injury: ST elevation with convex-upward contour > 0.5 mm, and low or inverted T wave, in I, II, III, $V_4$, $V_5$, or $V_6$. — 40. a. ☐ (56)

b. Possible Acute Anterior Injury: QS $V_1$ and $V_2$ with convex-upward ST-T. — b. ☐ (57)

c. Possible Acute Posterior Injury: R/S in $V_1$ $\geq$ 1.0, and ST-T depression, $\geq$ 1.0 mm and convex downward. — c. ☐ (58)

d. Possible or Suspected Unhealed M.I. of Any Kind: Large amplitude T wave inversion. — d. ☐ (59)

41. Possible Left Ventricular Hypertrophy: R wave $\geq$ 26 mm in $V_5$ or $V_6$ or > 20 mm in I, II, III or AVF. — 41. ☐ (60)

42. Left Ventricular Conduction Defect: QRS duration > 0.11 sec. in any lead + absence of slurred S wave > .05 sec. in I or $V_5$ and $V_6$. — 42. ☐ (61)

43. Rhythm/Conductor Disorder: — 43.

a. Heart cycle length varies > 25% beats at least once in any 6 second interval (sick sinus syndrome). — a. ☐ (62)

b. Atrial and ventricular rates differ > 25%. (This will not exclude occasional uniform, non R-on-T type PVC's.) (Second degree heart block.) — b. ☐ (63)

c. Multifocal or many PVC's > 10/min. (QRS-T's with QRS $\geq$ 0.12 sec. not preceded at least 0.12 sec. by P wave.) — c. ☐ (64)

d. R-on-T type PVC's. — d. ☐ (65)

e. Two or more PVC's in a row. (Ventricular tachycardia.) — e. ☐ (66)

f. Parasystolic focus. — f. ☐ (67)

g. Atrial flutter. — g. ☐ (68)

h. Atrial fibrillation. — h. ☐ (69)

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## I. DISPOSITION

44.
a. Disposition of subject: 44. a.

1 Exercise Test . . . . . 1

2 Reschedule . . . . . 2

3 Exclude . . . . . 3 (70)

*If "Exercise Test," go to item 46.*

*If "Reschedule," go to item 44c.*

NEW CARD--DUPLICATE COLUMNS (1-4)
3 (5)
DUPLICATE COLUMNS (6-14)

b. Reasons for exclusion *(Check the appropriate boxes):* b.

1 Aortic stenosis . . . . . 1 ☐ (15)

2 Congestive heart failure. . . . . 2 ☐ (16)

3 Blood pressure . . . . . 3 ☐ (17)

4 R-on-T type PVC's . . . . . 4 ☐ (18)

5 Ventricular tachycardia . . . . . 5 ☐ (19)

6 Parasystolic focus . . . . . 6 ☐ (20)

7 Atrial flutter. . . . . 7 ☐ (21)

8 Atrial fibrillation . . . . . 8 ☐ (22)

9 Congenital heart disease . . . . . 9 ☐ (23)

10 Second rescheduling required . . . . . 10 ☐ (24)

b. Continued b.

11 Other (Specify)_____ 11 ☐ (25)

*Please thank the subject and dismiss him.*

c. Reason for Rescheduling. *(Check the appropriate boxes). NOTE: a Reschedule Form must be completed for every subject rescheduled.* c.

1 Non-fasting (Item 8) . . . . . 1 ☐ (26)

2 Unstable angina (Item 17) . . . . . 2 ☐ (27)

3 Possible recent infarction by history (Item 20) 3 ☐ (28)

4 Fainting (Item 21) . . . . . 4 ☐ (29)

5 Acute illness (Item 30) . . . . . 5 ☐ (30)

6 Possible ischemia, subject not on digitalis (Item 39) 6 ☐ (31)

7 Possible acute lateral or inferior injury (Item 40a) 7 ☐ (32)

8 Possible acute anterior injury (Item 40b). . . . 8 ☐ (33)

9 Possible acute posterior injury (Item 40c) . . . 9 ☐ (34)

10 Possible or suspected unhealed M.I. (Item 40d) . 10 ☐ (35)

11 Equipment malfunction . . . . . 11 ☐ (36)

12 Other. Specify:_____ 12 ☐ (37)

45. Approximate date of re-visit:

☐☐/☐☐
Mo. Yr. (38-41)

## J. EXERCISE ELECTROCARDIOGRAM

46. Attending physician: a. Name: _____

b. Initials: [ ][ ] (42-43)

47. Is monitoring equipment functioning properly?

1 No 2 Yes (44)

*In items 48-58, record the subject's systolic and diastolic blood pressure, his heart rate at end of stage, the ST code and rhythm code.*

| | Systolic | Diastolic V | Heart Rate at End of Stage or Termination | ST Code | Rhythm Code |
|---|---|---|---|---|---|
| 48. Standing at Rest | [ ][ ][ ] (45-47) | [ ][ ][ ] (48-50) | [ ][ ][ ] (51-53) | [ ] (54) | [ ] (55) |
| 49. Zero (1.7 mph, 0%) | [ ][ ][ ] (56-58) | [ ][ ][ ] (59-61) | [ ][ ][ ] (62-64) | [ ] (65) | [ ] (66) |
| 50. One-Half (1.7 mph, 5%) | [ ][ ][ ] (67-69) | [ ][ ][ ] (70-72) | [ ][ ][ ] (73-75) | [ ] (76) | [ ] (77) |

NEW CARD--DUPLICATE COLUMNS (1-4)
[4] (5)
DUPLICATE COLUMNS (6-14)

| | | | | | |
|---|---|---|---|---|---|
| 51. One (1.7 mph, 10%) | [ ][ ][ ] (15-17) | [ ][ ][ ] (18-20) | [ ][ ][ ] (21-23) | [ ] (24) | [ ] (25) |
| 52. Two (2.5 mph, 12%) | [ ][ ][ ] (26-28) | [ ][ ][ ] (29-31) | [ ][ ][ ] (32-34) | [ ] (35) | [ ] (36) |
| 53. Three (3.4 mph, 14%) | [ ][ ][ ] (37-39) | [ ][ ][ ] (40-42) | [ ][ ][ ] (43-45) | [ ] (46) | [ ] (47) |
| 54. Four (4.2 mph, 16%) | [ ][ ][ ] (48-50) | [ ][ ][ ] (51-53) | [ ][ ][ ] (54-56) | [ ] (57) | [ ] (58) |
| 55. Five (5.0 mph, 18%) | [ ][ ][ ] (59-61) | [ ][ ][ ] (62-64) | [ ][ ][ ] (65-67) | [ ] (68) | [ ] (69) |
| 56. Six (5.5 mph, 20%) | [ ][ ][ ] (70-72) | [ ][ ][ ] (73-75) | [ ][ ][ ] (76-78) | [ ] (79) | [ ] (80) |

NEW CARD--DUPLICATE COLUMNS (1-4)
[5] (5)
DUPLICATE COLUMNS (6-14)

| | | | | | |
|---|---|---|---|---|---|
| 57. Seven (6.0 mph, 22%) | [ ][ ][ ] (15-17) | [ ][ ][ ] (18-20) | [ ][ ][ ] (21-23) | [ ] (24) | [ ] (25) |
| 58. Immediate post-exercise | [ ][ ][ ] (26-28) | [ ][ ][ ] (29-31) | [ ][ ][ ] (32-34) | [ ] (35) | [ ] (36) |

*Ask:*

59. Do you have any discomfort in your chest? (59.)

1 No . . . . . 1

2 Yes . . . . . 2 (37)

*If "No," go to item 65.*

60. *If "Yes," circle the number of minutes that elapsed between termination of exercise test and observation of discomfort.* (60.)

0 Immediate post-exercise 0

1 One minute . . . . . 1

2 Two minutes . . . . . 2

3 Three minutes . . . . . 3

4 Four minutes . . . . . 4

5 Five minutes . . . . . 5

6 Six minutes . . . . . 6

9 More than 6 minutes post-exercise . . . . . 9 (38)

61. *Ask subject to show where it is (or was). Does site include sternum?* (61.)

1 No . . . . . 1

2 Yes . . . . . 2 (39)

*If "No," go to item 65.*

*If "Yes," ask:*

62. Is the discomfort sharp or dull? (62.)

1 Sharp . . . . . 1

2 Dull . . . . . 2 (40)

*If "Sharp," go to item 65.*

*If "Dull," ask the subject to stop breathing for a few seconds, then ask:*

63. Did the pain go away? (63.)

1 No . . . . . 1

2 Yes . . . . . 2 (41)

*If "Yes," go to item 65.*

*If "No," ask the subject to take two deep breaths, then ask:*

64. Is the discomfort worse? (64.)

1 No . . . . . 1

2 Yes . . . . . 2 (42)

| | Systolic | Diastolic | Heart Rate at End of Stage | ST Code | Rhythm Code |
|---|---|---|---|---|---|
| 65. Two minute post-exercise | (43-45) | (46-48) | (49-51) | (52) | (53) |
| 66. Four minute post-exercise | (54-56) | (57-59) | (60-62) | (63) | (64) |
| 67. Six minute post-exercise | (65-67) | (68-70) | (71-73) | (74) | (75) |

NEW CARD--DUPLICATE COLUMNS (1-4)
6 (5)
DUPLICATE COLUMNS (6-14)

68. Duration of test (min./sec.) ___ / ___ (15-18)

69. Maximum heart rate achieved. ___ (19-21)

*If the answer to item 59 was "Yes," ask:*

70. Do you still have any discomfort in your chest? 70.

1 No . . . . . 1

2 Yes . . . . . 2 (22)

71. Reasons for termination *(Check the appropriate boxes):* 71.

1 Target heart achieved . . . . . 1 ☐ (23)

2 Bruce test criteria met (exhaustion) . . . 2 ☐ (24)

3 Fatigue/weakness . . . . . 3 ☐ (25)

4 Dyspnea . . . . . 4 ☐ (26)

5 Leg pain . . . . . 5 ☐ (27)

6 Chest pain . . . . . 6 ☐ (28)

7 ST changes . . . . . 7 ☐ (29)

71. Continued 71.

8 Supraventricular tachycardia . . . . . 8 ☐ (30)

9 Ventricular tachycardia . . . . . 9 ☐ (31)

10 Other arrhythmias . . . . . 10 ☐ (32)

11 Hypotension . . . . . 11 ☐ (33)

12 Cerebral symptoms . . . . . 12 ☐ (34)

13 Intracardiac block . . . . . 13 ☐ (35)

14 Hypertension . . . . . 14 ☐ (36)

15 Technical problems (describe in comments) . . . . 15 ☐ (37)

16 Difficulty recorded in item 31b . . . . . 16 ☐ (38)

17 Subject refused to continue . . . . . 17 ☐ (39)

18 Other (describe in comments) . . . . . 18 ☐ (40)

72. Technician: a. Name: _____ b. Initials: ___ (41-42)

Comments: _____