Supplementary Online Content


**eAPPENDIX.** Survey Presented to Physicians and Nurses Regarding the Assessment of Patients’ New York Heart Association/World Health Organization Functional Classes

This supplementary material has been peer reviewed, edited, and approved by the authors.
Dear Colleague,

Please read each of the following brief patient descriptions. Then, please assign a New York Heart Association / World Health Association (NYHA/WHO) class as you would in your own practice.

There are no intended “correct” answers. The goal is simply to see if caregivers come to the same conclusions.

Therefore, please do not discuss these questions with others. Please rank patients as you would in your own practice.

As an incentive and thanks, you will be entered into a raffle to win free registration for the next Pulmonary Hypertension Association International meeting.

Please enter your name and email address on this sheet, DETACH IT from the questionnaire, and turn in this name sheet and your completed questionnaire in the separate boxes near the entry to the conference room. THIS WILL KEEP YOUR ANSWERS ANONYMOUS.

This research has not received industry funding.

Thank you.
Darren Taichman, MD, PhD

YOUR NAME ___________________________________________________

EMAIL ADDRESS _______________________________________________
PATIENTS

1. 38-year-old woman with idiopathic pulmonary arterial hypertension diagnosed 10 months ago. She demonstrated acute vasoreactivity to inhaled nitric oxide, normalization of her mean pulmonary artery pressure and a 30% reduction in her pulmonary vascular resistance. She has been treated with oral calcium channel blockers. She works as a copy editor.

NYHA/WHO: Class I ________  Class II ________  Class III ________  Class IV ________

2. 43-year-old woman with scleroderma associated pulmonary arterial hypertension diagnosed three years ago. She is being treated with a single oral agent for pulmonary arterial hypertension, warfarin, and uses supplemental oxygen. She reports dyspnea carrying groceries into her apartment. She denies lightheadedness or peripheral edema. Her 6-minute walk distance is 300 meters.

NYHA/WHO: Class I ________  Class II ________  Class III ________  Class IV ________

3. 26-year-old woman with idiopathic pulmonary arterial hypertension and 8 months progressive dyspnea on exertion. She becomes short of breath after climbing two flights of stairs. She denies light-headedness or lower extremity edema. At right heart catheterization, her right atrial pressure is 15 mm Hg, mean pulmonary artery pressure 49 mm Hg, cardiac index 1.6 L/min/m². The pulmonary artery occlusion pressure is 7 mmHg.

NYHA/WHO: Class I ________  Class II ________  Class III ________  Class IV ________

4. A 43-year-old woman on prostanoid therapy for 2 years for HIV associated pulmonary arterial hypertension. She also uses supplemental oxygen at 6 liters per minute. At rest her O₂ saturation is 89%. She is short of breath dressing herself and talking on the phone.

NYHA/WHO: Class I ________  Class II ________  Class III ________  Class IV ________

5. 55-year-old woman with hepatitis C and cirrhosis. A mean pulmonary artery pressure of 50 mmHg was noted at a catheterization performed one year ago during evaluation for potential liver transplantation. The right atrial pressure was 8 mm Hg, pulmonary artery occlusion pressure 10 mm Hg, and cardiac index 2.9 L/min/m². Since then, she has been treated with inhaled iloprost and oral sildenafil. Currently, she becomes light-headed after climbing a flight of stairs, but denies limiting her activities due to dyspnea.

NYHA/WHO: Class I ________  Class II ________  Class III ________  Class IV ________
6. A 35-year-old woman with scleroderma associated pulmonary arterial hypertension, diagnosed following evaluation for a syncopal episode one week ago. She is relatively sedentary at baseline and denies any recent change in her activities due to shortness of breath. She performs activities of daily living without noted significant shortness of breath. On echo, her right heart is dilated. At cardiac catheterization the right atrial pressure 10 mm Hg, mean pulmonary artery pressure 45 mm Hg, cardiac index 2.1L/min/m² and pulmonary artery occlusions pressure is 7 mm Hg.

NYHA/WHO: Class I ________  Class II ________  Class III ________  Class IV ________

7. A 49-year-old woman with scleroderma associated pulmonary arterial hypertension, diagnosed three years ago. She has been treated with single agent for pulmonary arterial hypertension, warfarin and oxygen. She reports shortness of breath carrying groceries. She denies lightheadness or leg swelling. Her six-minute walk distance is 390 meters.

NYHA/WHO:  Class I ________  Class II ________  Class III ________  Class IV ________

8. A 51-year-old woman with anorectic agent associated pulmonary arterial hypertension who has been treated with subcutaneous treprostinil for the last 18 months. She has site pain that requires narcotics for relief on a daily basis. She is a kindergarten teacher and continues to work full time. She notes dyspnea when playing games outdoors with her students.

NYHA/WHO:  Class I ________  Class II ________  Class III ________  Class IV ________

9. A 56-year-old man with idiopathic pulmonary arterial hypertension, treated with intravenous epoprostenol for the last year. He does clerical work. He denies shortness of breath. He does feel tired at the end of a long workday. He notes mild bilateral lower extremity edema. A recent cardiac catheterization revealed a right atrial pressure of 11 mm Hg, mean pulmonary artery pressure of 40 mm Hg, cardiac index of 2 L/min/m² and a pulmonary artery occlusion pressure of 9 mm Hg.

NYHA/WHO:  Class I ________  Class II ________  Class III ________  Class IV ________

10. A 37-year-old woman with scleroderma associated pulmonary arterial hypertension. She was not responsive to inhaled nitric oxide at cardiac catheterization one year ago and has since been treated with oral bosentan. She currently denies limitations due to dyspnea or fatigue. She works as a receptionist.
NYHA/WHO:  Class I ________        Class II ________     Class III ________   Class IV ________

PLEASE COMPLETE THE FOLLOWING INFORMATION

Your position (check all that apply):
    ☐ Physician        ☐ Nurse        ☐ Nurse Practitioner        ☐ Research Coordinator
    ☐ Other ________________

Your involvement with patients with pulmonary arterial hypertension (check all that apply):
    ☐ clinical care        ☐ coordinator
    ☐ Other _______________________________
    Country in which you practice: ______________________________________

Your primary practice specialty:
    ☐ pulmonary        ☐ cardiology        ☐ rheumatology
    ☐ internal medicine without subspecialty        ☐ critical care
    ☐ other ________________

Your practice setting:
    ☐ private office-based practice        ☐ academic medical center
    ☐ private hospital-based practice        ☐ other ________________________________

Number of years you have been treating patients with pulmonary hypertension:
    ☐ 0 to less than 1 year        ☐ 1 to less than 3 years        ☐ 3 to less than 5 years
    ☐ 5 to less than 10 years        ☐ 10 or more years

Please estimate the number of new patients with pulmonary arterial hypertension you see each year:
    ☐ <10        ☐ 10-20        ☐ 21-50        ☐ >50

Do you currently use the WHO or NYHA functional classification as part of your assessment when deciding therapy?
    ☐ Yes        ☐ No

Have you enrolled patients into clinical trials or studies of pulmonary arterial hypertension?
Please check all pulmonary arterial hypertension therapies that you have prescribed or managed:

- calcium channel blockers
- bosentan
- ambrisentan
- sitaxsentan
- sildenafil
- tadalafil
- inhaled iloprost
- intravenous treprostinil
- subcutaneous treprostinil
- intravenous epoprostenol

(☐ I am not directly involved in patients’ clinical care)

Do you think the patients described in this questionnaire resemble patients you might see in your own practice?

- Yes
- No

Please check all items that you consider when determining a patient’s NYHA/WHO class (check as many as apply):

- symptoms
- medications used
- hemodynamic values
- physical examination
- 6 minute walk distance
- echocardiographic findings
- patients’ lifestyle
- patient’s occupation
- Requirements to get insurance approval for the therapy I think best for the patient
- other ____________________________________________________________

THANK YOU!