distinguish ''biologically'' *versus* ''chronologically'' aged individuals [6]. Thus, its strong correlations with respiratory parameters [2] and its sensitivity to clinical modifications [1] should only be seen as additional evidence of the strong biological foundations of the test, even in a disease-specific population. Nevertheless, in no way may such characteristics allow it to substitute tests measuring specific capacities and functions.

In the current clinical scenario characterised by a growing number of older persons, the use of the 4MGS has an extremely high relevance. The stratification of older persons according to such an additional objective ''vital sign'' implies the possibility of developing a new model of patient-tailored healthcare systems. In this way, slow walkers, rather than persons aged $\geqslant$65 years, may become those considered more vulnerable to endogenous and exogenous stressors and amenable to adapted interventions (following a comprehensive geriatric assessment). It may provide the basis for distinguishing the ''geriatric patient'' according to a biological parameter rather than through a mere chronological (and extremely limited) criterion such as age. It is noteworthy that such use of the gait speed test for screening older persons in the need for a more detailed comprehensive evaluation (and subsequent potentially adapted interventions) has already been proposed in other medical specialities, for example in cardiac surgery [8] and oncology [9]. The role of the 4MGS in the screening of older persons (and now even among COPD patients) is methodologically different from that of the 6MWT and ISW. The endurance walk tests maintain their clinical relevance and cannot be replaced by the 4MGS in the specific assessment of cardiorespiratory capacity.

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The role of the 4MGS in the screening of older persons is methodologically different from that of the 6MWT and ISW http://ow.ly/rT7ed

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Received: Nov 28 2013 | Accepted: Nov 29 2013

Conflict of interest: None declared

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From the authors:

We are greatly honoured by the interest shown by M. Cesari and S. Scarlata in our recent publications on the 4-m gait speed (4MGS) in patients with chronic obstructive pulmonary disease (COPD) [1, 2]. We strongly agree with their view that the 4MGS has value as a ''vital sign'', a ''marker of global well-being'' and reflects biological (rather than chronological) age. Gait speed has been shown to be a strong and consistent risk factor for adverse outcomes including disability, nursing home admission, falls and mortality in community dwelling older persons [3, 4]. The intention of our studies was to draw the attention of the respiratory fraternity to the 4MGS, as we believe that the 4MGS may have a future role in stratifying patients

with COPD. Although forced expiratory volume in 1 s is the most commonly used surrogate marker of disease severity, it does not reflect extrapulmonary manifestations of COPD [5]. We believe that the 4MGS provides additional information to the clinician and, given its simplicity, could be implemented widely in most clinical settings [6]. As a leading authority, M. Cesari will be aware that the 4MGS is already used to screen for sarcopenia and frailty in older adults [7, 8].

M. Cesari and S. Scarlata erroneously believe that our studies were proposing the 4MGS as a simpler alternative to more established field walking tests used in patients with COPD, such as the incremental shuttle walk test (ISWT) or 6-min walk distance (6MWD). This was not our intention, and indeed we clearly expressed that the 4MGS was not a measure of exercise capacity. The first study demonstrated that the 4MGS was a reliable and robust measure, and correlated with measures of exercise capacity, health-related quality of life and dyspnoea [1]. In the second study, we demonstrated the 4MGS was responsive to pulmonary rehabilitation, and used external anchors (including, but not exclusively, the ISWT) to estimate a minimal clinically important difference [2]. In both studies we concluded that the 4MGS had potential as a simple assessment tool. The 4MGS appeared to be particularly responsive in those with poor exercise capacity levels. Although further work is required to confirm this, we believe that the 4MGS may be a useful functional assessment tool in specific settings; for example, patients with COPD recovering from hospitalisation or critical care. In these patients, walking 4 m at their usual speed may indeed be ''pushing to the limit of the physiological reserves of the individual''.

It is worth reviewing why field walking tests, such as the ISWT and 6MWD, are used in patients with COPD. First, they are used as outcome measures to determine the benefits of interventions, typically pulmonary rehabilitation. Secondly, they are used by clinicians as a surrogate marker of the patient's day-to-day physical functioning. Finally, they reflect disease severity, and both the ISWT and 6MWD have been shown to predict mortality in patients with COPD [9, 10]. Although the 4MGS is not a measure of exercise capacity, we believe our two studies in the *European Respiratory Journal*, coupled with the existing literature in other disease populations, provide some evidence that the 4MGS may provide similar information to the clinician.

Going forward, I am sure M. Cesari and S. Scarlata would agree that our initial findings might encourage the respiratory community to further evaluate the utility of the 4MGS in older chronic respiratory disease populations.

@ERSpublications
The 4-metre gait speed is a useful functional outcome marker in COPD http://ow.ly/tgQDH

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Received: Dec 19 2013 | Accepted: Dec 20 2013

Conflict of interest: Disclosures can be found alongside the online version of this article at erj.ersjournals.com

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Eur Respir J 2014; 43: 1820–1822 | DOI: 10.1183/09031936.00222013 | Copyright ©ERS 2014

6-minute walk distance as a predictor of outcome in idiopathic pulmonary fibrosis

To the Editor:

The interesting manuscript by DU BOIS *et al.* [1] states in the discussion section that "only two previous studies have demonstrated an independent association between 6MWD and the risk of mortality in patients with IPF", quoting the studies of CAMINATI *et al.* [2] and of LEDERER *et al.* [3].

It should be noted that in 2012 the *European Respiratory Journal* published a study demonstrating the significant and independent association between 6-min walk distance (6MWD) and outcome in patients newly diagnosed with idiopathic pulmonary fibrosis (IPF) [4]. In this prospective study, patients were followed for at least 3 years from the time of diagnosis. Baseline 6MWD and 6-month changes were assessed. Both 6MWD metres and 6MWD % predicted, according to the reference equations of ENRIGHT and SHERRILL [5], were considered.

As a continuous variable, 6MWD % predicted, but not 6MWD metres, was significantly and independently associated with 3-year mortality (HR 0.97 (95% CI 0.96–0.99), p=0.0193 Cox proportional hazards analysis), together with the Medical Research Council dyspnoea score and the composite physiologic index [6]. With a cut-off of 72% pred, based on receiver operating characteristic analysis, 6MWD % predicted was also significantly and independently associated with 3-year mortality (HR 3.27 (95% CI 1.25–8.82), p=0.0162 Cox proportional hazards analysis) together with Medical Research Council dyspnoea score and composite physiologic index. 6MWD metres with a cut-off of 350 m was not a significant predictor. These results were confirmed in an independent, retrospective cohort from another centre (HR 5.43 (95% CI 1.35–36.17), p=0.0160). In patients with relatively preserved exercise capacity at the time of diagnosis (6MWD >350 m or 6MWD >72% pred), a 6-month decline of either 6MWD meters or 6MWD % predicted was also associated with significantly increased risk of mortality at 3 years after diagnosis (p=0.038 and p=0.012, respectively; log rank test) [4].

The study of DU BOIS *et al.* [1], selectively conducted on patients with mild-to-moderate IPF (forced vital capacity ⩾55% pred, diffusing capacity of the lung for carbon monoxide ⩾35% pred and 6MWD ⩾150 m) with data from the GIPF-007 (Interferon-γ-1b in patients with IPF) trial, provides further evidence supporting the use of 6MWD as a reliable and independent predictor of survival in IPF. It would certainly be interesting to learn about the predictive power of 6MWD % predicted *versus* 6MWD metres in their study, although better reference equations are needed.

@ERSpublications
Both baseline 6MWD and its 6-month changes are independent predictors of survival in newly diagnosed IPF http://ow.ly/tinC6

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Received: Dec 08 2013 | Accepted: Dec 22 2013

Conflict of interest: None declared.

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