

ESPEN 2017 Abstract Submission

Topic: *Nutritional assessment*

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DIAGNOSTIC ACCURACY OF THE PG-SGA SHORT FORM AND NRS 2002 IN INTERNAL MEDICINE WARD

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Presentation Method: Oral or Poster presentation

Please indicate your professional occupation: Dietitian

The presenting author fulfills the above conditions and wants to apply for a travel award: No

The presenting author fulfills the above conditions and wants to apply for the ESPEN Prize: Yes

Rationale: The PG-SGA is a validated instrument to assess malnutrition and its risk factors. Its patient component, i.e. the PG-SGA Short Form (SF), can be used as screening instrument. In this multicenter study, we aimed to assess diagnostic accuracy of the PG-SGA SF and NRS 2002, in patients at the Internal Medicine ward.

Methods: In 192 patients (76.0±13.5 years; 53% female) in 9 Portuguese internal medicine wards, malnutrition risk was assessed by PG-SGA SF and NRS 2002. PG-SGA SF ≤8 was defined as low/medium malnutrition risk and NRS 2002 ≤2 as low risk. PG-SGA SF ≥9 and NRS 2002 ≥3 were defined as high malnutrition risk. Nutritional status was assessed by the full PG-SGA (reference method). Malnutrition was defined as PG-SGA Stage B (moderate/suspected malnutrition) or Stage C (severely malnourished). Diagnostic accuracy was tested by sensitivity, specificity, positive and negative predictive value, and receiver operating curve. Agreement between PG-SGA and NRS-2002 was tested by McNemar's test and Cohen's kappa (κ).

Results: Forty-six % and 53% were categorized as at risk of malnutrition by PG-SGA SF and NRS 2002, respectively. In total, 55% were malnourished. Sensitivity, specificity, positive and negative predictive value of PG-SGA SF and NRS 2002 were 0.84, 1.00, 1.00, 0.83 and 0.74, 0.74, 0.77 and 0.70, respectively. Area under curve of PG-SGA SF and NRS 2002 was 0.987 and 0.778 respectively. McNemar's test showed no significant disagreement ($p=0.86$) between PG-SGA SF and NRS 2002. Cohen's kappa showed weak agreement ($\kappa=0.492$; $p<0.001$) (Table 1).

| | NRS 2002 Low risk | NRS 2002 High risk | Total |
|------------------------------|----------------------|-----------------------|-------|
| PG-SGA SF Low/medium risk | 73 | 31 | 104 |
| PG-SGA SF High risk | 18 | 70 | 88 |
| Total | 91 | 101 | 192 |

Conclusion: Our findings indicate that in patients at the internal medicine ward, PG-SGA SF shows better diagnostic accuracy than NRS 2002, i.e. better sensitivity and specificity.

Disclosure of Interest: J. Pinho: None Declared, R. Marinho: None Declared, J. Silveira: None Declared, S. Silva: None Declared, A. Amado: None Declared, A. Pessoa: None Declared, J. Rosinhas: None Declared, M. Lopes: None Declared, F. Ottery Other: Copyright holder of the Patient-Generated Subjective Global Assessment (PG-SGA), co-owner and co-developer of the PG-SGA based Pt-Global app, H. Jager-Wittenaar Other: Co-developer of the PG-SGA based Pt-Global app, A. Marinho: None Declared

Keywords: Diagnostic accuracy, PG-SGA