



Health Related Quality of Life in patients receiving Home Enteral Nutrition in Spain assessed by a specific questionnaire: NutriQoL[®]

Apezetxea A¹, Cuerda C², Virgili N³, Irlles JA⁴, Cuesta F⁵, Casanueva F⁶, Carrillo L⁷, Layola M⁸, Lizán L⁹

¹Hospital Universitario de Basurto, Bilbao, Spain; ²Hospital Universitario Gregorio Marañón, Madrid, Spain; ³Hospital Universitario de Bellvitge, Barcelona, Spain; ⁴Hospital Universitario Nuestra Señora de Valme, Sevilla, Spain; ⁵Hospital Clinico San Carlos, Madrid, Spain; ⁶Hospital Universitario de Santiago de Compostela, Santiago de Compostela, Spain; ⁷Centro de Salud Victoria de Acentejo, Santa Cruz de Tenerife, Spain; ⁸Medical Affairs. Nestlé Health Science, Spain; ⁹Outcomes'10, Castellón, Spain

RATIONALE AND OBJECTIVE

There are specific aspects of Home Enteral Nutrition (HEN) that influence patients' Health Related Quality of Life (HRQoL). However, available questionnaires are not enough concrete for performing this measure. Therefore, a specific tool for assessing HRQoL in patients receiving HEN becomes necessary^{1,2}.

The aim is to assess Health Related Quality of Life (HRQoL) in patients receiving Home Enteral Nutrition (HEN) using NutriQoL[®] questionnaire in Spain.

METHODS

NutriQoL[®], a specific questionnaire, developed and validated in Spain, for the assessment of HRQoL in patients receiving HEN regardless of the underlying condition was administered to a prospective cohort from 9 Spanish hospitals. It includes 17 pairs of items of HEN-related HRQoL grouped in two dimensions:

- 1) physical functioning and activities of daily living
- 2) social life aspects

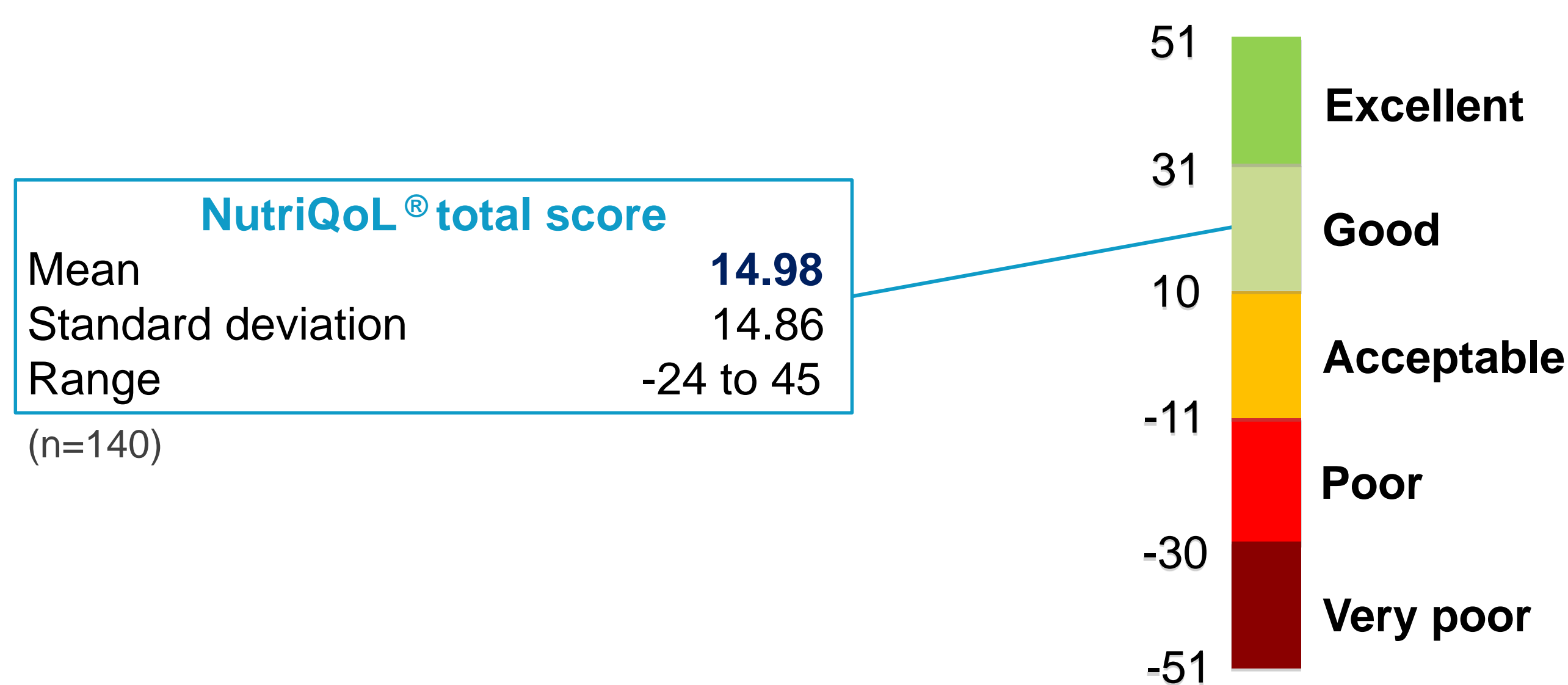
NutriQoL[®] scores range from -51 (worst HRQoL) to 51 (best HRQoL). Additionally, a visual analogue scale (VAS) and 1 item of overall HRQoL were presented with the objective of obtaining a general perception of patient's health condition after the introduction of HEN.

NutriQoL[®] scores were compared among groups sharing underlying pathology, HEN administration route and HEN function. Overall HRQoL item results were described. Cluster analysis using k-means identified groups of patients with similar HRQoL.

RESULTS

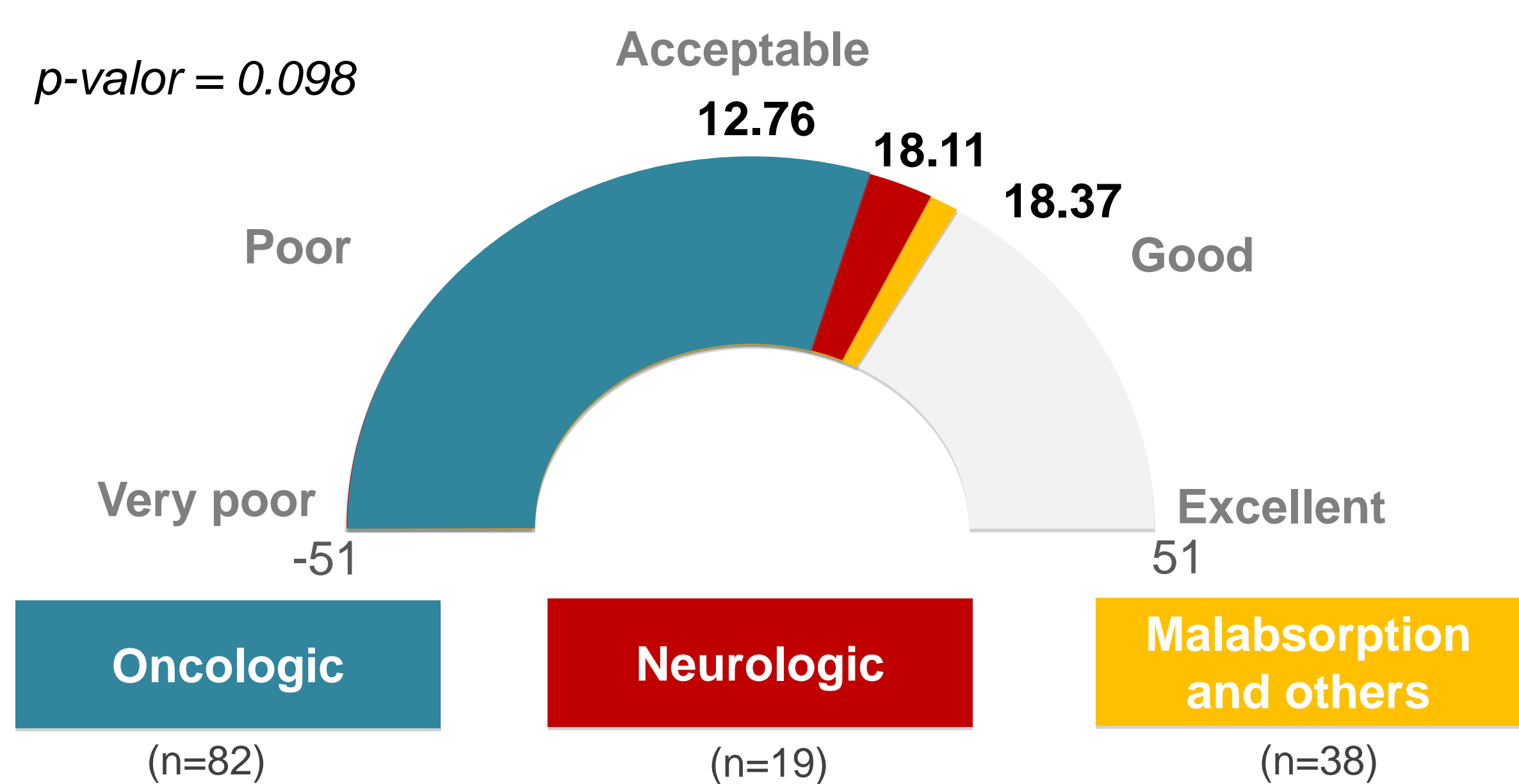
A total of 140 subjects (61.4% men; mean (SD) age: 62.7 (15.41) participated. NutriQoL[®] mean total score was 14.98 (14.86). Dimension 1 and 2 scored 13.55 (11.71) and 1.40 (4.74) (Figure 1).

Figure 1. NutriQoL[®] total score results



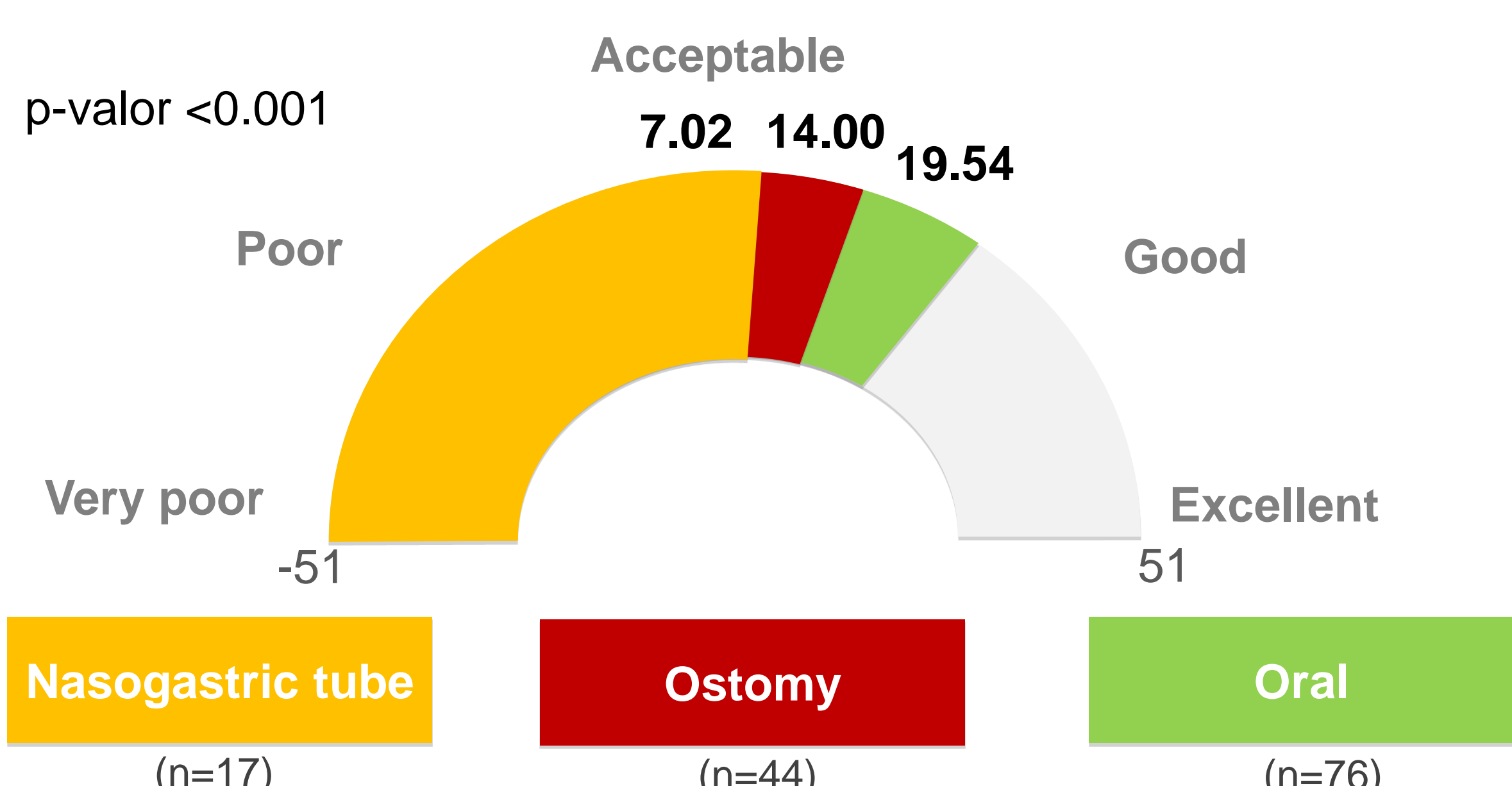
Cancer patients presented lower HRQoL compared to neurological and malabsorption patients (12.76 vs. 18.11 vs. 18.37; p=0.098) (Figure 2).

Figure 2. HRQoL measured by NutriQoL[®] according to underlying pathology



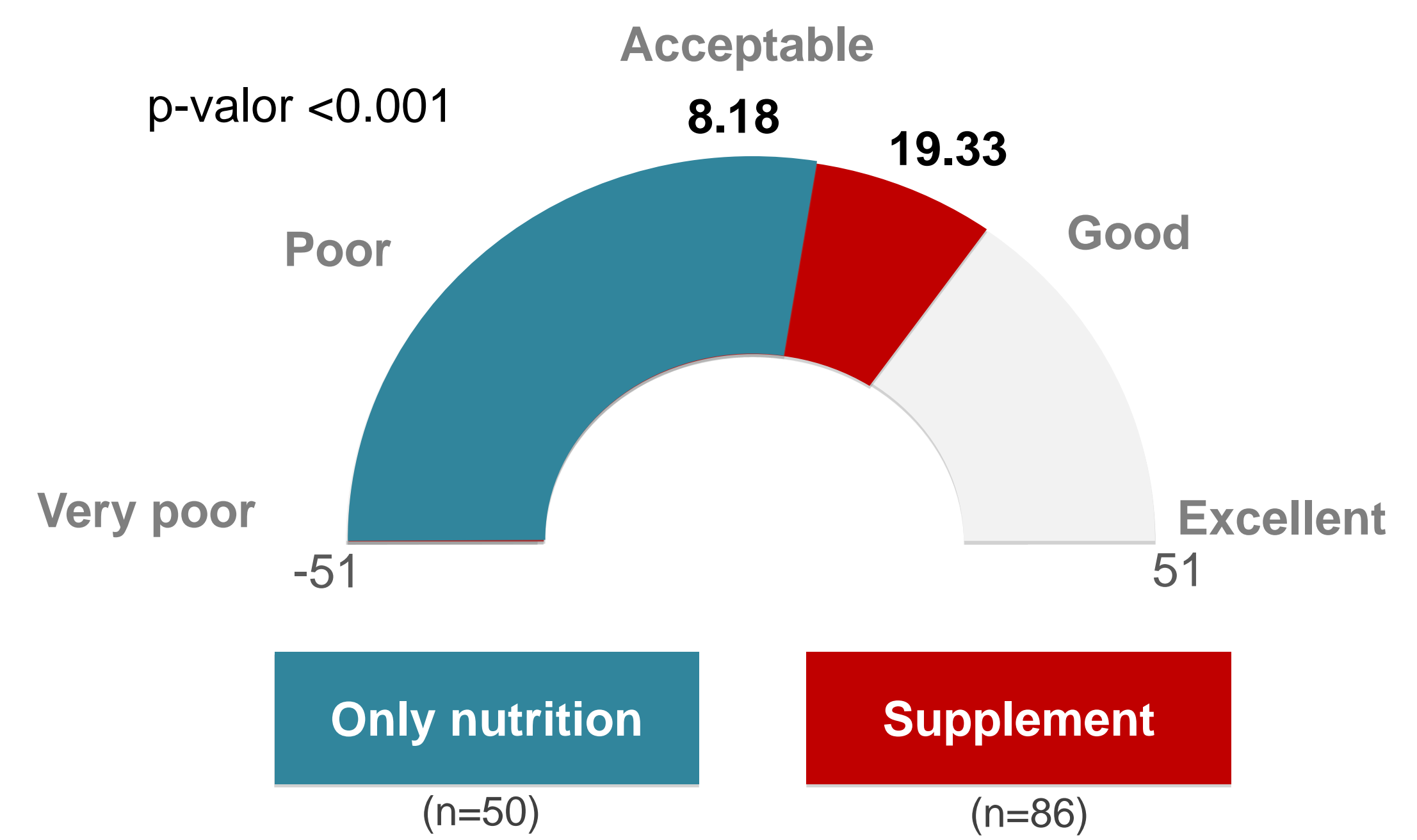
Patients receiving oral HEN referred higher HRQoL than those receiving HEN by gastrostomy or nasogastric tube (19.54 vs. 14.00 vs. 7.02; p<0.001) (Figure 3).

Figure 3. HRQoL measured by NutriQoL[®] according to administration route



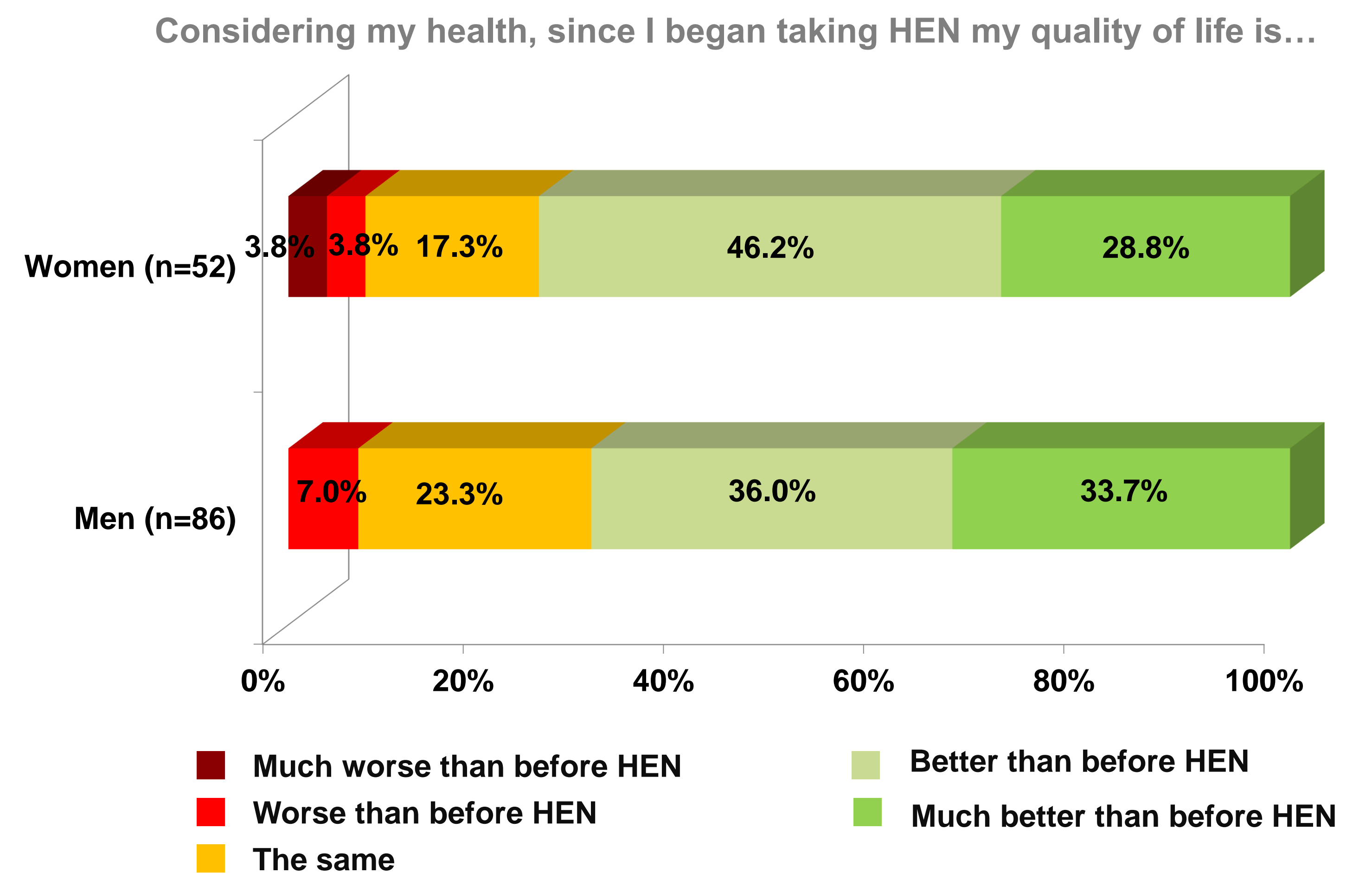
Patients receiving HEN as their only nutrition route obtained worse results than patients receiving HEN a supplement (19.33 vs. 8.18; p<0.001) (Figure 4).

Figure 4. HRQoL measured by NutriQoL[®] according to HEN function



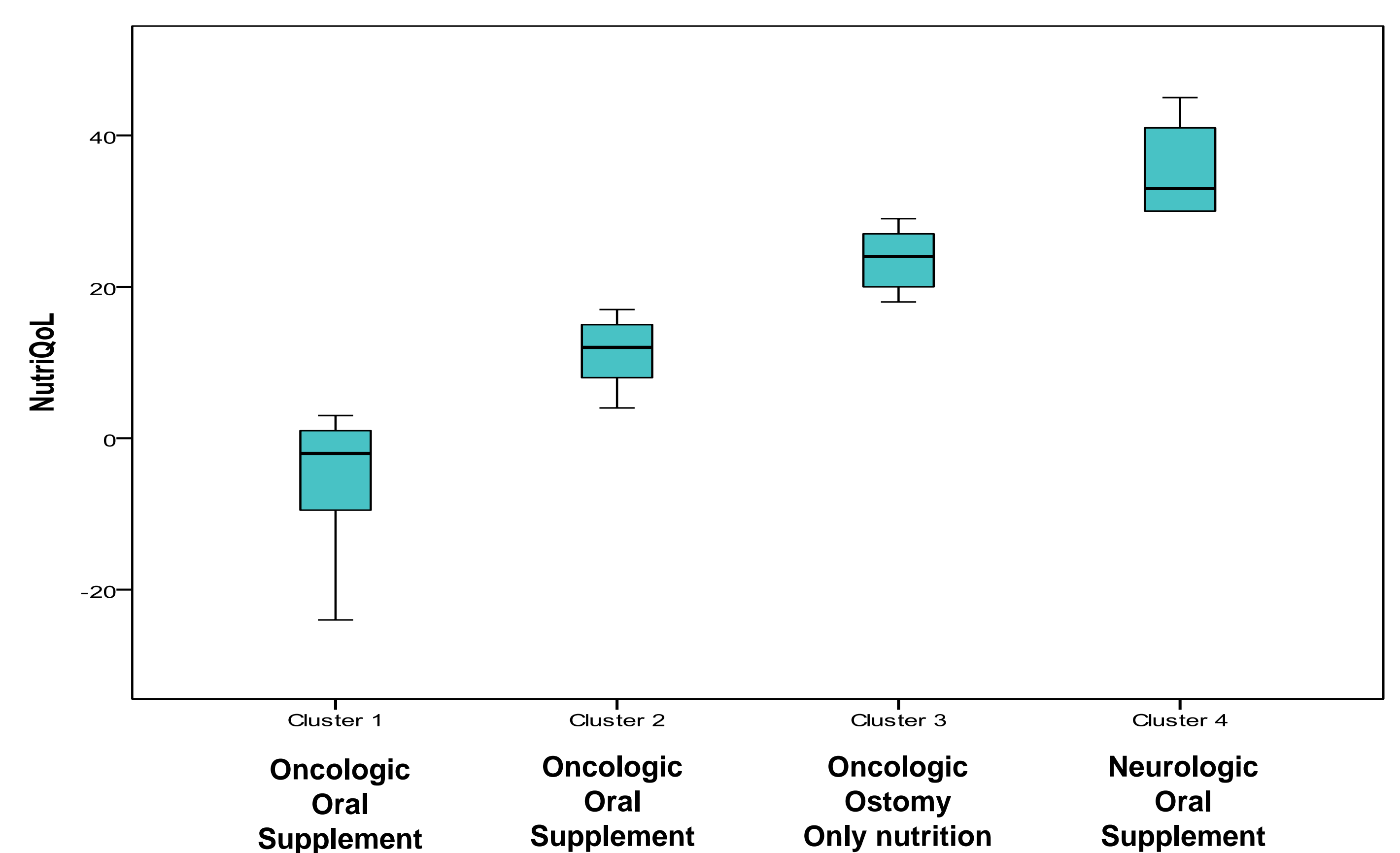
Up to 71.4% of patients referred HRQoL improvements since the introduction of HEN (Figure 5).

Figure 5. NutriQoL[®] 1 item of overall HRQoL score results



Cluster analysis resulted in 4 groups according to NutriQoL[®] score. Cluster 1 and 2: [-12.21 (5.95) and 3.9 (4.67)]; oncologic patients receiving oral HEN as a supplement, with differences in terms of severity (Charlson index 3.14 (2.57) vs. 2.45 (2.65)). Cluster 3 [18.19 (3.94)]; oncologic disease receiving HEN by gastrostomy as a their only nutrition. Cluster 4 [32.23 (5.83)]; Neurologic patients receiving oral HEN as a supplement (Figure 6).

Figure 6. Cluster analysis



CONCLUSIONS

NutriQoL[®] results demonstrated a sample with a fairly good HRQoL, where the introduction of HEN had improved their HRQoL. In patients receiving HEN, physical functioning and activities of daily living were better predictors than social life domain. Cluster analysis results showed different groups of oncologic patients with worse HRQoL, outlined in terms of comorbidities and HEN administration route.

REFERENCES

1. Bannerman E, Pendlebury J, Phillips F, Ghosh S. A cross-sectional and longitudinal study of health-related quality of life after percutaneous gastrostomy. Eur J Gastroenterol Hepatol. 2000; 12: 1101-9.
2. Jordan S, Philpin S, Warring J, Cheung WY, Mphil, Williams J. Percutaneous endoscopic gastrostomies: the burden of treatment from a patient perspective. Adv. Nurs. 2006; 56:270-81.