

# UICC Abstract

## **Dynamic structure of HRQoL indicators: what has been done and what will be done in the PROBE project.**

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### **Background:**

Thanks to the amazing progresses that cancer research has done during the last decades, cancer patients can today live for years after the cancer diagnosis, either with or without cancer. It consequently becomes more and more important to assess and take care of their quality of life. The Patient Reported Outcomes and Behavioural Evidence project is part of the Pfizer Foundation Global Health Partnerships Initiative to accelerate the pace of progress in the fight against cancer and it aims to explore Health-Related Quality of Life (HRQoL) from a unique prospective: the patient's one. One of the aims of this project is to investigate internal relationships between HRQoL indicators, in order to help healthcare professionals in developing symptom-directed interventions.

### **Methods:**

Pooling of 29 European Organisation for Research and Treatment of Cancer closed randomized clinical trials yielded HRQoL data for 6739 cancer patients with different clinical and socio-demographic characteristics. A cluster analysis was performed to investigate how HRQoL indicators cluster in the pooled dataset and in subgroups defined according to disease characteristics (metastatic status and cancer site). Dendrograms were plotted for the pooled dataset and for each subgroup. Quality of the clustering was evaluated using Cronbach's alpha.

### **Results:**

Analyses performed on the pooled dataset showed that symptoms tend to appear in combination. Three main groups of symptoms were found in this dataset. Repeating the analyses on the subgroups allowed us to define different symptomatic profiles for different cancer patients. These results show that HRQoL indicators can be seen not only as single entities, but also as a dynamic construct; these dynamics should be kept in account while defining strategies to take care not only of the disease, but also of a patient's physical and psychological needs as reported by the patient himself.

### **Conclusions:**

Our findings suggest that investigating the underlying structure of HRQoL indicators may help health care professionals in better understanding their patients' needs and in defining care and support plans. Further investigation inside the subgroups will be done with the aim of better characterizing patients. Future research is planned using data from Medical Research Council, National Cancer Institute Canada – Clinical Trial Group and Arbeitsgemeinschaft Gynaekologische Onkologie Group, for a total of over 5,000 patients; this will allow us to obtain better defined and more robust results.

***“This work is part of the Pfizer Foundation Global Health Partnerships Initiative to accelerate the pace of progress in the fight against cancer.”***