



# Reduction in malnutrition with enteral feeding

The efficiency of collaboration between a Hematology Intensive Care Unit (ICU) and a Transversal Nutrition Support Unit (TNSU)

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## Project and method

Nutritional support is recommended for all patients receiving hematopoietic stem cells. Guidelines on how and when enteral nutrition should be initiated were published in 2012(1). The main challenges lie in communication of the care plan to patients and obtaining their consent. The objective of a TNSU is to provide improved, consistent initiation and management of nutritional care and reduce complications related to malnutrition. The TNSU supported the clinical hematology team of Montpellier University Hospital in this approach.

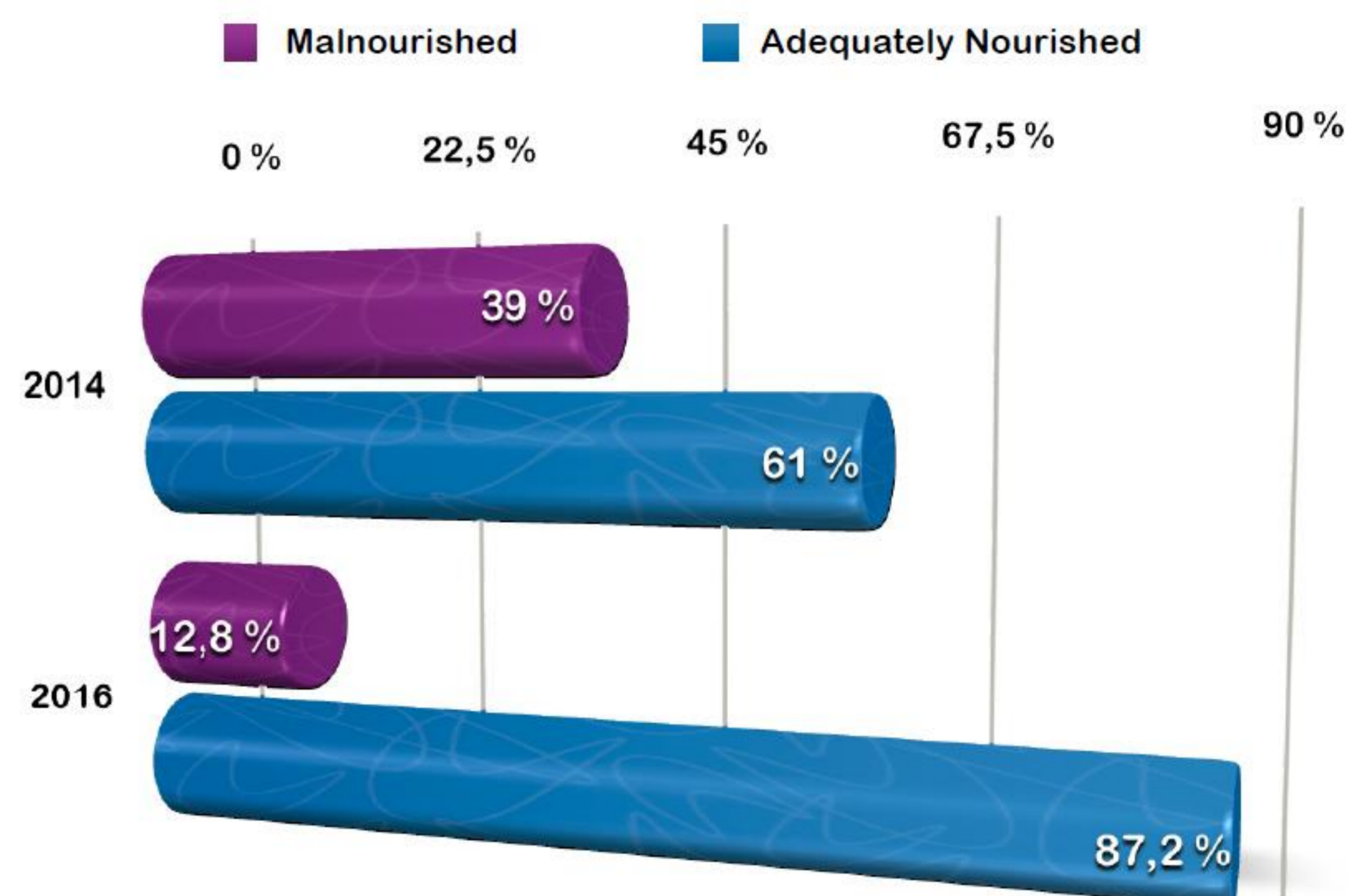
An assessment of existing nutritional practices was conducted in 2014 by TNSU. **97 patients** hospitalized in ICU with leukemia or requiring an autologous hematopoietic stem cell, were evaluated. 39% were malnourished of which in 73% this was acquired during hospital stay (treatment related, iatrogenic, etc.). Parenteral nutrition accounted for 100% of nutritional support. The TNSU team subsequently collaborated with the hematology team to optimize nutritional care including the choice of approach, setting energy and protein targets, naso-gastric tube placement and maintenance.

The TNSU team accompanied the hematology team for 2 months (2015) and provided training and information, practical workshops on installing nasogastric tubes, screening and care protocols and daily presence in unit to support the team. An assessment of the impact of these two months of intervention, was conducted a year later (March 2016).

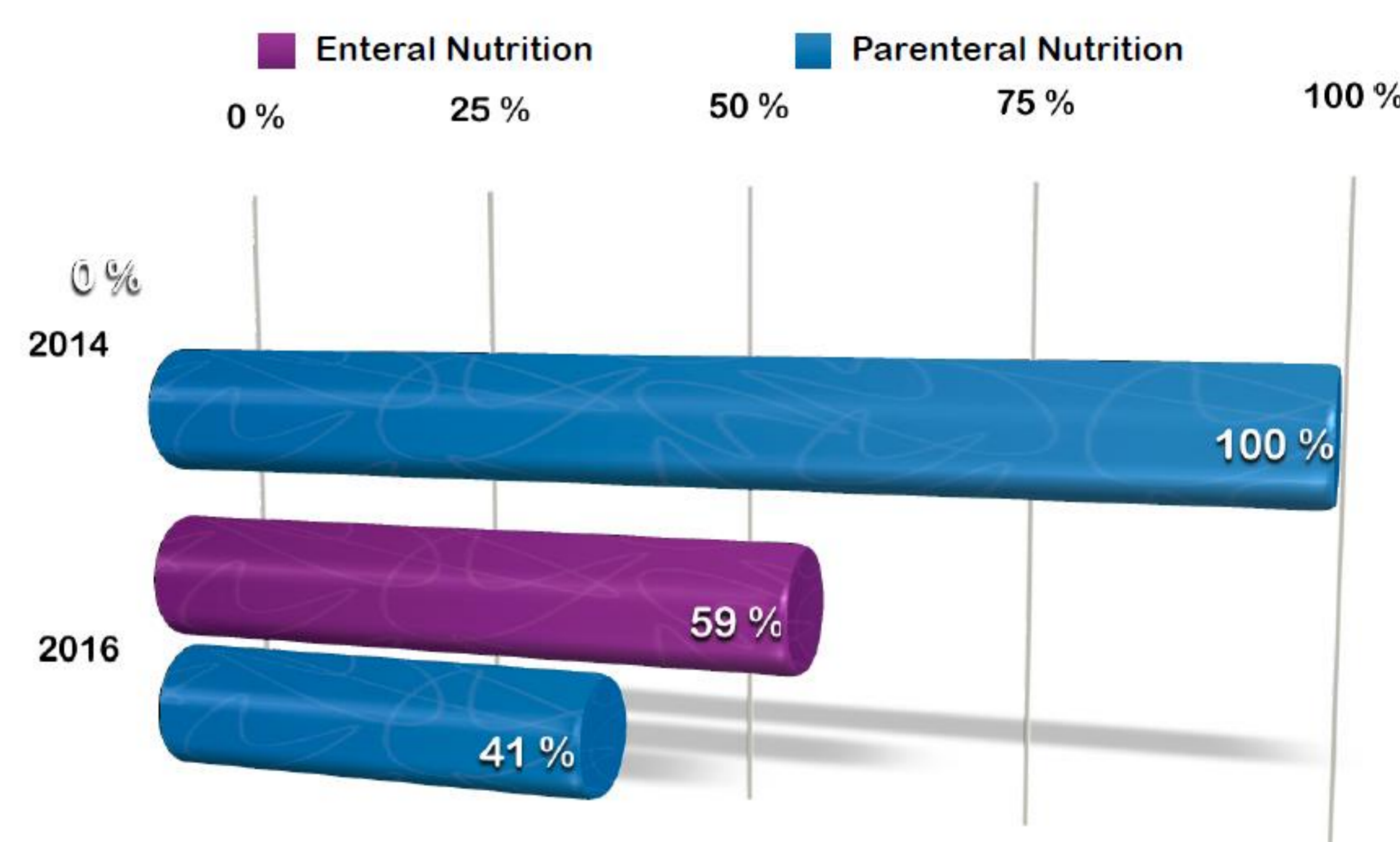
## Results

In march 2016, **55 patients** were evaluated, 12.8% were suffering from malnutrition (versus 39% in 2014). **Enteral nutrition was initiated as first line nutrition in 59% of cases** when artificial feeding was recommended, compared to 100% parenteral nutrition in 2014.

## Nutritional Status



## Enteral (EN) vs Parentéral Nutrition (PN)



## Conclusion

The introduction of a **personalized care plan** and support of this by the TNSU team improved nutritional support, in particular the introduction of enteral nutrition as first line support and decreased the percentage of malnourished patients. This supports the existing data advocating this.

To set up the project of enteral nutrition, we have to integrate naso-gastric tube placement in our care practices. It remains an invasive care for patients, sometimes reluctant to this method. That is why we are leading, in parallel, a project to use hypno analgesia method to facilitate the care and to reduce the discomfort of the patient.

## Reference

(1) Senesse P, P. Bachmann et al, (2012) Nutrition chez le patient adulte atteint de cancer. Nutr Clin Métab 26:151-164

## Disclosure of interest

Vincent Attalin and Antoine Avignon, owners of Aviitam®