BIM OF HIGH-ENERGY, HIGH-PROTEIN ORAL NUTRITIONAL SUPPORT FOR THE TREATMENT OF DISEASE RELATED MALNUTRITION IN CANCER PATIENTS IN THE FRENCH COMMUNITY SETTING

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Background

- Up to 70% of oncological patients experience malnutrition, with tumour type, disease stage, and clinical setting affecting its prevalence [1-3]
- Clinical guidelines recommend routine evaluation of nutritional status in cancer patients, as they are at high risk of malnutrition due to a combination of DRM, tumour-associated metabolic dysregulation and inflammation [1, 4]
- DRM is associated with reduced overall survival[5, 6] and increased risk of surgical complications[7] in oncology patients.
- A Dutch study reported that in patients who underwent surgery for abdominal cancers, low muscle mass resulting from DRM or sarcopenia was associated with longer hospital stays (1 additional day; p=0.05) and higher costs (additional €4,061 hospital costs; p=0.015)[8]
- Malnutrition significantly worsens health-related quality of life in patients with cancer[9]
- Multiple studies have reported that cancer patients do not receive adequate and timely nutrition support[10].
- Oral nutritional supplements (ONS) can be used to treat malnutrition. There are different types of ONS, in this study we compare the standard ONS (stdONS) against the highly concentrated High-energy, High-protein ONS (HEHP-ONS) (with more than 10g of protein per 100 ml and at least 1.8 kcal/ml). The later being the largest proportion of the total ONS reimbursed in France[11]

Objective

Demonstrate budget impact of different ONS options for treating DRM in oncology patients in the community setting in France.

Results

- The SLR and desk research identified 2 key trials. (**Table 1**) Cawood AL. 2023 presents data on ONS usage in community dwellers, and Orsso C. 2024 of ONS usage during cancer therapies.
- **Table 2** presents the inputs used in the budget impact model where the use of ONS was associated with a reduction in the incidence of hospital re-admission (26% no ONS; 12.7% standard ONS; and 11.5% for HEHP- ONS)[12,13] and the hospital length of stay (LoS) (4 days no ONS, and 3 days for both standard and HEHP ONS) for each re-admission[13, 14]
- **Figure 1** presents the budget impact analysis of the use of ONS in the management of oncology patients in the French community setting. **Figure 2** presents the market share of HEHP-ONS in the French community setting.

Table 1. Literature review funnel

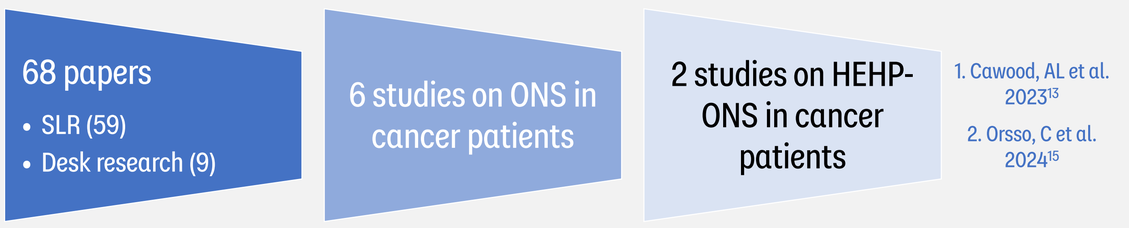


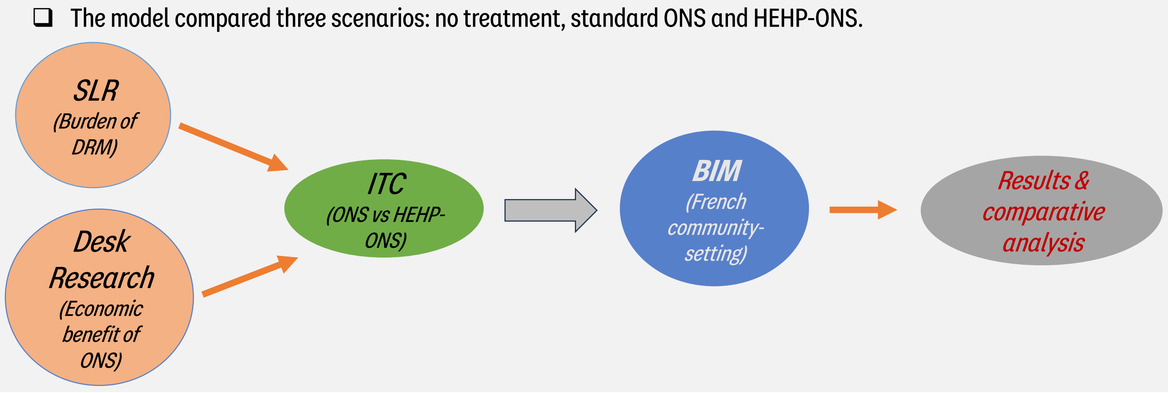
Table 2. ITC results used as inputs into the budget impact model

	Hospital readmission			References
	No ONS	Std ONS	HEHP-ONS	
Hospital readmission rate	26%	12.7%	11.5%	Cawood, AL. et al 2023 (Serrano P. et al 2022)*
Hospital Length of Stay	4	3	3	Cawood, AL. et al 2023 (Poon, ET. et al 2004)*

*Cawood study refers to an SLR, publications in brackets were identified as part of the SLR

Methods

- A systematic literature review (SLR) was performed alongside desk research to identify the burden of DRM and economic benefits of ONS in cancer patients.
- Included markets: EU4, UK & Netherlands.
- An indirect treatment comparison (ITC) was performed comparing standard and HEHP-ONS, the results were integrated in a BI model developed from the perspective of the community-setting in France.
- The model compared three scenarios: no treatment, standard ONS and HEHP-ONS.



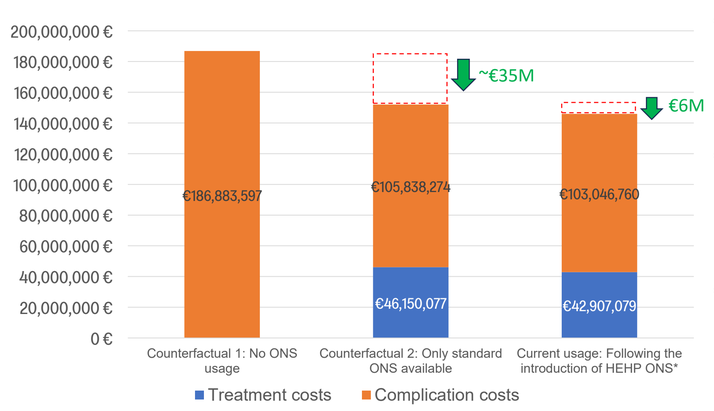
Discussion

- In this research study, we focused on oncology patients in the community setting, further research is needed to understand the economic value of HEHP-ONS in other settings in France (i.e hospital, nursing homes) and other DRM populations, (i.e. frail patients).
- A recent Polish study, reported an average saving on total costs in period of 180 days after hospital admission of €2,940 per patient using high-protein nutritional support in patients with colorectal cancers. Savings were associated with reduction in hospital complications.[16]
- Similar research in other markets can be valuable to highlight the economic impact, as well as ensuring timely and equitable access to medical nutrition in patients that can benefit from this intervention. This will only be achieved by a collaborative effort between industry, payers, providers & HCPs.

Conclusion

The use of HEHP-ONS in the management of DRM in cancer patients could be associated with positive outcomes and cost savings for the French healthcare system.

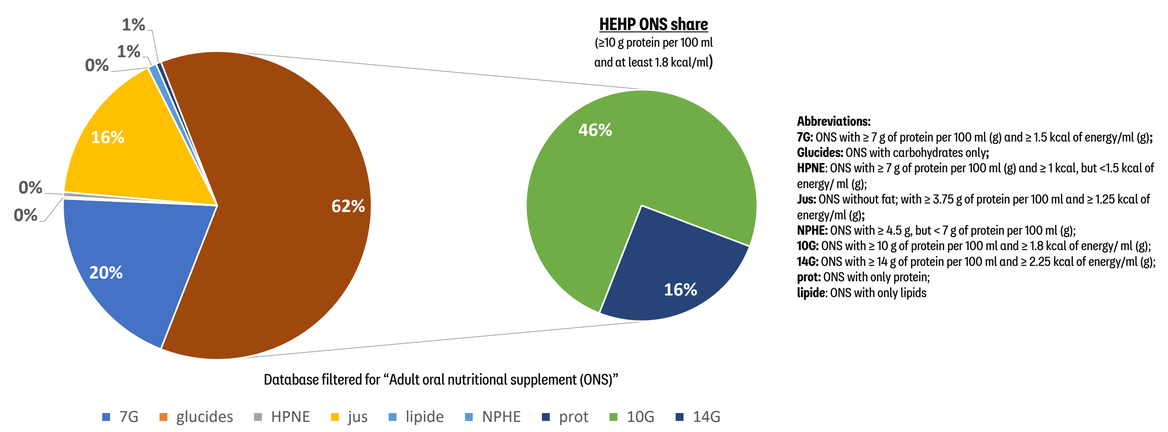
Figure 1. Budget impact analysis of the use of ONS in the French community setting



*Using current data on ONS usage and relative market shares of HEHP ONS versus Standard ONS

- Use of stdONS reduced budget impact of cancer management in the French community setting in ~€35M
- HEHP-ONS usage (~60% market share) has led to a further €6M savings versus std ONS
- Increasing the use of HEHP-ONS to 80% market share in DRM cancer patients could generate an additional €1.8M savings in the French community setting

Figure 2. 2022 ONS market share in the French community setting market[11]



Abbreviations:
7G: ONS with ≥ 7 g of protein per 100 ml (g) and ≥ 1.5 kcal of energy/ml (g); **Glucides:** ONS with carbohydrates only; **HPNE**: ONS with ≥ 7 g of protein per 100 ml (g) and ≥ 1 kcal, but <1.5 kcal of energy/ ml (g); **Jus:** ONS without fat; with ≥ 3.75 g of protein per 100 ml and ≥ 1.25 kcal of energy/ml (g); **NPHE:** ONS with ≥ 4.5 g, but < 7 g of protein per 100 ml (g); **10G:** ONS with ≥ 10 g of protein per 100 ml and ≥ 1.8 kcal of energy/ ml (g); **14G:** ONS with ≥ 14 g of protein per 100 ml and ≥ 2.25 kcal of energy/ml (g); **prot:** ONS with only protein; **lipide**: ONS with only lipids

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Abbreviations:
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