

# SNOEZELEN study in the context of cancer treatment

## INTRODUCTION

The Snoezelen approach was developed in the 1970s in Holland. It is a multisensory method, used in patients treated for cancer at ICANS. It aims to awaken the 4 senses: hearing, sight, smell and touch. The objective is to reduce stress, reduce anxiety, as well as pain, improve appetite and sleep. This activity allows patients to regain a feeling of well-being.

This study was carried out in hospitalized patients (day hospitalization in hematology, oncology and supportive care as well as in conventional hospitalization), benefiting from invasive care (insertion of the Huber needle, transfusion, parenteral nutrition, complex dressing and various punctures).

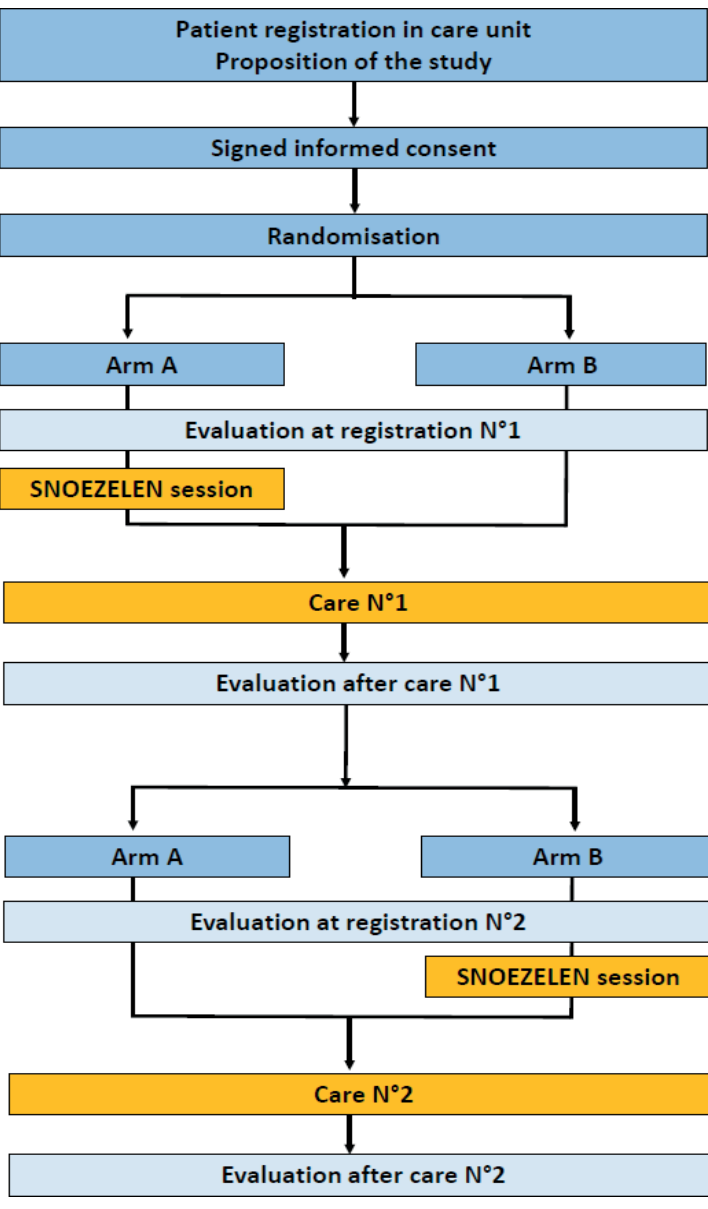
## METHODOLOGY



**Primary objective of the study :** to compare patient satisfaction with the quality of care perceived with or without a Snoezelen session.

**Secondary objective of the study :** to evaluate the reduction in stress, anxiety and pain related to care. Number of subjects: 60 patients included to obtain at least 36 analyzable.

**Inclusion criteria :** adult patients, without psychiatric pathology, WHO score ≤ 3.



The study was randomized, cross-over, monocentric and open-label. The patients were followed on two invasive treatments repeated consecutively within 8 weeks.

**Duration of the study :** 24 weeks were planned but lasted 15 months (related to the unavailability of trained staff).

FlowChart

VISIT Timepoint	INCLUSION	VISIT 1		VISIT 2	
		At registration*	After care	At registration*	After care
Informed consent	X				
Eligibility (inclusion/exclusion criteria)	X				
Vital signs (Blood pressure, Heart rate and SatO2)		X	X	X	X
Pain evaluation by the patient (Numeric scale)		X	X	X	X
Anxiety evaluation by the patient (Numeric scale)		X	X	X	X
Patient questionnaire: anxiety/depression (HADS)		X		X	
Patient questionnaire: quality of care perception			X		X
Satisfaction evaluation by the caregiver (Numeric scale)			X		X

\* At registration and before the Snoezelen session if applicable

**Study hypothesis :** The main criterion was the difference in patient satisfaction after care with the “Perception of quality of care” questionnaire, modified Visual Analogue Scales. A preliminary study using Snoezelen showed us that the satisfaction score was 8.35 (+- 0.86). **A score increase of 1 point is expected when the Snoezelen method is used.** We estimate the average score without Snoezelen at 7.35 (+- 0.86). If we consider 18 patients per arm, then we can expect a power of 90%. We will add 20% of patients to each group in order to anticipate the high risk of death before the end of the study in these cancer patients.

## RESULTS

### Demographic data:

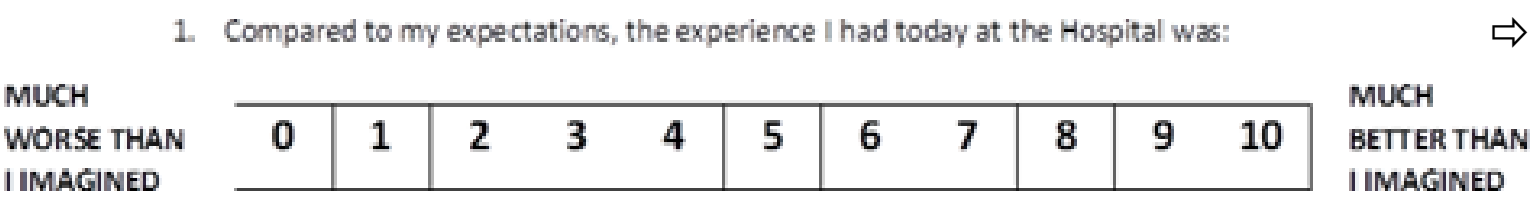
Variable	A: Snoezelen then standard	B: standard then Snoezelen	p-Value
	N=19	N = 21	
Sex	Men: 6 (28.57%)	Men: 7 (36.84%)	0,738
	Women: 15 (71.43%)	Women: 12 (63.16%)	
Age	60.6 (±15.1)	59.1 (±20.1)	0.914
	Range: (21.0 ; 86.0)	Range: (21.0 ; 84.0)	

### Initial data at inclusion (arm A vs arm B):

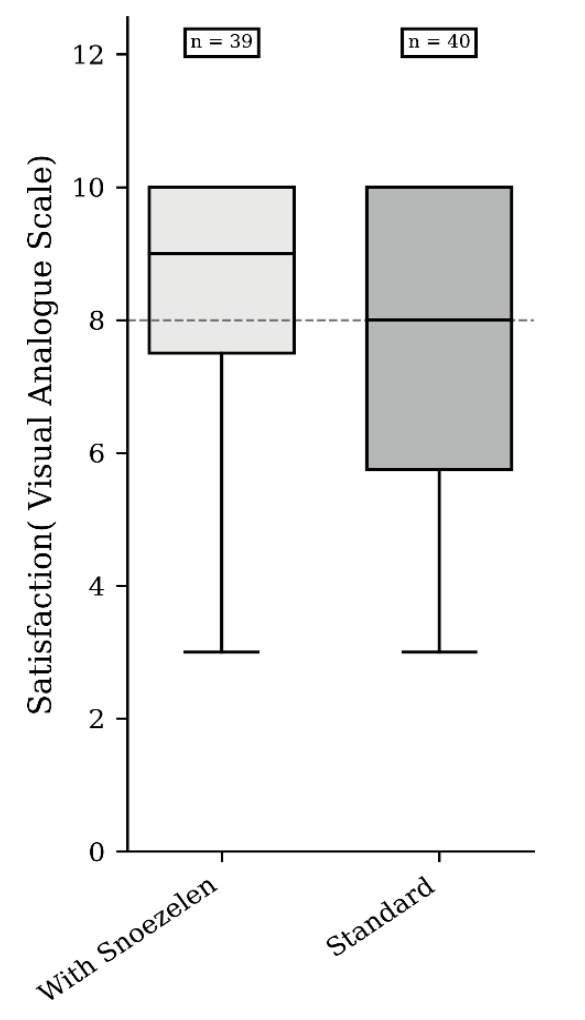
Variable	A: Snoezelen then standard	B: standard then Snoezelen	p-Value
	N=19	N = 21	
Pain (Visual Analogue Scale)	0.2 (±0.6) Range: (0.0 ; 2.0)	Men: 7 (36.84%) Women: 12 (63.16%)	0,116
Anxiety (Visual Analogue Scale)	1.7 (±2.8) Range: (0.0 ; 2.0)	59.1 (±20.1) Range: (21.0 ; 84.0)	0.082
Anxiety (HADS)	8.42 (±3.42) 95% CI: [6.77 ; 10.07]	8.62 (±3.84) 95% CI: [5.07 ; 10.37]	0.865
	5.68 (±2.67) Range: (4.0 ; 16.0)	6.9 (±4.02) Range: (3.0 ; 16.0)	
Depression (HADS)	95% CI: [4.4 ; 6.97] Range: (1.0 ; 10.0)	95% CI: [5.07 ; 8.74] Range: (1.0 ; 17.0)	0.271

⇒ No significant difference between the two groups at inclusion.

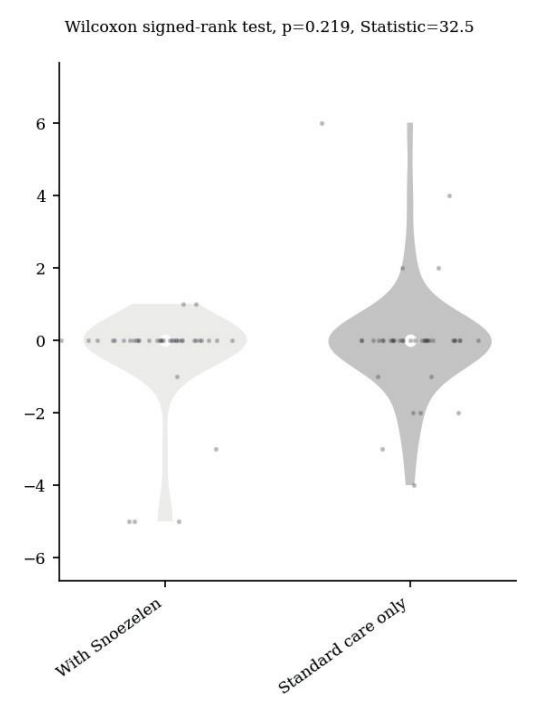
### Main objective on patient satisfaction (with vs without Snoezelen):



⇒ Satisfaction has indeed increased by 1 point as in our hypothesis, but the variability of the responses does not allow a statistically significant conclusion to be drawn.

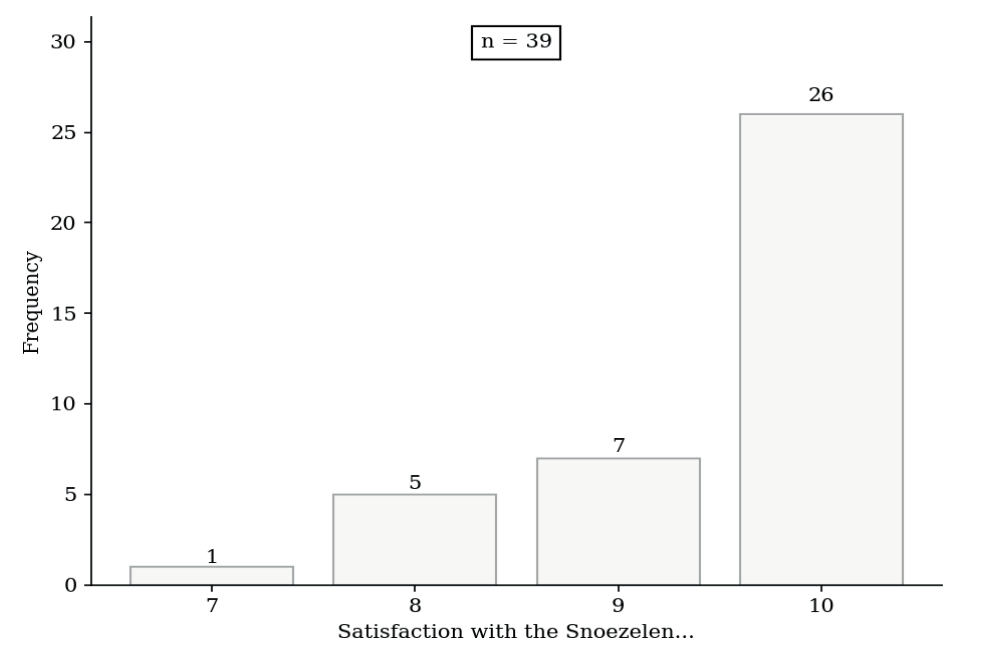


### Secondary objectives on anxiety, pain and stress (with vs without Snoezelen):



⇒ No significant difference  
⇒ Focus on pain

### Patient satisfaction (with Snoezelen only):



⇒ Positive impact : the session was appreciated by the patients.

## CONCLUSION & PROSPECT

The study did not reveal any significant difference in the patient’s perception of the quality of care, nor in anxiety, pain or stress. On the other hand, the sessions had a positive impact on the satisfaction experienced by all patients when using the multisensory method proposed at ICANS, in addition to the specific management of anticancer treatments.

It would be necessary to continue the study with a larger number of subjects to be able to demonstrate the positive impact on feelings, quality of life and pain with more targeted questionnaires. This could help determine whether the Snoezelen method can be integrated more systematically into cancer treatment to improve patient care.