

# Delirium and Opioids in Terminal Cancer

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## Background

- Delirium is a severe and frequent complication in terminal cancer
- Opioid intake is among the most well known delirium risk factor in terminal

## Objective

To correlate the use of opioids before and after the occurrence of significant delirium symptoms in terminal cancer

## Methods

- 1516 patients in 7 palliative care units in Canada, who survived longer than 48 hours, were followed prospectively from October 2001 to January 2005 from admission until patient's death
- The Confusion Rating Scale (CRS) was used for delirium screening and monitoring
- Daily equivalent of opioids (morphine SC) was used for analysis

## Results

Table 1. Socio-demographic data of patients

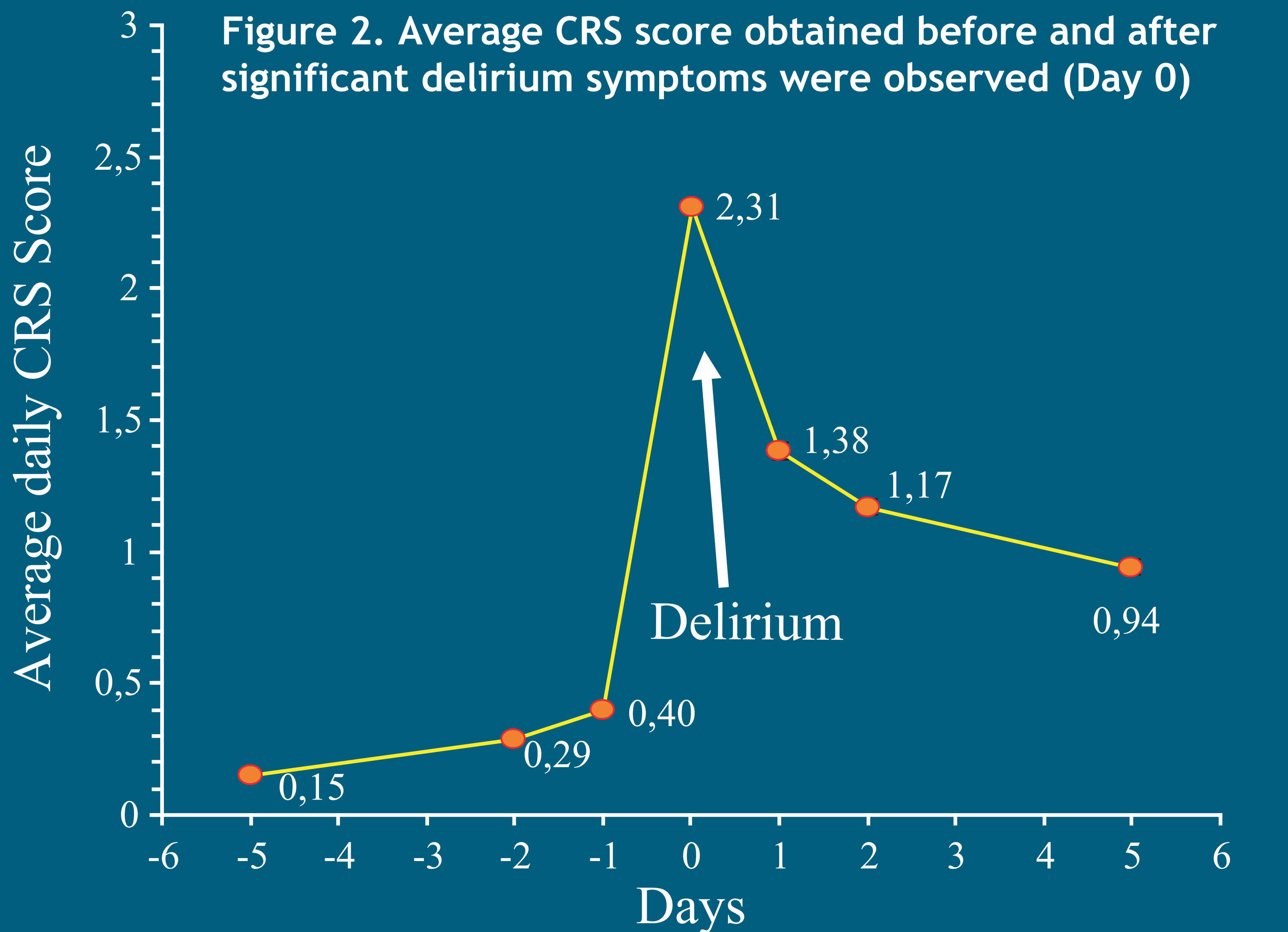
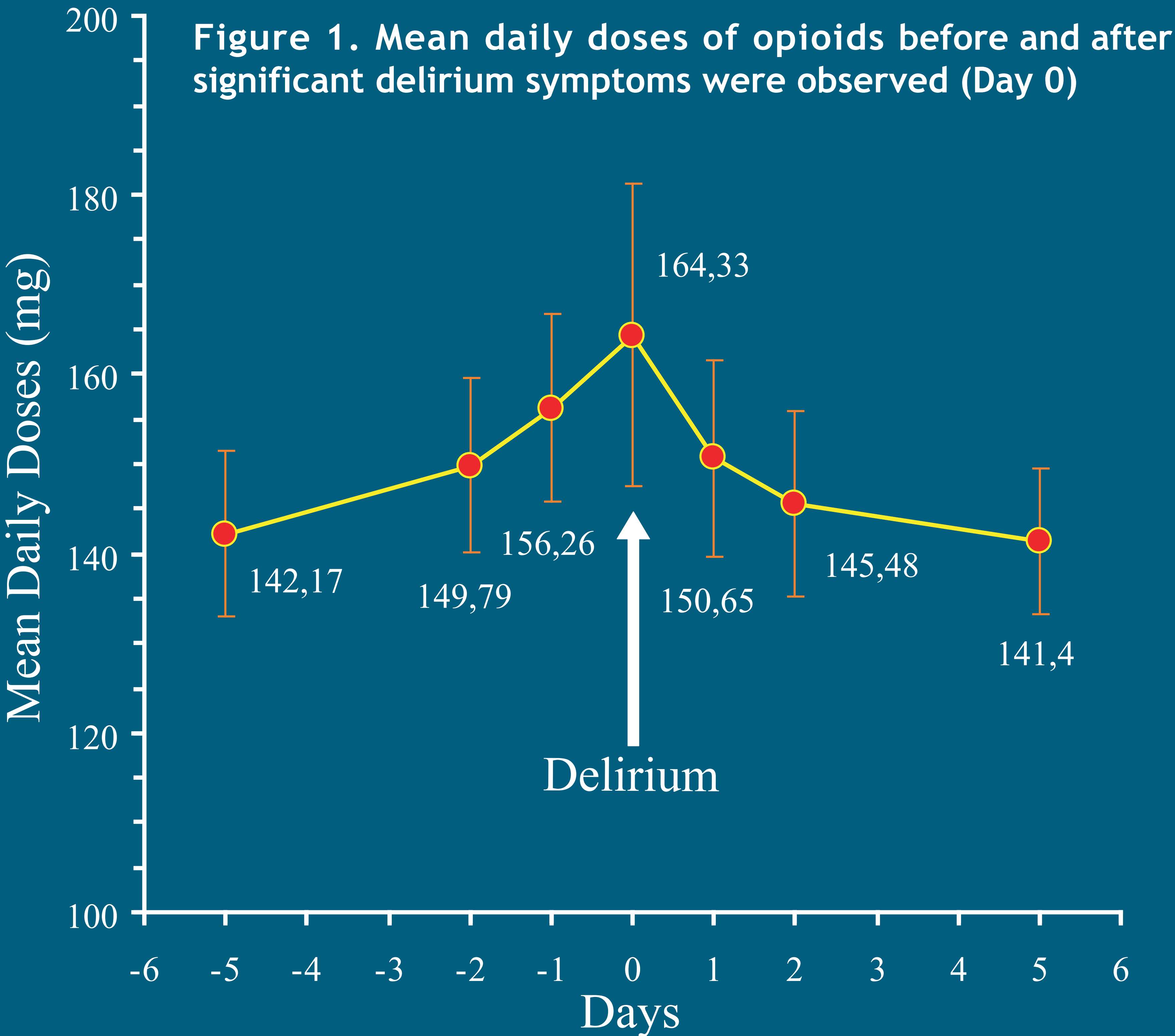
Characteristics	Delirium-free patients; n=815	Delirious patients; n=701	p value
Age (year)	68,3 (±13)	68,6 (±13)	NS
Length of stay/survival (days)	16,0 (±15,4)	26,6 (±20,3)	< 0,001
Gender (% of women)	54,7%	52,6%	NS
At least 50% of time confined to bed (ECOG 3-4)	88,8%	86,9%	< 0,001
Primary site			
Trachea, bronchus, lungs	189 (23,2%)	183 (26,1%)	NS
Digestive track	140 (17,2%)	126 (18,0%)	NS
Colon & rectum	110 (13,5%)	101 (14,4%)	NS
Genital and urinary tract	105 (12,9%)	89 (12,7%)	NS
Breast	79 (9,7%)	67 (9,6%)	NS
Prostate	37 (4,5%)	18 (2,6%)	0,04
Others	155 (19,0%)	117 (16,7%)	NS
Past history of delirium			
Yes	87 (10,7%)	126 (18,0%)	< 0,001
None	440 (54,0%)	339 (48,4%)	< 0,001
Unknown	288 (35,3%)	236 (33,7%)	NS

Table 2. Association between Opioid intake and Delirium

	Delirium-free population	Delirious population	Odd Ratio (p value)
Mean Daily Doses of Opioids	98,7 (262,7)	136,3 (362,0)	<0,001
Proportion of patients with ≥ 90 mg Opioids	0,227 (0,37)	0,331 (0,41)	1,52 (p<0,001)

## Conclusions

- Opioids were associated with delirium
- There is a direct relation between high opioid doses and occurrence of delirium
- Analysis of delirium risk factors in terminal cancer remains a complex and challenging task



## References

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2. Gaudreau, J.D., Gagnon, P., Roy, M.A., Harel, F., Tremblay, A. 2005. Association between psychoactive medications and delirium in hospitalized patients: a critical review. Psychosomatics. 46(4): 302-16.