

# 12-month outcomes of individuals receiving outpatient treatment for opiate use disorder: comparison between buprenorphine and methadone maintenance treatment in naturalistic conditions



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## Background

- **Opiate Maintenance Treatment (OMT) with methadone and buprenorphine** are the most used medication treatment for opiate use disorder (OUD)
- Importance to understand the different impact of methadone and buprenorphine on addiction treatment outcomes, and specificities across different profile of patients
- Few studies on the impact of OMT on quality of life and substance use (other than opiates) outcomes.

## Objectives

- To **compare multidimensional characteristics** of individuals beginning treatment with methadone and buprenorphine in outpatient addiction clinics
- To **describe the evolution** of multidimensional treatment outcomes between inclusion and **12-month follow-up**, in **naturalistic conditions** of treatment
- To compare this evolution between the two treatments

## Method

### Study design

- Ongoing and prospective open cohort (Addiction Aquitaine Cohort)
- Individuals who started opiates maintenance treatment (OMT) between 1994 and 2015 in French outpatient addiction treatment centers
- Assessment at treatment entry (baseline) and at 12-month ( $\pm$  3 months) follow-up
- Data collected prospectively and independently for research-evaluation purpose, and did not contribute to treatment choices or management.

### Instruments

- The Addiction Severity Index (ASI): sociodemographic, history of substance use, severity CS (McLellan, Cacciola et al. 2006)
- The Mini International Neuropsychiatric Interview (MINI): DSM-IV substance dependence criteria (Sheehan, Lecrubier et al. 1998)
- The Nottingham Health Profile (NHP): individual's perception of different quality of life dimensions (Torrens, San et al. 1997)

### Analyses

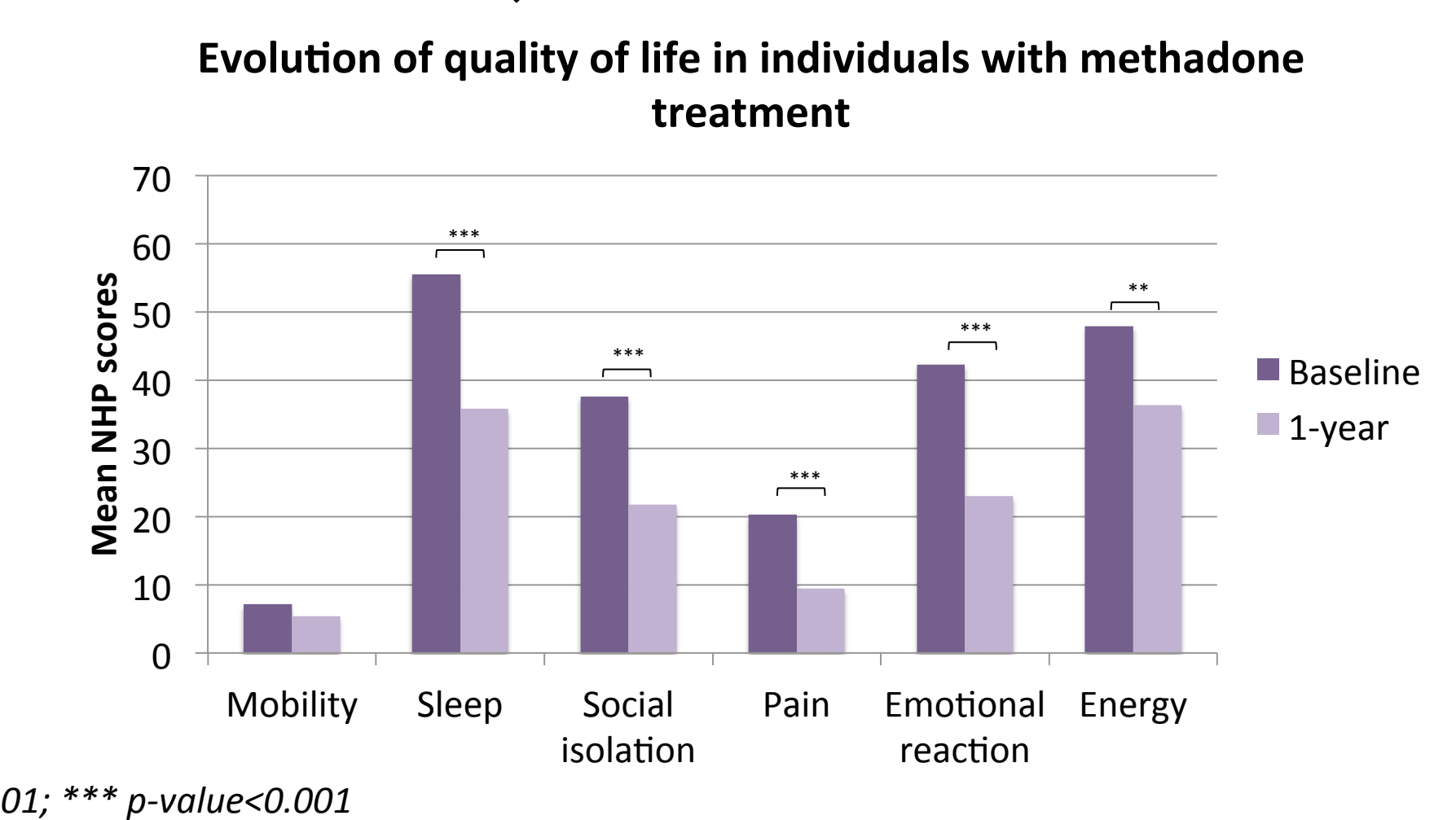
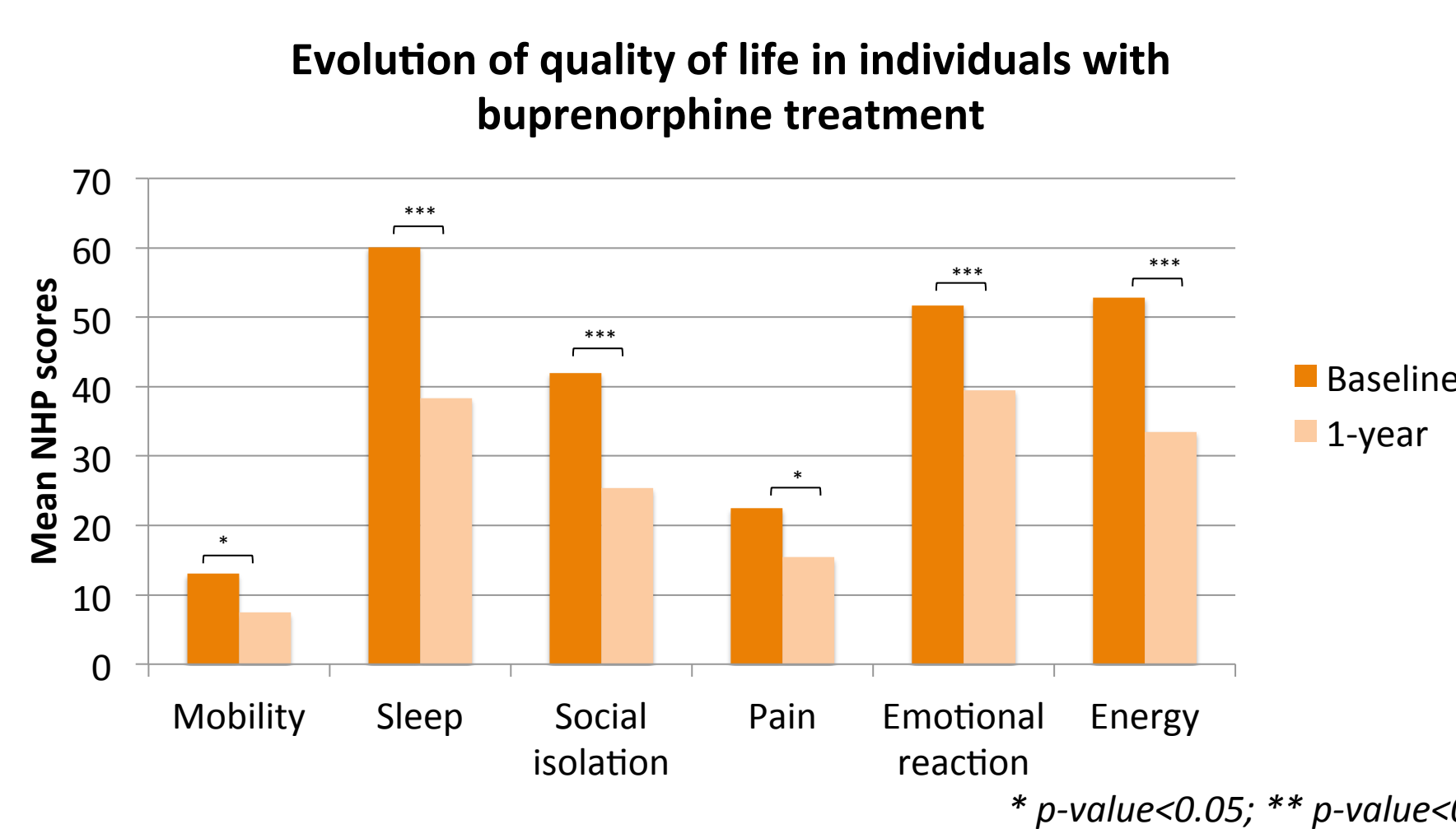
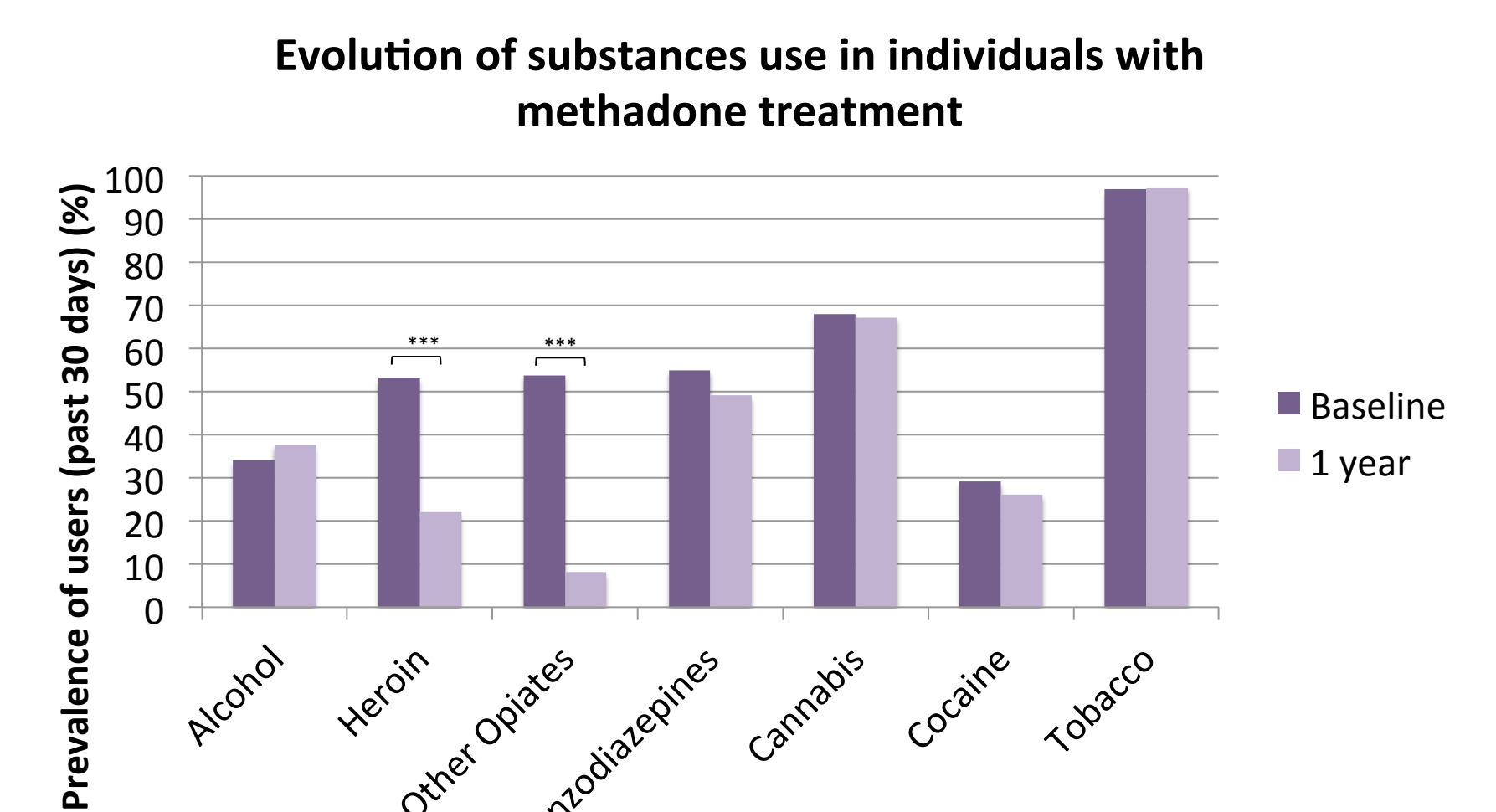
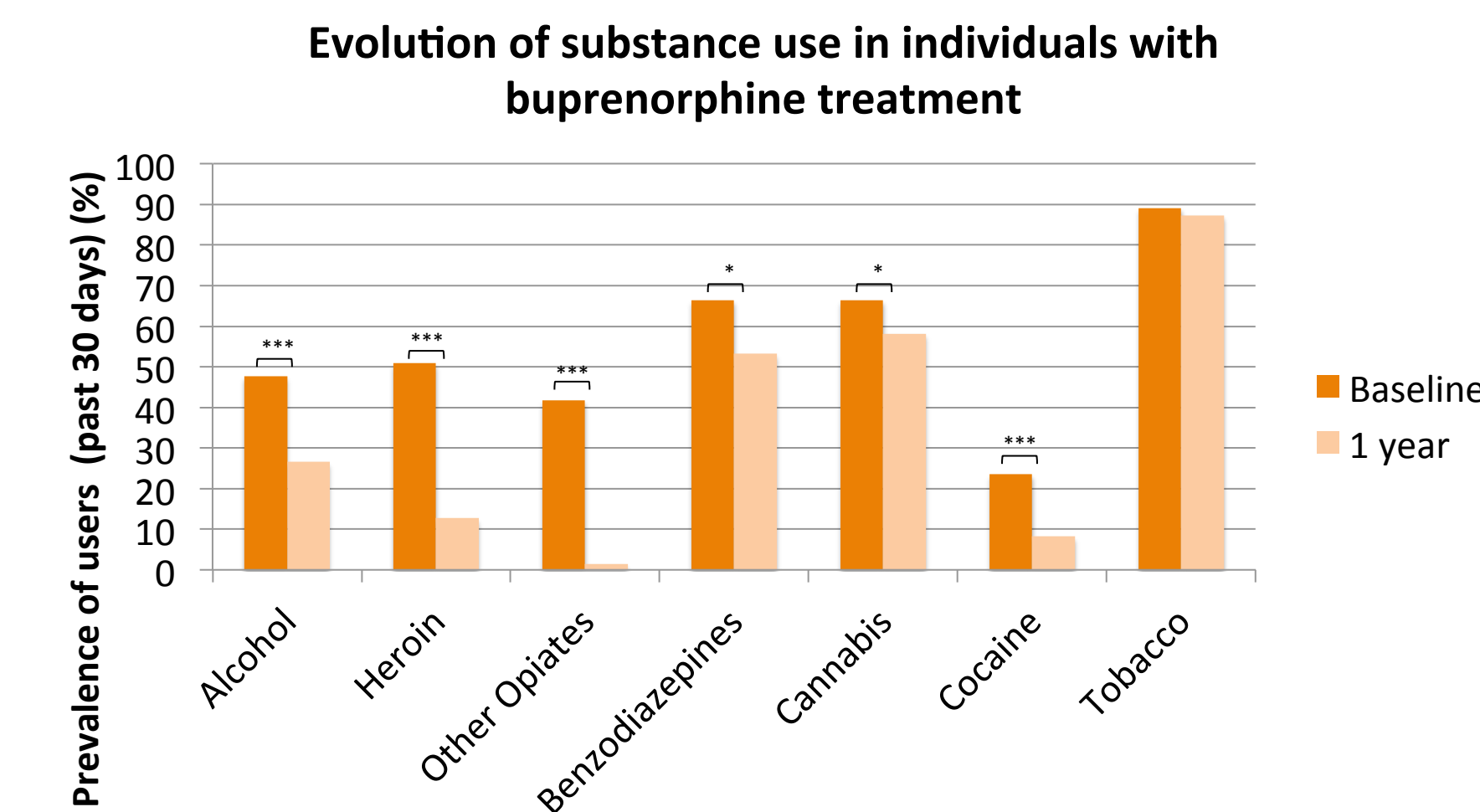
- Compare multidimensional characteristics of individuals: Chi<sup>2</sup> test, t-test
- Describe the evolution between inclusion and 12-month follow-up in the two treatment groups (treatment that was initiated at baseline): Repeated measures analysis of variance ANOVA, McNemar's Chi-square test
- Compare this evolution between the two groups of treatment: MANOVA for repeated measures

## Results

### Baseline characteristics:

	MET	BUP	MET vs. BUP
n	173	110	
Age Mean (SD)	33.4 (7.7)	33.4 (7.8)	NS
Gender – Male n (%)	124 (71.7)	71 (65.1)	NS
Treatment dose at 12 months, mg Mean (SD)	89.5 (55.4)	14.5 (8.6)	
<b>Lifetime regular substance use (ASI) – n (%)</b>			
Alcohol $\geq$ 5 AU	83 (50.6)	50 (48.5)	NS
Heroin	161 (95.8)	90 (84.1)	p< .001
Other opiates	97 (58.1)	52 (49.5)	NS
Benzodiazepine	75 (46.0)	55 (53.4)	NS
Cannabis	150 (87.7)	85 (81.7)	NS
Cocaine	78 (46.2)	35 (33.0)	p= .031
Tobacco	62 (98.4)	53 (96.4)	NS
<b>Severity of Addiction - ASI Composite Scores Mean (SD)</b>			
Medical	0.28 (0.32)	0.33 (0.30)	NS
Employment/ Support	0.59 (0.29)	0.56 (0.27)	NS
Alcohol	0.16 (0.22)	0.17 (0.24)	NS
Drug	0.32 (0.10)	0.32 (0.09)	NS
Legal	0.11 (0.17)	0.10 (0.16)	NS
Family/ Social	0.15 (0.16)	0.17 (0.17)	NS
Psychiatric	0.36 (0.23)	0.42 (0.23)	NS

### Evolution at 12-month follow-up



\* p-value<0.05; \*\* p-value<0.01; \*\*\* p-value<0.001

Improvement in both treatment groups of severity of drug, legal and psychiatric ASI domains

### Comparison of evolution between buprenorphine and methadone groups :

Treatment at baseline not associated with

- Improvement of ASI Drug composite score
- Improvement of NHP quality of life domains

- **Methadone:** Larger decrease of number of days of other opiates use in the past 30 days
- **Buprenorphine:** Higher improvement of family/social and alcohol ASI domains

## Conclusion

- At 12-month follow-up, both buprenorphine and methadone maintenance treatment reduced addiction severity and improved the quality of life
- Both heroin and other opiate use reduced significantly regardless of the maintenance treatment, both in number of users and number of days of use
- Patients treated with methadone showed a slightly better improvement in other non-prescribed opiate use
- Buprenorphine showed higher impact on alcohol, cocaine, cannabis and benzodiazepine use

## References

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