


Nalmefene Phase IV Study: A Seeding Flying in the Face of Evidence?

Alain Braillon¹  · Françoise Taiebi^{1,2} · Amal Bernoussi²

Published online: 23 February 2018
© Springer International Publishing AG, part of Springer Nature 2018

Barrio et al. [1] concluded “data provided by this phase IV study (110 patients included, 88 reporting data at the 1-month visit) suggest nalmefene is an effective, well-tolerated treatment for alcohol dependence in real-world, clinical settings”. This deserves robust comment.

First, psychological interventions (delivered by appropriately trained and competent staff, based on a relevant evidence-based treatment manual) are the recommended treatment [2].

Second, flawed marketing claims about the effectiveness of nalmefene were seen as early as 2014 and the ineffectiveness of nalmefene has been confirmed by two meta-analyses showing evidence that the reduction in drinking with nalmefene is not different from placebo [3–10]. Pharmacologically assisted treatment for alcohol use disorder is only evidence based for acamprosate, naltrexone and disulfiram, for the maintenance of abstinence. However, long-term multi-factorial life-style interventions, the cornerstone for treatment, are effective [2, 11]. The paradigm of a reduction in drinking, assuming that vulnerable and dependent individuals could reduce their consumption over the long term, is not logical because the duration of

the intoxication is a critical issue and alcohol is a human carcinogen (Class 1) with dose-related increases in cancer prevalence being either exponential (e.g. oral cavity, pharynx) or linear (e.g. oesophagus, breast) beginning at one to two drinks per day [12]. This alternative to abstinence, based on an old short-term study with surrogate endpoints, was rapidly dismissed when considering data 1 year after discharge from the study [13]. Long-term phase III studies must use relevant health outcomes (quality of life, accidents/injuries, morbidity), not declarative subjective surrogates. Abstinence remains the appropriate goal for people with alcohol dependence or with psychiatric/physical co-morbidity. Nevertheless, when a patient prefers another approach, he/she should be advised strongly that abstinence is most appropriate, but should not be refused access to care.

Third, Barrio et al. stated “satisfaction was globally high for both professionals and patients, and overall nalmefene was well tolerated, with no serious adverse events reported”. However, the lack of detailed information on adverse event screening and monitoring suggest a poor method that may explain the discrepancy with a meta-analysis reporting the threefold increased risk of withdrawal from treatment on nalmefene and an elevated (Peto odds ratio = 1.32) risk of psychiatric serious adverse events, albeit not statistically significant [14].

Four, psychoactive substances are usually used in conjunction, in this instance especially tobacco, the first avoidable cause of premature death. Tobacco cessation treatment improves other substance use, predicting more favourable long-term outcomes [15]. The lack of data about this issue is a major limitation.

This comment refers to the article available at <https://doi.org/10.1007/s40261-017-0590-4>.

✉ Alain Braillon
braillon.alain@gmail.com

¹ Alcohol Treatment Unit, University Hospital, 80000 Amiens, France

² Faculty of Psychology, University of Picardie Jules Verne, 80000 Amiens, France

Administration of a costly placebo must not be an alternative to demanding evidence-based care. Patients with alcohol-use disorders are vulnerable people deserving of psychological interventions. This is possible. The Improving Access to Psychological Therapies (IAPT) programme launched in 2008 in England to offer psychotherapies—largely cognitive-behavioural treatment—is a beacon. It inspired health authorities in Quebec, who recently invested US\$35 million to launch its first public psychotherapy program [16]. Spain, as in France, must offer adequate access to psychotherapy.

Funding No source of funding was used to prepare this letter.

Compliance with Ethical Standards

Conflict of interest All authors have no conflicts of interest to declare.

References

- Barrio P, Ortega L, Guardia J, Roncero C, Yuguero L, Gual A. Who receives nalmefene and how does it work in the real world? A single-arm, Phase IV study of nalmefene in alcohol dependent outpatients: baseline and 1-month results. *Clin Drug Investig*. 2017. <https://doi.org/10.1007/s40261-017-0590-4>.
- National Institute for Health and Care Excellence. Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence. 2011. <https://www.nice.org.uk/guidance/cg115/chapter/1-Guidance>.
- Braillon A. Nalmefene in alcohol misuse: junk evaluation by the European Medicines Agency. *BMJ*. 2014;348:g2017.
- Spence D. Bad medicine: nalmefene in alcohol misuse. *BMJ*. 2014;348:g1531.
- Stevenson M, Pandor A, Stevens JW, Rawdin A, Rice P, Thompson J, Morgan MY. Nalmefene for reducing alcohol consumption in people with alcohol dependence: an evidence review group perspective of a NICE single technology appraisal. *Pharmacoeconomics*. 2015;33:833–47.
- Braillon A, Granger B. Nalmefene and alcohol dependence: a new approach or the same old unacceptable marketing? *Subst Abuse Rehabil*. 2015;6:75–80.
- Palpacuer C, Laviolle B, Boussageon R, Reymann JM, Bellissant E, Naudet F. Risks and benefits of nalmefene in the treatment of adult alcohol dependence: a systematic literature review and meta-analysis of published and unpublished double-blind randomized controlled trials. *PLoS Med*. 2015;12:e1001924.
- Naudet F, Fitzgerald N, Braillon A. Nalmefene for alcohol dependence: a NICE decision? *Lancet Psychiatry*. 2016;3:1104–5.
- Fitzgerald N, Angus K, Elders A, de Andrade M, Raistrick D, Heather N, McCambridge J. Weak evidence on nalmefene creates dilemmas for clinicians and poses questions for regulators and researchers. *Addiction*. 2016;111:1477–87.
- Palpacuer C, Duprez R, Huneau A, et al. Pharmacologically controlled drinking in the treatment of alcohol dependence or alcohol use disorders: a systematic review with direct and network meta-analyses on nalmefene, naltrexone, acamprosat, baclofen and topiramate. *Addiction*. 2017. <https://doi.org/10.1111/add.13974>.
- Baumann S, Toft U, Aadahl M, Jørgensen T, Pisinger C. The long-term effect of a population-based life-style intervention on smoking and alcohol consumption. The Inter99 Study—a randomized controlled trial. *Addiction*. 2015;110:1853–60.
- Rehm J, Shield K: Alcohol consumption. In Stewart BW, Wild CB, editors. *World Cancer Report 2014*. Lyon, France: International Agency for Research on Cancer; 2014.
- Pendery ML, Maltzman IM, West LJ. Controlled drinking by alcoholics? New findings and a reevaluation of a major affirmative study. *Science*. 1982;217:169–75.
- Johansen KGV, Tarp S, Astrup A, Lund H, Pagsberg AK, Christensen R. Harms associated with taking nalmefene for substance use and impulse control disorders: a systematic review and meta-analysis of randomised controlled trials. *PLoS One*. 2017;12:e0183821.
- Prochaska JJ, Delucchi K, Hall SM. A meta-analysis of smoking cessation interventions with individuals in substance abuse treatment or recovery. *J Consult Clin Psychol*. 2004;72:1144–56.
- Psychotherapy: Quebec to invest \$35 million in mental health. Available from: <http://montrealgazette.com/news/local-news/psychotherapy-quebec-to-invest-35-million-in-mental-health>. Accessed 30 Jan 2018.