

## Extended-Release Intramuscular Naltrexone

### A Viewpoint by Steven Siegel

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Alcohol dependence is a major social and public health issue with devastating consequences for the patient, their family and society. Like many psychiatric and medical illnesses, effective treatment for alcohol dependence is highly reliant on the degree of patient adherence to and participation in the treatment plan. Treatments for alcoholism have thus far focused almost exclusively on psychosocial interventions such as therapy and support groups, including Alcoholics Anonymous (<http://www.alcoholics-anonymous.org/>).

While such approaches can be very helpful, recent evidence also supports a potential role for pharmacotherapy in the treatment of addictions in general, and alcoholism in particular. However, the success of pharmacotherapy for all illnesses is tightly tethered to medication adherence, which is typically quite poor across a broad array of medical and psychiatric diagnoses. For example, only approximately 60% of patients are thought to take medications as prescribed, even for severe conditions such as diabetes mellitus, heart disease and schizophrenia, which all have concrete adverse effects resulting from nonadherence. Indeed, medication adherence is a major determinant of outcome in a variety of illnesses, such as schizophrenia, with recent evi-

dence confirming that the ability to take medication as prescribed is a far greater predictor of outcome than the specific agent prescribed.<sup>[1]</sup>

Therefore, interventions such as long-term injectable formulations are likely to play a significant role in turning the potential benefit of efficacious agents into effective real world treatments. Fortunately, the pharmaceutical industry has recently turned its attention to addressing the issue of adherence by creating monthly injectable medications such as the polylactide-co-glycolide microspheres containing naltrexone. As noted in the accompanying article, these parenteral systems can both improve outcome through guaranteed medication administration and reduce total medication exposure by bypassing first-pass metabolism and reducing drug peak plasma concentrations. Such developments using novel delivery systems, rather than focusing exclusively on novel molecules, are likely to comprise a major thrust of therapeutic advancement for the treatment of alcoholism that will hopefully extend to other medical and psychiatric conditions in the future. ▲

### Acknowledgements

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### Reference

1. Lieberman JA, Stroup TS, McEvoy JP, et al. Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *N Engl J Med* 2005; 353 (12): 1209-23