

April 28, 1970

Dr. Alejandro Zaffaroni
3401 Hillview Avenue
Stanford Industrial Park
Palo Alto, California 94304

Dear Dr. Zaffaroni,

We are faced with a difficult drug delivery problem, and in reading Drug Research Reports, read of the formation of Alza Corporation, with its focus on drug delivery problems. I am writing to enquire whether Alza can assist us in the following problem.

Naloxone is a specific opiate antagonist, which we have found useful in treating opiate dependence (*Clin. Pharmacol. Therap.*, 9: 568-577, 1968). On oral administration, naloxone is either rapidly destroyed or poorly absorbed, for large doses (3.0 Gms/day) are required to achieve antagonism to heroin for 24 hours, a minimum for therapeutic usefulness. On parenteral administration, 0.6 to 1.2 mg/3 hours are needed to maintain effective antagonism.

Naloxone is produced from thebaine, a proscribed drug, and producing supplies for oral use is impossible. In our discussions, we have focussed on parenteral administration, and considered the development of a long acting parenteral form, possibly in a silastic type vehicle. We proposed such a development to the usual research funding agencies and have received sufficient initial support to undertake feasibility trials.

If Alza is interested, I would appreciate the opportunity to meet with you. I plan to be in San Francisco for National meetings May 9-13 and can be reached at the Hilton Hotel or in New York (212-369 7900).

I look forward to hearing from you.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry
Director, Division of Biological
Psychiatry

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cc: Prof. A. M. Freedman