

HARVARD MEDICAL SCHOOL  
DEPARTMENT OF SURGERY

JUDAH FOLKMAN, M.D.  
JULIA DYCKMAN ANDRUS PROFESSOR  
OF PEDIATRIC SURGERY AND  
SURGEON-IN-CHIEF



CHILDREN'S HOSPITAL MEDICAL CENTER  
300 LONGWOOD AVENUE  
BOSTON, MASSACHUSETTS 02115  
617-734-6000, EXT. 3311

January 4, 1980

Professor Benjamin Lax  
Director, National Magnet Laboratory, NW-14  
Massachusetts Institute of Technology  
Cambridge, MA. 02138

Dear Professor Lax:

We have developed a novel method of controlling or modulating the sustained release of proteins and other macromolecules from an implantable polymer (ethylene-vinyl acetate copolymer) by incorporating magnetic beads into the polymer.

This technique may have a major impact on the field of sustained release technology especially in the pharmaceutical sciences. It is the first time that any sustained release system has been capable of modulation by an external magnet.

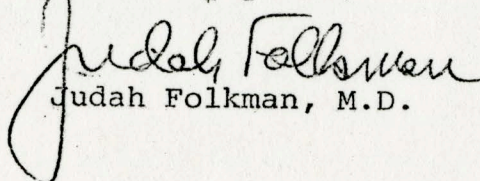
We have previously shown (Diabetes, January, 1980) that insulin can be released from these same polymers for as long as 30 days after a single implant. With the application of magnetic modulation, such an implant may eventually be useful in diabetes.

I would greatly appreciate it if you could consider communicating the enclosed paper to the Proceedings of the National Academy of Science. I realize that you probably have many requests from colleagues in your own field, and therefore, I will certainly understand if you cannot do this.

We were helped by Dr. Richard Frankel's advice early in this study, and we have acknowledged him and also have kept him up to date on the experiments. If you have any questions about the experimental work, possibly you might want to discuss this with him.

Best regards,

Sincerely yours,

  
Judah Folkman, M.D.

MJC  
Manuscript