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Robert D. Conn, M.D.
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Heart Transplantation
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CARDIOVASCULAR CONSULTANTS, P.C.

March 31, 1999

Office of the Secretary
Federal Communications Commission
The Portals, TW-A325
445 12th Street SW
Washington, DC 20554

ATTN: Ms. Magalie Roman Salas, Secretary

RE: WT Docket 99-66

Dear Ms. Salas,

I am writing in strong support of the proposed medical implant communications service which would provide for short range, ultra low power, better communications involving implanted medical devices. This type of "telemetry" and communication would be a true breakthrough in this field and would lead to marked improvement in our ability to interact with these devices, particularly as they become more complicated.

I would refer you to the letter I wrote to the FCC, in September of 1997, expressing my support for this technology. Since that time, I have seen further development in this area and I can support the iniative even more strongly.

I would certainly be happy to answer questions you may have from a clinical practice standpoint. Please let me know if I can be of any help. I do appreciate your consideration of this technology.

Sincerely,

David M. Steinhaus, M.D.

DMS/mbh

Ben D. McCallister, M.D.
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[redacted]

September 2, 1997

Office of the Secretary
Federal Communications Commission
1919 M Street Northwest
Washington, D.C. 20554

RE: RM-9157

To Whom It May Concern:

I am writing to offer my enthusiastic support for a petition for rule making to the FCC which would create the medical implant communications service as filed by Medtronic on 7/28/97. This change would allow medical devices to operate and communicate with each other over a short range of approximately two meters in the 402-405 MHz band with an ultra low power.

Modern pacemakers and implantable devices have the capability of adjusting therapies which can be individualized for improvements in patient care. In addition, modern devices also have data storage capability which can be retrieved and utilized for improved device programming or to make other therapeutic changes. Currently, this is accomplished utilizing a radiofrequency link between the implanted device and a so called programmer. This requires a "telemetry head" to be placed directly over the implanted device for relatively "intimate" contact. While this has been a marked improvement over the previous fixed devices, the technology is relatively old and leads to multiple problems in present usage.

First, the telemetry link is relatively slow which was acceptable ten years ago but now is no longer effective due to the relatively large amounts of data being transferred. Second, given the relatively intimate contact required, patients do need to disrobe, the telemetry link is prone to movement artifact, and sterility problems are a difficulty at the time of surgical implantation.

The new so called "headless" telemetry system would be a fairly dramatic improvement in patient care. First, and perhaps foremost, it would be much faster and would allow the free flow of data between programmer and device which would, obviously translate into improved cost effectiveness. Second, it would be clearly less intrusive and would allow patients essentially to remain in street clothes or even be amenable to some type of home monitoring system. In addition, because it can be removed from the direct field, the telemetry receiver could be placed outside of a sterile field at the time of implantation. Finally, such

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a system would have the capability of allowing communication between multiple implanted devices without fragile hard wire connections.

I have personally seen a demonstration of the new telemetry capability and can endorse this new system wholeheartedly. It represents a clear quantum leap in the care of patients with implanted devices.

Sincerely,

David M. Steinhaus, M.D.

DMS/jt

c: Mr. David Hilliard, Esq.
Wiley, Rein, & Fielding
1776 K Street Northwest
Washington, D.C. 20554

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