

CANCER TREATMENT

****NEWS BREAK****

FDA Approves Mayo Clinic (February, 2026) to use Magnetic Hyperthermia for Cancer Treatment

MAGNETIC HYPERTHERMIA PRODUCES IMPROVED RESULTS for CHEMOTHERAPY

Magnetic Hyperthermia Heating can now provide a needed synergy to assist with the Chemotherapy of cancer patients and also reduce the secondary threat from infections.

Chemotherapy is always the “weapon of choice” to treat cancer. There are several problems with Chemo that limit its effectiveness.

A. The doctor is always faced with a stern reality: **Not Enough** Chemo will not cure the cancer. **Too Much** chemo will kill the cancer and kill the patient, as well.

B. Chemo destroys the white blood cells, causing a rise in patient’s infections. As noted by the **World Health Organization**, **8.5%** of all cancer deaths can be linked directly back to infections, such as sepsis, and not to the cancer .

C. Doctors who are administering **antibiotics** to treat the resulting infections, inadvertently cause problems with the chemo therapy, endangering the already sick cancer patient.

The Role of MAGNETIC HYPERTHERMIA: Magnetic Hyperthermia applies heat to the targeted cancer tissue. This weakens the cancer tissue and enhances the treatment potential of the chemo . It also allows a reduction in the need for large dosages of chemo and so reduces the related problems with chem-induced infections.

MSI Automation, Inc.

8537 Greenbriar St, Wichita, Kansas 67226 USA

www.msiautomation.com

Research@msiautomation.com

G. Innovation 2026: The research by Dr. Deep Ghosh or the *Institute of NanoScience and Technology* (Mohali, India) in 2024 has shown that **Magnetic Hyperthermia (AMF)** system provided by **MSI Automation** can be used to more safely treat the infections of diabetic patients while under parallel treatment for cancer.

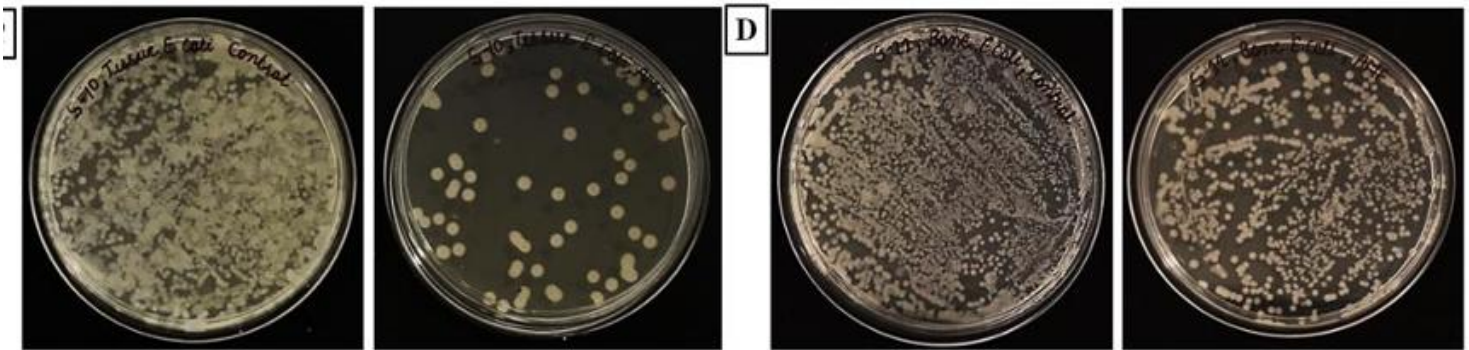
Unlike Magnetic Hyperthermia for cancer treatment, treating bacterial infections require no nanoparticles that need be added to the infected tissue. The bacteria, by its own nature, adsorb iron for its own nutrition and growth. The **Magnetic Hyperthermia** heats these *paramagnetic* iron nanoparticles that are inside the bacterial cell. The bacteria cell heats, denatures and dies, (patent pending)

LIVE HUMAN TISSUE

E-Coli Infection

LIVE HUMAN BONE

E-Coli Infection



BEFORE

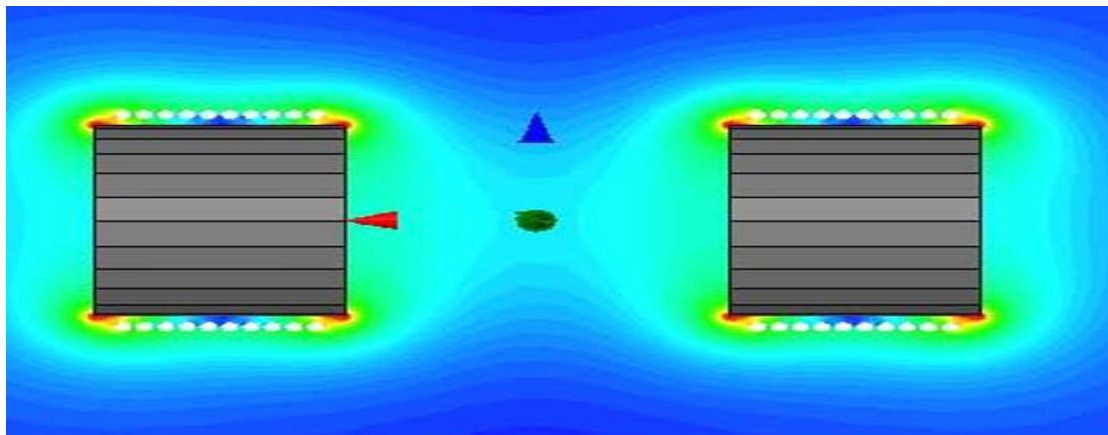
AMF

BEFORE

AMF

“Upon exposure of the bacteria for 20-30 minutes with **AMF** (360 kHz / 400 Oe), we observed a hyperthermia response with 3-5 log reduction in live bacterial load. The hyperthermia anti-bacterial treatment was confirmed using multiple patient specimens (with different pathogens).”

This validates the clear potential of the drug-free strategy to address the infection.” ***Dr. Deepa Ghosh** of *The Institute of Nano Science and Technology* / (Mohali, India). Aug 7, 2022-2024
 Nanoscale DOI: 10.1039/d1nr07435k (pp 1713-1722)



Magnetic Heating can now provide a needed synergy to assist in the Chemo treatment of cancer patients while reducing the secondary threat from infections.

MSI AUTOMATION, INC.

8537 Greenbriar St., Wichita, Kansas 67226 USA

www.msiautomation.com

Research@msiautomation.com