Immuno Antichemo Nanorobotic Treatment
Adhiya N. N¹, Nayana G. S. Nair², Aneesha Mini S. N³, Remanikanth S⁴
Department of Electrical and Electronics Engineering
ACE College of Engineering, Trivandrum, India

Abstract:
This paper will describe the nanorobotic technology to treat cancer and to demolish the effects of chemo which is recently under consideration. A frontier construction around 2 mm away from affected region is enabled to avert the growth of cancer from scattering to aseptic cells by nanorobots inspired by purpose and planned due to keen interest to deplete cancer from the face of the world. It lessens their alignments and mental torture due to chemo therapy. Speculation has been published on possible future applications of nano technology using advanced materials and manufacturing technique. This is an era which deals with robots. We specifically look over the advantages a nonorobot can intimidate. Injected nanorobots controlled via monitor are incorporated which destroys thousand cells in a second.

Keywords: Chemo sensors, Fullerenes, Nano Robots.

I. INTRODUCTION
Nanorobots are so tiny that they can easily transverse the body. Exterior of nanorobots for treatment are constructed out of carbon particles. A network of special stationary nanorobot might be strategically positioned throughout the body, logging each active nanorobot as it passes, then reporting those results, allowing an interface to keep track of all the devices in the body. A doctor could not only monitor a patients progress but change the instructions of nano robots in vivo to progress to another stage of healing when the task is completed the nanorobots will be flushed from the body. Physician controlled nanorobots could extract existing chromosomes from a diseased cell and insert newly manufactured ones in their place. This would allow a permanent cure of pre-existing genetic disease and permit cancer cell to be reprogrammed to a healthy state [1].

II. DESIGN
Freely floating type nanorobot with data emancipation is utilized. Microprocessor based time setting is incorporated. Nanorobots will be typically of the range 0.4 to 4 microns. There will be a tightly closed chamber which prevents fluids from entering into it. Carbon in the form of fullerene can be utilised because of its inertness [2].

Components of Nanorobot
Chemo sensors: It depicts the presence of cancer cells and liberates poison to demolish them around 2 mm around the region
Nanorobotic Lasers: Internal laser treatment via nanorobot which burns the cancerous cell
Electrodes: It creates cancer cell by generating an electric current, heating the cell until it dies.
Microwave emitters and ultrasonic signal generators: To identify and destroy cancerous cell.
Medicine cavity: Holds small doses of medicine or chemicals.

Power system: The nanorobot uses glucose molecules present in the human body as the power source. The conversion of this glucose molecule into energy is accomplished buy the energy converter; this is an important part of nanorobot.

Nano area locator: This locates the position of nanorobot.
External sensors: To informs nanorobots of collisions.

Figure 1. Nanorobot architecture
III. MECHANISM OF ACTION

Ultrasonic signal emitted identifies the affected cell. Nanorobots at the target release other chemicals which others use as a guiding signal to the target. Chain reaction of cancer spreading is first blocked by injecting paralysing chemicals to paralyse the chain reaction. Nanorobots could go from cell to cell like a house cleaning device. Nanorobots make use of frontier construction 2 mm away from the ailing cells. This can be made possible by various nano sensors. Nano area locator locates the provide boundary information. The whole action of nanorobots can be monitored and controlled. The action of nanorobots is entirely a fast and steady process. From target location till accomplishment of aim, they work as a union and tries to forward the best result. Better cells are left untouched. Boundary separation is a key towards leaving the healthy cells as such. These robots can destroy thousands of cell per second. Acoustic communication sensors mounted within the nanorobot will permit the nanorobot to communicate with its partners whether or not the organ inlet has received the required substance. External sensors inform them of collision. Thus the nanorobot works smoothly. External sensors also let them know about the obstacles present in its path that require a new trajectory planning. Laser radiations are exhibited when the condition of the ailed cell is so pathetic.

IV. CONCLUSIONS

Cancer can be depleted from the face of earth without even giving a hint of mental assault to the patient. Effects of chemo is not visible as all the changes takes place with encounter with cells.

V. REFERENCES
