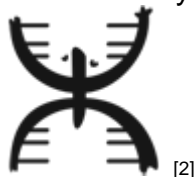


Tumor-Targeted Magnetic Nanoparticles for Thermo-Controlled Drug Delivery ^[1]

Submitted by [Janet Marielis Crespo Cajigas](#) ^[2] on 26 June 2015 - 5:24pm



Triple Negative Breast Cancer or TNBC is a disease that affects 15% women all over the world. The current treatments for this and all cancers in general are chemotherapy and radiotherapy both of which are as harmful as they are helpful to the cells in the human body. However, the field of nanotechnology with applications in medicine is becoming a vital point in modern research. A regular cell is in the microscale in size which signifies that a nanoparticle (1,000 micrometers smaller) can easily find a way inside a cell and release the drug it carries. The idea of using biocompatible iron nanoparticles functionalized with a copolymer that is optimal for encapsulating and releasing drugs to transport them directly to cancerous cells has become very popular as they are not toxic to the body. In the near future, this drug delivery system could be an efficient and safe treatment for patients with not only breast

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