

Tentative Outline
Special Issue for Recent Patents on Nanomedicine
Guest Editor(s): Dr. Swarnali Das Paul, FPS, SSGI, Bhilai, CG.

TITLE: “Research and regulation: challenges of Nanoproducts”

Aims & Scope:

Nanoproducts are including a drug, cosmetics, device, biologic, or combination of any of the above. Though the technology is still young, more than 1000 nanopharmaceutical patents have been issued by the U.S. Patent and Trademark Office (US-PTO) during 1999 – 2012.

But there is growing evidence that various nanoproducts marketed for direct and indirect human consumption is unsafe. These products could present unexpected human toxicity by increasing their potential to traverse biological barriers or membranes and reach or accumulate in tissues and cells owing to their smaller size. In addition, there are concerns about the occupational and environmental risks associated with the manufacture and disposal of nanoproducts.

Regulating all these nanoproducts is creating challenges for FDA regulators as the FDA only regulates nanoproducts (i.e., products that incorporate nanotechnology) and not nanotechnology per se. Additionally, the traditional product - by - product regulatory model that the FDA currently employs is not effective for all nano products because it may be difficult to put them into one of the available traditional classifications. Labeling is another major issue of these nano products. Thus, there is an emerging need regarding suitable nano product regulation for resolving all such issues related to nano products.

Key words: Nanoproducts, FDA, Safety, Regulation, Brain targeting, Drug delivery, Solid lipid nanoparticles, Biomaterial Scaffolds.

Subtopics:

Review article:

1. Dr. Ajazuddin Mohd., RCPSR, Bhilai, CG. India.

Topic: Nanocosmetics: Past, present and future trends.

2. Dr. R.N Gupta, Birla Institute of Technology, Meshra, Ranchi, India.

Topic: Regulatory Aspects of Nanoproducts

3. Dr. Vaishali Londhe, Associate Professor, SPTM, NMIMS, Mumbai, India.

Topic: Safety of nanoproducts

Research article:

4. Payal Ganguli, Aspiring scientist, Newcastle University, Newcastle upon tyne, UK.

Topic: Maintaining the Stemness of Mesenchymal Stem Cells in Biomaterial Scaffolds.

5. Abhiruchi Mehta, Research scholar, North Eastern university, Boston, MA, USA.

Topic: Targeted therapy in brain tumors using nanoparticles

6. Ashish Pandey, Birla Institute of Technology, Meshra, Ranchi, India.

Topic: Formulation and evaluation of solid lipid nanoparticle for topical delivery of an antifungal drug

7. Dr. Rupa Mazumder, Professor, NIET, Noida, India.

Topic: Nano drug delivery system of a large polypeptide through ocular route.

Schedule:

Manuscript submission deadline: July 30th 2014

Peer Review Due: September 15th, 2014

Revision Due: October 15th, 2014

Notification of acceptance by the Guest Editor: November 10th, 2014

Final manuscripts due: 30th November, 2014