Tuesday, October 19, 2010

EDITORIAL

THE CL OPTION

past editorials ...

SERVICES

PHARMA TENDERS & PROJECTS

Tenders&Enquiries

Pharma Projects- *NEW*

CORPORATE

Company Profiles

Corporate Results

Corporate X-ray

Pharmabiz Studies of Top Companies

Indian Cos Approved by Intl Regulatory Agencies

US FDA UPDATE

US FDA: ANDA

US FDA: Warnings

US FDA: Approved NMEs upto December 2009

US FDA: New Approvals

US approved Labs with Stem Cell Lines

EXPORT & IMPORT

Drug Export Procedures

Drug Registration Norms for Various Countries

Drug Units With WHO GMP Certification

Pharma Export Data

Import Reg Update

PHARMA LAWS & DOCUMENTS

Notifications

Pharma Regulations

Patent Laws and Amendments

Patent Scan

Documents

New Drug Approvals

Notified Prices

List of banned FDCs w.e.f. 01.01.2002

List of formulations containing PPA

List of FDCs of Rifampicin + Isoniazid

LIST OF LABS & GOVT. BODIES

Govt Recognised In-House R&D Units

AICTE Boards & Committees

Research

IISc's completes pre-clinical studies of potential anti-thyroid agent

Tuesday, October 19, 2010 08:00 IST

Nandita Vijay, Bangalore

Indian Institute of Science's department of Inorganic and Physical Chemistry (IPC) has completed the pre-clinical study of a compound that can lead to the development of a potential anti thyroid agent. Scientists have developed a synthetic compound which controls the thyroid hormone metabolism.

The research which has received funding from Department of Science and Technology and Indian Institute of Science spanned over eight years. Extensive lab in-vitro research was carried out using the thyroid hormone to study the mechanism of iodination and de-iodination process. "It is known that thyroid peroxidase takes iodide from food and uses hydrogen peroxide to induce iodination to create the thyroxine," Professor Govindasamy Mugesh, associate professor, department of Inorganic and Physical Chemistry, Indian Institute of Science told Pharmabiz.

The department of IPC has been engaged in research of diseases originating from thyroid. Considerable basic research on thyroid hormones is going on at various phases. "Our idea is to design compounds that control the thyroid hormone synthesis. This is the first synthetic compound which has been shown to inactivate thyroid hormone by de-iodination reaction. We have developed a chemical model of 'Iodothyronine Deiodinase', which is an enzyme that controls the function of the thyroid," he added.

The study has been published in a top chemical weekly 'Angewandte Chemie International Edition' where it is reported that the first chemical model for the de-iodination of Thyroxine by 'Iodothyronine Deiodinase' has been developed.

T3 and T4 are the key hormones which assess the thyroid function. According to the published report, the Deiodinases are mammalian seleno-enzymes which play an important role in the activation and inactivation of thyroid hormones. The over activity of these enzymes generally lead to hyperthyroidism and its low level of activity leads to hypothyroidism.

NPPA notification dated April 16, 2010 fixing/ revising the prices of 4 bulk drugs

FORTHCOMING EVENTS

International

Domestic

CHRONICLE PHARMABIZ SPECIALS

Forthcoming

Past

CORPORATE

Pharma Stocks

Executive Diary

Pharma People

Product Launches

PHARMA MART

Buyer's Postings

List of Indian CROs
List of CROs (International)
Govt & approved labs of India

Archives: News & Features
SPECIAL FEATURES
Features
Business of PHARMA MARKETING

INTERVIEW
DCA to beef up activities
R P Meena IPS, Director General of Drugs & Copyrights

Past Interview...

"Now we are making several analogues of this compound to improve the activity. Once we get a series of compounds, we will be filing a patent and take the study to clinical phase," stated professor Mugesh.

Professor Mugesh was supported by a PhD student Debasish Manna. However, the research team at IPC under him comprises 10 PhD students and three post doctorates.

There have been several notable recognitions for the study on thyroid hormone. This year, professor Mugesh bagged four awards: Central Drug Research Institute Award for Excellence in Drug Research, a Medal from the Chemical Research Society of India, RSC West India Young Research Scientist Award and IAP Young Scientist Award.

Other research efforts from the department of IPC include antibiotic drug resistance of beta-lactams where the study involves producing inhibitors for metalloproteins.

Flash Sales Offer
Used Equipment
Contract Manufacturing
Surplus Inventory

Post a Comment

E-MAIL THIS! PRINT THIS! BACK

Google MY YAHOO! Bloglines

ADVERTISE in this space

Copyright © Saffron Media Pvt. Ltd.