Biosimilars - An emerging trend in Indian pharma industry

Article by Neha Ramani

India released the draft regulatory guidelines for 'Similar Biologics' at the BIO industry conference in Boston, USA, on 19 June 2012. These guidelines were revised in 2016. Under these guidelines Central Drugs Standard Control Organization (CDSCO) is responsible for laying down standards for the drugs, to ensure that the requirements regarding the manufacturing process and quality are met, providing approvals for clinical trials, granting marketing rights, granting import or export licenses and ensuring pre-market and post-market regulatory requirements for biologics.

The Review Committee on Genetic Manipulation (RCGM) is one of the other two competent authorities involved in the approval process for Biosimilars. It functions under the Department of Biotechnology (DBT), Ministry of Science and Technology. RCGM is responsible for reviewing reports and visiting experimental facilities to ensure that adequate safety measures are taken, regulating import, export, transfer, exchange of genetically engineered materials, providing permissions for conducting pre-clinical toxicity studies and recommending appropriate phase of clinical trials to the Drug Controller General of India (DCGI).

The Genetic Engineering Approval Committee (GEAC), which functions under the Department of Environment Forests and Wildlife is a statutory body to examine and issue clearance for environmental safety. Their function is to review and approve activities involving large scale use of genetically engineered organisms and products, release of genetically engineered organisms and products into the environment including experimental field trials and industrial production.

The aforesaid three bodies put together are responsible for the regulatory framework in India for Biosimilars.

With the revised guidelines for similar biologics in 2016, the government has made the approval process more stringent including giving emphasis to the post market regulatory requirements to protect the public interest. The amendments have also brought many positive changes, such as under the previous guidelines, it was essential that the reference biologic for which biosimilar is to be developed, is approved and marketed in India. After the amendment, the reference biologic may be approved or marketed either in India or any other International Council for Harmonisation countries (i.e., European Union, Japan, United States, Canada, and Switzerland). The amendment also tries to align the regulations with other international agencies such as EMA and WHO.

Case Laws

Roche and Genentech Inc. manufactured a breast cancer drug, Trastuzumab (Herceptin) and imported and marketed it in India. The drug dominated the Indian market until the Indian patent lapsed and Biocon launched a biosimilar CANMAb and Mylan Pharmaceuticals launched Hertraz.

Roche filed a case against the Drug Controller General of India (DCGI), Biocon and Mylan before the Delhi High Court, seeking to restrain the sales of their biosimilars, claiming that the approval of the biosimilars did not meet the standard set-out in the Guidelines for Similar Biologics.

In April 2016, the single bench of the Delhi High Court ruled in favour of Roche and held that marketing approvals granted in favour of CANMAb and Hertraz were not in line with the Guidelines. However, keeping in mind public interest and access to cheaper drugs, the court allowed Biocon and Mylan to continue manufacturing, marketing and advertising their products provided the 'biosimilar tag' was removed and the INN name, Trastuzumab, was not used alone.

In March 2017, a Division Bench at Delhi High Court passed an interim order allowing Biocon and Mylan to market their biosimilars for two additional indications: early breast cancer and metastatic gastric cancer. Prior to the passing of this order, Biocon and Mylan, had permission to market their products for only metastatic breast cancer. Roche filed a Special leave petition (SLP) before the Supreme Court to restrain Biocon and Mylan from marketing the biosimilars for the two additional indications but later voluntarily withdrew the SLP.

The Delhi High Court has remained silent on determination of the legal importance and binding character of the Biosimilar Guidelines, 2012 and the fact that Biocon and Mylan were given approval for their biosimilars even though there was no public record that phase 1 and 2 clinical trials were conducted.

Over the last decade, India has emerged as a thriving biosimilar ecosystem in comparison to other countries due to its large population and need for affordable treatment. Biocon has made a major mark in the development of innovative biologics and biosimilars, not just in India but in all major global markets. It has established strong and strategic partnerships with Mylan and Sandoz, which have given them an advantage in obtaining global regulatory approvals and commercialization. They have successfully received approvals from the United States Food and Drug Administration (USFDA) for two biosimilars: Ogivri, a version of trastuzumab for treatment of breast cancer and Fulphila, a version of pegfilgrastim used to increase the white blood count in cancer patients. With a diverse portfolio and numerous innovative biologics and biosimilars in the pipeline, Biocon has taken a lead and opened the US and global drug market for Indian companies.

There is a definite shift in the trend and focus of the pharmaceutical industry in India and across the globe from development of pharmaceuticals to biopharmaceuticals. Despite the heavy costs, infrastructure for R&D and excess time required in the development of biologics, we have seen revamping of businesses, mergers and expansions to increase operational capabilities, as well as splitting, re-shaping and restructuring R&D by pharma companies to diversify into specialty medicine and biologics. It is an exciting time ahead, with a promise of evolution of biopharmaceuticals and breakthroughs in life-changing and life-saving drugs, like we have never seen before.

NEHA RAMANI neharamani@lexorbis.com

Neha is a Partner at LexOrbis and is based out of Mumbai. With over 7 years of experience, Neha has acquired proficiency in drafting and prosecution of patent applications in the Biotech, Life Sciences and Pharmaceutical domain and regularly advises national and international clients on filling and prosecution strategies in India. She has advised and assisted several clients in obtaining permissions from the National Biodiversity Authority.

Neha also regularly advises clients in managing their brand portfolio. She has experience in filing and prosecution of Trade Marks and regularly attends show cause and Opposition hearings. She is a registered Patent Agent and a Lawyer registered with the Bar Council of Maharashtra and Goa. Neha has a Masters in Intellectual Property from University of New Hampshire Franklin Pierce School of Law, USA. She has a BSc (Hons) degree in Biochemistry and Pharmacology from University of Strathclyde, Glasgow, UK.