

Concluding Remarks and Recommendations

Keeping in mind the dynamic profile of the country, it is obviously in the interest of the government to have adequate safeguards and mechanisms to prevent unethical hike in drug prices. These mechanisms are very much acceptable under the TRIPS agreement. The DOHA declaration makes it very clear that differentiation in patent rules is necessary to protect public health. The singling out of public health and in particular pharmaceuticals, as an issue needing special attention in TRIPS implementation constitutes recognition that public health related patents can be treated differently from other patents and the Indian Government must make full use of this provision.

Some well established mechanisms for controlling drug prices are as follows:

- Compulsory licensing
- Parallel imports
- Data Protection
- Exceptions to patent rights- bolar provision, not allowing TRIPS plus measures and ever-greening of patents
- Price control by Govt. agencies e.g. National Pharmaceutical Pricing Authority (NPPA)

Details of these mechanisms are given below, at end of this section.

8.1 Strengthening DPCO and bringing biopharmaceuticals within its purview:

There has been a tendency on part of the govt. to decrease the number of drugs under price control, moving from a 'protected environment' to a 'market driven environment' which is more in tune with the global trends, where undue interference by the government is regarded as a hindrance to trade and economic growth. However, decreasing number of drugs under DPCO does not in any way mean that the government cannot exercise control. The government at any stage may impose regulation of prices of essential drugs, if it feels the same are not reasonable.

A transparent formula involving reasonable mark-up over cost has already been in existence for some time (*pricing aspects reviewed separately in chapter 3 of this*

report). However, at present blood and its products and also biopharmaceuticals show too much variation in price (Table 8.1).

Table 8.1: Prices of 'biodrugs'

Category	Company	Brand Name	Quantity	Price (Rs)
Immuno Globulin (IVIgG)	Novartis	Sandoglobulin	3gm	4630
	Zydus	Zy-IV IGG	2.5gm	1950
	Bharat Serum	Gamma I.V	2.5 gm	2772
Erythropoietin	Johnson & Johnson	Eprez	1ml(2000i.u/ml)	1020
	Zydus Biogen	Zyrop	2ml(2000i.u/2ml)	798
	Johnson & Johnson	Eprez	1ml(4000i.u/ml)	2010
	Zydus Biogen	Zyrop	2ml(4000i.u/2ml)	1698
Streptokinase	Pharmacia	Kabikinase	1.5 m.i.u	3600
	Aventis	Streptase	1.5 m.i.u	2497
	Bharat Serum	Streptokinase	1.5 m.i.u	2295

Source: Drug Today (April-June 2004) , IDR (Indian Drug Review) Sep-Oct 2004

It would be, therefore, in public interest to bring them under price control or provide special incentives to manufacturers of biopharmaceuticals, so that prices remain affordable for masses. This is all the more important, since the demand for biopharmaceuticals is likely to go up in future (Table 8.2).

Table-8.2: Projections for Biogenerics in Indian Market

Biogeneric Molecule	2001	2005		2007	
	Market share (Rs Crore)	Market share (Rs Crore)	Growth (%)	Market Size (Rs Crore)	Growth (%)
Erythropoietin	35.2	283.2	68%	412	21
Interferon	15.6	500	34	60.5	10
G-CSF (Filgrastim)	11.6	200	104	294.8	21
Hepatitis B Vaccine	203.6	685.5	35	987.2	20
Streptokinase	19.1	34.6	16	39.7	7
Combination Vaccine	16.1	25.7	12	28.4	5
Rota Virus	1.3	6.1	49	9.5	25
Typhoid Vaccine	6.2	20.6	35	32.2	25
Total	308.5	1305.7	43	1846.4	19

Source: Biospectrum (Vol -2 Issue 9 September-2004)

The main reasons behind the high prices in the biogeneric segment are as follows:

- Out of over 2-dozen recombinant therapeutic proteins and several Monoclonal based products, available globally, only around half a dozen are being produced in this country. Not too many players have entered this field because of non access to the state of art technology of production.
- Copying biotechnology products and establishing their equivalence to the original product are not easy tasks. Biotechnology products unlike small molecules are complex, heterogeneous molecules for which the manufacturing process which includes, the gene, the vector, the fermentation step, isolation and purification, could be different from those for the original patented product and such differences could affect the quality, efficacy and safety profiles of the generic drug.

8.2 Options for the Public Healthcare System

As far as India's pharmaceutical industry is concerned, various options are possible in the WTO regime. These are :

- (a) manufacture off patented generic drugs,
- (b) produce patented drugs under compulsory licensing or cross licensing,
- (c) invest in R&D to engage in new product development,
- (d) produce patented and other drugs on contract basis,
- (e) explore the possibilities of new drug delivery mechanisms and alternative use of existing drugs, and
- (f) collaborate with multinationals to engage in R&D, clinical trials, product development or marketing the patented product on a contract basis and so on.

Besides these strategies, India's strength lies in process development skills. This expertise utilised within the WTO framework with emphasis on quality standards will provide India a competitive advantage over other Asian countries.

8.3 Mechanisms for Control of Drug Prices

8.3.1 Compulsory Licensing

"Compulsory license is a permission granted by the government in public interest, to a non-patentee to make a patented product".

Various grounds for this can be:

- national emergency
- epidemic
- non-working of patent
- high prices of drug being imported etc.

Article 31 of the TRIPS agreement

This sets forth a number of conditions for granting of permission (compulsory licenses) viz. case-by-case determination, prior negotiation in certain cases with the patent owner, remuneration etc. but it DOES NOT limit the grounds on which such licenses are granted. Though Article 31 refers to some of the possible grounds (such as emergency and anti-competitive practices) for issuing compulsory licenses, it leaves members full freedom to stipulate other grounds, such as NON-WORKING (of patents), public health or public interest.

The DOHA declaration (Para 5 b)

This extends the flexibility even further. The declaration specifically mentions that each member has the right to grant COMPULSORY LICENSES and the freedom to determine the grounds upon which such licenses are granted. The declaration also provides flexibility to individual countries regarding public health crisis, which may represent 'a national emergency or other circumstances of extreme emergency' and that 'emergency may be a short-term or long-term situation.'

In the event when action taken by one country is challenged by another country, the Declaration places the burden on a complaining member country to prove that an emergency or urgency does not exist in the other country. This represents an important difference with respect to earlier GATT/WTO jurisprudence which put the burden of proof on the member invoking an exception to its obligations. e.g. under TRIPS if India wanted to grant CL for a drug and USA complained, then India had to defend why it was granting a CL. However under the DOHA declaration, this has been reversed. If US complained, then it would have to prove that conditions for granting a CL e.g. emergency or urgency, did not exist.

Amendments in Indian Patent Act, 2005 regarding CL

The provisions for grant of compulsory license have been amended to facilitate export of drugs to least developed countries:

- a) A compulsory licence may be applied for 3 years from the grant of the date of a Patent.
- b) In considering an application for compulsory licence from a prospective licensee, the Controller of Patents is required to take into account “as to whether the applicant has made efforts to obtain a licence from the patentee on reasonable terms and conditions and whether such efforts have not been successful “within a reasonable period”. The Bill clarifies that this “reasonable period” may be not more than 6 months. In other words, if the prospective licensee makes a request for grant of a license to the Patent holder and the efforts by way of negotiation or otherwise do not fructify within 6 months, the prospective licensee may apply to the Patent Office and obtain a compulsory licence.

Grounds for grant of compulsory licence:

1. Reasonable requirements of the public are not satisfied;
2. Patented product is not available to the public at a reasonably affordable price

The compulsory licence may be granted predominantly for the domestic market and also for export to any other country. The condition of obtaining compulsory licence has been expanded by the Bill (in case of LDCs having no Patent Law or provision for compulsory licence) to include an ‘authorisation’ or notification from such a country so that drugs can be exported under a licence if so notified or permitted by the recipient country.

In case of National emergency, extreme urgency or public non-commercial use, the period of 3 years could be waived and the Government may acquire the invention in public interest.

The Bill also clarifies that where compulsory licence is granted for the predominant purpose of supply in Indian market, the licensee may export the patented product, if need be; Similar facility of export is also permitted when licence is granted to remedy a practice found or determined anti-competitive after judicial or administrative process.

Working of patent: The Patent should be worked in India within a reasonable period and bi-annual working statements should be filed at the Patent Office.

Failure to file such a working statement would invite a penalty of Rs.10 Lacs. If the Patent is not worked in India, it could become a ground for revocation of Patent. Mere import of the patented product by the patentee in India may not be viewed as "working in the territory of India".

The following grounds are also to be taken into account for grant of compulsory license: a circumstance of national emergency; or a circumstance of extreme urgency; or a case of public non-commercial use, which may arise or is required, as the case may be, including public health crises, relating to Acquired Immuno Deficiency Syndrome, Human immunodeficiency Virus, tuberculosis, malaria or other epidemics.

8.3.2 Parallel Imports

Under this mechanism, if a country finds that a patented drug is being sold at high prices in that country, but is available at cheaper prices elsewhere, it can permit import of the same in parallel, to bring the prices down. The TRIPS agreement states that parallel importation cannot be challenged under the WTO dispute settlement mechanism, thus de facto giving countries the freedom to choose whether to allow parallel importation or not.

Also, under DOHA declaration(Para 5 d), 'adoption of international principle of exhaustion of rights' (determining the rules by which parallel imports may be accepted), member states have been given the freedom to establish their own regime for such exhaustion WITHOUT CHALLENGE .

Data Protection

The Government of India has also rejected a pharma MNC's proposition that the 'TRIPS agreement prohibits use of data filed in the course of obtaining regulatory clearance for commercial research' and has not included 'data exclusivity' in the Amendment Act, 2002.

"Data exclusivity" is jargon for mandatory non-reliance on originator's data (mainly of drugs and agro chemicals), published to meet regulatory obligations , for unfair commercial use during a fixed period of time. In other words, the data filed by a company on the results of clinical trials and side effects should not be used by other companies for their commercial purposes.

8.3.3 Exceptions to patent rights-Other measures

Apart from the above, certain other measures can also be used to keep a check on prices. These are briefly listed below:

a) **Early Working Exception or 'Bolar Provision':**

Under this, a manufacturer of generic drugs can use the patented invention to obtain marketing approval without patent owner's permission and before expiration of patent. This facilitates the generic manufacturers to market their products as soon as the patent expires, thus favoring generic competition. This provision is sometimes called the regulatory exception or Bolar Provision under Article 8 (WTO, 2001). The US, Canada, Australia, Israel and Argentina have adopted Bolar exception in their patent legislation. In India, such a provision was not needed, since we had not introduced product patents. Similar provision can be adopted now.

b) **Not allowing TRIPS Plus measures and Ever-greening of patents:**

TRIPS plus measures are those which enforce legislation even more strict than that required under TRIPS e.g. those relating to provisions which result in an increase in the life of a patent or grant of data exclusivity, preventing manufacture of generic drugs. The TRIPS agreement is clear on this aspect- it does not regard new use of an old formulation as an inventive step (Art. 27(1)), thus allowing member countries freedom to deny the ever-greening of patents.

c) **Measures already taken by Indian Government**

In this context, India has already made provisions in the recently amended patents act, 2005 under which 'new use' has been made 'not patentable'.

Section 3(d): "the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least employs one new reactant".

Explanation: "Salts, esters, ethers, polymorphs, metabolites, pure form, particle size, isomers, mixtures of isomers, complexes, combinations and

other derivatives of known substance shall be considered to be the same substance, unless they differ significantly in properties with regard to efficacy".

Thus, section 3(d) has been amended to revert to the pre-Ordinance situation wherein any new use of a known substance is not patentable. In other words, a second medical indication is not patentable. Further, new forms of substances such as isomers, derivatives, complexes, polymorphs, metabolites, substance with different particle size etc would need to show significant therapeutic efficacy over the parent substance in order to be patentable.

3. Competition policy

Abuse of IPRs and monopoly practices can be curbed under TRIPS. In fact, Articles 8 and 40, Section 8) of TRIPS clearly provide for appropriate measures to prevent the abuse of IPRs or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology. National competition and antitrust policies can be suitably formulated and used to prevent the build up of excessive monopoly power of certain enterprises and to deal with the possible abuse of monopoly power emanating from patent protection. Apparently, in the US "Compulsory licensing has been specified as a remedy in more than 100 anti-trust cases making available some 40,000-50,000 patents at reasonable or no royalties." (Nogues, 1990)

8.3.4 Suggested measures for drug price control

It has been advocated that the National List of Essential Medicines (NLEM) should form the basis of drugs to be considered for intensive price monitoring, ceiling prices and for imposition of price controls, if necessary.

- **Weighted average price formula:** To start the process, the government should announce the ceiling price of all drugs contained in the NLEM on the basis of the weighted average prices of the top three brands by volume of single ingredient formulations prevailing in the market as on 01.04.2005 in cases where there are less than three brands, the average of all existing brands would be taken.
- **Improving data coverage:** The ORG-IMS data set can be used for this purpose initially with a 20 percent retail margin provided. There is, however, a need to improve the available data coverage, which should be taken up with ORG-IMS or

any other data provider. For drugs which are not reflected in ORG-IMS data, the NPPA should prepare the necessary information based on market data collection.

- **Reference Product notification for price determination:** The Government should specify the reference product in terms of strength and pack size for each product which would form the basis for price determination. The price ceiling would be specified on a per dosage basis, such as per tablet/per capsule or standard volume of injection. The prices of all other strengths and dosages would be determined on the basis of a standard formula, which would be related to the ceiling price of the reference formulation. Price relaxation may be permitted for non-standard delivery systems, packaging and pack sizes through applications to the negotiations committee, which should become applicable for all similar cases.
- **Permitting price relaxation in case of improved/innovative formulations :** In the case of formulations which involve a combination of more than one drug in the NLEM, the ceiling price would be the weighted average of the applicable ceiling prices of its constituents. For formulations containing a combination of a drug in the NLEM and any other drug, the ceiling price applicable to the essential drug would be made applicable. However, the company would be free to approach the price negotiations committee for a relaxation of the price on the basis of evidence proving superior therapeutic effectiveness for particular disease conditions.
- **Streamlining bulk procurement procedures:** In order to determine the reasonableness of the ceiling prices fixed as above, the L1 prices quoted in bulk procurement by Government and other designated agencies would be used after the system of bulk procurement is streamlined. Recognizing that retail distribution has costs not reflected in bulk procurement, a mark up of 100 per cent over this reference price is recommended. Since it would take time to streamline the bulk procurement procedures and to generate reliable data on such bulk procurement prices the ceiling prices should be allowed to rise on the basis of the price index of manufactured goods (this would be a subset of Wholesale Price Index readily available from the Ministry of industry).
- **Online Price Data monitoring:** The regulatory body should set up a computer based system which would scan the prices data provided by companies against

the ceiling prices determined as above and identify formulations which breach the relevant price ceiling. The company manufacturing or marketing such a product would be required to reduce its price or face penal action. The companies should be permitted to represent for any price increase on valid grounds, which should then become applicable to the entire class of products.

- **Price monitoring as per therapeutic segmentation:** In the case of drugs not contained in the NLEM, intensive monitoring should be carried out of all drugs falling into a pre-specified list of therapeutic categories. The reference prices for this purpose would be the ceiling prices of drugs contained in the NLEM, and any significant variation in the relative prices (say above 10 per cent) would be identified for negotiation.
- **Linking grant of approval to price conformity:** Any new formulation based on existing APIs would be required to submit its intended price along with application for marketing approval regulator, which would be granted only if the indicated price is consistent with the relevant ceiling price. Till such time as the NADT is formed, this function will be carried out by the DCGI and NPPA in a coordinated manner. The NLEM should be revised periodically, say every 2 years, in order to reflect new drugs and significant changes in pattern of drug sales within the therapeutic categories.

Despite price controls, monitoring of drug prices has been very poor in India (Rane, 1996) where, significant differences persisted between the prices charged by different manufacturers for the same formulation. Mostly companies with substantial market power charged higher prices and the impact of DPCO did not percolate to the consumers at all (Chaudhuri, 1999). While stressing the fact that the present price controls will be applicable on patented products too and such controls would definitely benefit the customers, Watal (1996) warned that the costs of establishing and maintaining an effective price control over all patented drugs may be very high.