World Health Organization
REGIONAL OFFICE FOR South-East Asia

UHC Technical brief

Data exclusivity and other "trips-plus" measures

Regulating medicines

The pharmaceutical market is highly regulated. Two sets of laws and regulations play a crucial role in this market. These are (i) the intellectual property laws and (ii) the laws and regulations on drug registration. These two sets of laws have different objectives, and are administered by different government agencies.

Intellectual property rights, notably patents (on which this briefing note will focus, as they have the most profound implications on access to medicines), are meant to reward innovation by providing inventors with temporary monopoly rights. Patents, however, confer negative rights: a patent on a certain pharmaceutical product means that the patent holder can prevent others from producing, selling or importing that product. But it does not give the patent holder the right to actually sell that medicine. In order to be allowed to sell a medicine, it has to be registered by the national drug regulatory authority.

The drug regulatory system, or registration system, seeks to ensure that only medicines of assured safety, quality and efficacy are available on the national market, referred to as market authorization. This is important, as consumers do not normally have sufficient information and knowledge about a pharmaceutical product to make their own assessment about its quality, safety and efficacy. In addition, medicines that are ineffective or of poor quality can be dangerous, both for the patient and for public health.

In order to assess the quality, safety and efficacy of a product, the drug regulatory authority would normally require the manufacturer to provide relevant information. For instance, in order to assess the quality of the product, samples would have to be tested, the production procedures would have to be documented and validated, and the production facility may have to be inspected.

The safety and efficacy of pharmaceuticals is demonstrated mainly via preclinical and clinical trials. Safety and efficacy can also be demonstrated by showing that a product is chemically and biologically equivalent to an existing medicine (the safety and efficacy of which are already known). However, by definition, "bioequivalence" cannot be demonstrated for entirely new pharmaceuticals, as there will be no similar existing medicines with which to compare them. Thus, in practice, only generic manufacturers demonstrate the safety and efficacy of their products via bioequivalence tests.

This latter point is important, as bioequivalence tests are much smaller in scale than full-fledged clinical and preclinical trials. Thus, they can be conducted faster and are considerably less expensive.

Data exclusivity

The clinical and preclinical trial data that originator companies submit to the regulatory authority are at the centre of the debate on "data exclusivity".

Bioequivalence data prove that a generic medicine behaves in the human body in the same way as the original product. The safety and efficacy of the particular medicine will have already been established through the clinical trial data provided by the originator company. This (apart from the bioequivalence data) is what a regulatory authority often indirectly relies on in approving the generic version.

Originator companies argue that, as they invested substantially in these trials, they deserve a period of "data exclusivity"; a certain length of

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time during which the regulatory authority cannot rely on the originator's data in order to register a generic version of the same product.

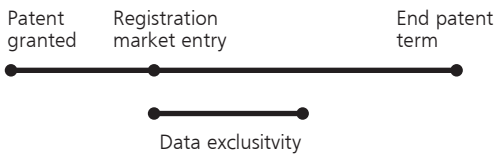
By implication, as long as the exclusivity lasts, generic producers would have to submit their own data to prove safety and efficacy, which would oblige them to repeat the clinical trials and other tests. This would cause significant delay, which many generic manufacturers cannot afford. Moreover, it would raise serious ethical questions, as clinical trials would have to be repeated, purely for commercial reasons.

Alternatively – and in practice much more likely – generic producers would have to delay the launch of their product until the end of the exclusivity period.[a] Thus, data exclusivity diminishes the likelihood of speedy marketing of generics, and delays competition and price reductions.

Implications of data exclusivity

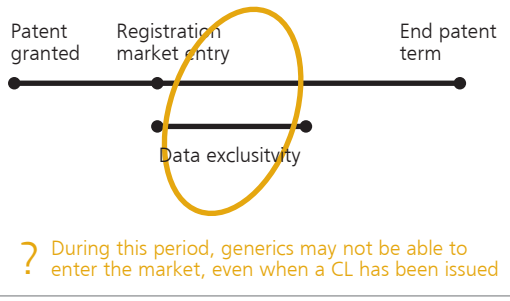
Proponents of data exclusivity at times point out that it does not have major implications, as the period of data exclusivity would normally be shorter than the patent duration (Fig. 1a).

***Fig. 1a:* "Standard" situation**



Yet, there are some questions as to whether data exclusivity could prevent the registration of medicines produced under a compulsory license (Fig. 1b). If so, data exclusivity would effectively render the compulsory license inoperative.

***Fig. 1b:* Effect of data exclusivity on compulsory licensing**



a In the United States, data exclusivity lasts five years for new chemical entities and three years for new indications. Data exclusivity for biological drugs lasts 12 years. In the European Union, it is 10 years with a possible one-year extension in case the drug is registered for a significant new indication.

Second, if a period of data exclusivity is also granted when an existing medicine obtains marketing authorization (or registration) for a second or new indication or for a new form, as in the case of paediatric versions of already approved drugs, data exclusivity could (be used to) extend the period of exclusivity of the originator product (Fig. 2).

***Fig. 2:* Extension of data exclusivity for second indication**

Finally, data exclusivity could prevent the registration of generic versions of medicines even when there is no patent on a medicine, e.g. when a pharmaceutical product does not meet the standards for patentability (e.g. because it is not new or an inventive step), the patent lapses, when a country has no patent law, or when patents are not being granted for pharmaceuticals. The latter situation can arise in least-developed countries that are World Trade Organization (WTO) Members, which do not have to grant or enforce patents for pharmaceuticals until 2033.[b]

TRIPS does not require data exclusivity

It has at times been argued that Article 39.3 of the TRIPS Agreement makes it mandatory for countries to grant data exclusivity. However, careful reading of Article 39.3 (*see* Box 1) does not warrant this conclusion; the text of the Article does not make any reference whatsoever to exclusivity or exclusive rights.

Article 39.3 requires countries to protect undisclosed registration data about new chemical entities (i) against disclosure and (ii) against unfair commercial use. Thus, regulatory authorities may not publish registration data,[c] or share them with third parties (e.g. generic competitors). There is some debate as to what exactly is meant by "unfair commercial use". Does the use of bioequivalence studies instead of full clinical trials represent "unfair commercial use"? There is no "unfair

b See WTO Document IP/C/73.
c However, it is important to note that they may do so when this is necessary to protect the public.

commercial use" by the generic company: the generic manufacturer never uses the originator's data, and does not even have access to them. Meanwhile, regulatory authorities also do not normally use the originator's data, though, as mentioned above, they may (indirectly) rely on them. Even even if the regulators were to use the data, it would not be commercial use, as the regulatory agency is not a commercial organization. The unfair comercial use does not apply to the work of a government regulatory body.

Thus, legal and public health experts believe that TRIPS requires data protection, but not data exclusivity – and national laws do not need to be more restrictive than TRIPS. It is important to note that least-developed countries are not required to provide the data protection mandated by TRIPS on pharmaceuticals till 2033.

Box 1. Article 39.3 of TRIPS

Members, when requiring, as a condition of approving the marketing of pharmaceutical or of agricultural chemical products which utilize new chemical entities, the submission of undisclosed test or other data, the origination of which involves a considerable effort, shall protect such data against unfair commercial use. In addition, Members shall protect such data against disclosure, except where necessary to protect the public, or unless steps are taken to ensure that the data are protected against unfair commercial use.

It is also worthwhile noting that in developing countries, regulatory authorities often rely on data that are already published or otherwise in the public domain – and that therefore do not fall within the scope of Article 39.3 (which imposes protection only for undisclosed data).

Mitigating the impact

As mentioned above, from the perspective of public health and access to medicines, it is preferable not to grant data exclusivity. Moreover, there is no requirement under international law that countries grant data exclusivity; countries have to provide for data protection only.

If a country, for some reason (*see below*), does grant data exclusivity or otherwise provides data protection beyond that is mandated by TRIPS, it is important to limit the potential negative implications of this on access to medicines. This can, for example, be done by limiting its duration (e.g. the start date for exclusivity could be counted from the date of first registration of the medicine anywhere in the world) and/or scope (e.g. only for new chemical entities), and by allowing registration of generic versions during the period of data exclusivity in case of compulsory licensing or non-patented medicines, when the government so notifies.

Other "TRIPS-plus" provisions

Requirements to offer exclusive rights to originator products that go beyond what is mandated by the TRIPS Agreement are sometimes referred to as "TRIPS-plus" requirements. Data exclusivity is an important example, but not the only one. Some instances of other "TRIPS-plus" requirements are given below.

- *Patent term extensions*, i.e. provisions to extend the duration of a patent beyond the 20 years required by TRIPS, in order to compensate for delays in granting the patent or in registering the medicine. It is important to note that there is no obligation, from an international/legal perspective, to grant such extensions.
- *Limitations of the grounds for compulsory licenses*, which may preclude issuing a compulsory license for reasons of public health. Requirements to limit the grounds (or reasons) for issuing a compulsory license go directly against the Doha Declaration,[d] which has unambiguously confirmed that countries are free to determine the reasons for granting compulsory licenses.
- *Linkage between patent status and generic registration*, meaning that the regulatory authority may not register generic versions of a pharmaceutical that is under patent. This would be problematic, as the regulatory authority would probably lack the human and other resources to check the patent status of each product. Moreover, in case there is a patent, regulators may not have the expertise to assess whether the patent is valid and would be infringed.[e] As a result, it is likely that they will enforce all patents, even invalid ones – and thus create additional and unnecessary hurdles for generic competition.[f]

d Declaration on the TRIPS Agreement and Public Health, WTO Ministerial Conference, Doha, Nov. 2001 (or the "Doha Declaration").

e For these reasons, regulatory agencies in the European Union (EU) have so far refused to implement such "linkage" between patent status and registration of medicines.

f In 2002, the US Federal Trade Commission found that when generic companies initiate patent litigation, they prevail in a significant number of cases. In 2009, the EU Competition DG reached similar findings regarding patent litigation between originators and generic companies in the EU.

- *Other "TRIPS-plus" requirements* deal with the administrative procedures related to patent applications and/or the granting and revocation of patents. The common feature of all "TRIPS-plus" provisions is that they have the effect of complicating and/or delaying the marketing of generics, and thereby reducing access to medicines (Box 2).

Box 2: Expanding data exclusivity requirements

Initially, requirements for data exclusivity focused on undisclosed data submitted to regulatory authorities. However, more recently, there have been cases where such demands just referred to "information", which could potentially expand the scope of data exclusivity significantly by preventing regulators from relying on data that are in the public domain in order to register a generic medicine.

In addition, where national drug regulators rely on approval by the regulatory agency of another country, undisclosed or other data/information may never be submitted to such a drug regulator by an originator. Even though there would then be no "data", the expanded scope of these provisions in recent trade agreements still requires a period of exclusivity to be granted.

The range of medicines covered by data or marketing exclusivity demands has also increased. While the requirement for data protection in the TRIPS Agreement is limited to those pharmaceuticals containing a new chemical entity, data exclusivity in several bilateral trade agreements covers new forms and new indications as well. In more recent agreements, exclusivity for biological drugs has also been discussed.

Yet, while these requirements go beyond the TRIPS Agreement or, in other words, are not required by TRIPS, in recent years, "TRIPS-plus" requirements have been incorporated in certain bilateral or regional free trade negotiations, in bilateral investment agreements, and in other international agreements. From the perspective of access to medicines, the countries should guard against these provisions.

Conclusion

Medicines fall under two separate legal and regulatory systems: the intellectual property system and the drug regulatory system. These systems have different objectives, are administered separately and function independently. Efforts to integrate these two systems via data exclusivity, "linkage" or other means are likely to have negative implications for access to medicines. Thus, countries would do well to keep these systems separate to ensure access to medicines.

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