

Adaptive Licensing: Could patients be the answer to the data problem?

Patients could play a key role in generating the data required to make Europe's Adaptive Licensing a success.

The timing of patient access to new medicines has always been one of the major conundrums associated with licensing new therapies. The balance between making a novel treatment available in time to benefit patients, while retaining safeguards to minimise unforeseen risks is a difficult one to strike.

The concept of adaptive licensing has come to the fore this year following the EMA's announcement in March that it will be launching a pilot project on adaptive licensing.

The aim of the pilot project is part of the European Union regulator's objective of improving timely patient access to new medicines, and it is hoped the project will lead to permanent changes which would allow early access in certain circumstances.

The concept of the adaptive licensing approach is that certain new treatments may be authorised for use in a restricted patient population, based on an initial positive assessment of the likely benefits and risks. Subsequent phases of evidence-gathering are then used to confirm the initial appraisal and adapt the marketing authorisation, allowing a broader patient population access to the medicine¹.

This procedure differs from the traditional licensing approach, where an experimental treatment, on receiving a licence, is presumed efficacious and safe for use in a given patient population. Instead, there is a gradual and evolving market entry process, reflecting decreasing levels of uncertainty about the likely benefits and harms - hopefully providing a pragmatic solution to the problem of early access^{1,2}. It is for this reason that adaptive licensing will be

of particular benefit to patients facing serious conditions where there is an unmet medical need¹. In addition, there is likely to be an increase in the involvement of healthcare providers in the R&D process and patients should be afforded a greater role in decision making about their therapy^{2,3}.

The EMA is progressing its plans by calling for sponsors to engage in its pilot project. Companies have been asked to submit ongoing programmes that include experimental medicines in the early stages of clinical development with the aim of using real examples to help understand how adaptive licensing might be applied for different types of products and indications¹.

“The most important shift will be in the approach to data collection, which will now have to occur over the entire lifecycle of the product”

As with any new process, there are likely to be difficulties associated with implementing adaptive licensing. The specifics of a pathway to market will likely vary by product and therapeutic area, as will the quantity of data required for an initial authorisation⁴. The most important shift will be in the approach to data collection, which will now have to occur over the entire lifecycle of the product³. Robust evidence-collection systems will be necessary². The EMA,



as part of its framework for individual pilot studies, asks sponsors to consider 'adaptive' strategies for patient access, monitoring and for ensuring they have the infrastructure required for the observational part of adaptive licensing¹.

One problem is likely to be that traditional large-scale data collection methods, via physicians for example, tend to be expensive and not very practical. The cost and complexity of generating enough information to justify the initial licence alone could easily become prohibitive. Innovative approaches to this problem may well be necessary. One solution might be to obtain information directly from the patient (or parents - in the case of children). The collection of Patient Reported Outcome (PRO) data can potentially accumulate much more information than a physician enters on a clinical system or takes from a consultation. Provided there are suitable safeguards, most patients are happy to anonymously share their health data in order to improve care, aid research or help others⁵. In this way, direct access to the wealth of knowledge the patient has about

their condition can be gained using data gathering tools. For example, carefully designed web-based surveys can generate large amounts of useable information in a cost-effective and time efficient manner. There is however, the question of how to collect data from those without online access.

Having the relevant medical expertise coupled with experience in online real world data collection and control is certainly invaluable. Patients need to be able to understand the questions being asked and surveys need to be designed in a way that will generate scientifically sound data which can provide the relevant answers. It is also important to ensure that a representative cross-section of the potential patient population is sampled. Many prospective patients, for reasons of age, education or financial constraints may be unable to complete an online survey. A multi-lingual telephone service is therefore an essential supplement to web-based questionnaires. Once in place such a system for collecting real world information as PRO data can be used to gather information in a structured and efficient manner and is ideally suited to the iterative phases of evidence gathering proposed as part of the adaptive licensing initiative¹.

Despite the fact that there have long been calls for a more flexible licensing approach³, there have also been concerns raised that the new scheme might involve a radical transformation of the existing regulatory framework². It is important therefore to emphasise that adaptive licensing is not intended as a shortcut to development nor is it an excuse to dispense with scientific rigour. The aim is to improve the quality of knowledge gained, particularly during the early stages of product development⁴. Organisations such as NICE have already made it clear they are open to the submission of non-randomised controlled trial data providing inherent biases have been taken into account².

There are, unquestionably, many advantages to the adaptive licensing paradigm. Access to new therapies would be gradual and based on the assimilation of evidence not only from clinical trials but also from observational data which would describe safety, efficacy and effectiveness of drugs in real world use⁴. The overall costs of

“Just as there is scope to innovate in the timing of conditional access to new treatments, there might also be the chance to break new ground in data collection by handing the initiative to patients”

treatment development might well fall as a consequence of better-informed decisions on product viability at an earlier stage⁴. Clearly there are obstacles too however, and others may only become apparent as the EMA's pilot project progresses¹.

It is important that all stakeholders accept that initial approval is not just early but also conditional⁴. However, the EMA's pilot project by definition, also creates new opportunities: just as there is the scope to be innovative in the timing of conditional access to new treatments during licensing, so there might also be the chance to break new ground in the process of data collection by handing the initiative to patients.

References

1. EMA. Adaptive licensing http://www.ema.europa.eu/ema/index.jsp?curl=pages/regulation/general/general_content_000601.jsp&mid=WC0b01ac05807d58ce
2. Uguen, D et al. Accelerating development, registration and access to medicines for rare diseases in the European Union through adaptive approaches: features and perspectives. Orphanet J. Rare Dis. 9, 20 (2014).
3. Eyeforpharma. Adaptive licensing: How it impacts Pharma and the patient <http://social.eyeforpharma.com/market-access/adaptive-licensing-how-it-impacts-pharma-and-patient>

4. Eichler, H-G et al. Adaptive licensing: Taking the next step in the evolution of drug approval. Clin. Pharm. & Ther. 91, 3 (2012).
5. Institute of Medicine www.iom.edu/SharingHealthData

About the author:

Alan Wade is the founder of Patients Direct. He is a former lecturer in anaesthesia and general practitioner and one of the two founder directors of CPS Research, a clinical trials company based in Scotland. CPS Research has been established for over 25 years and conducts mainly community-based trials in multiple areas including psychiatric disorders, vaccine development, chronic pain and migraine.

His second company, Patients Direct, has the specific purpose of collecting patient reported naturalistic, real-world data. It is currently being employed in areas as diverse as childhood rheumatoid disease, influenza vaccination and depression.

In addition to his clinical interests, Wade regularly gives presentations at international meetings, publishes in the medical press and sits on advisory boards.

Contact him via:
alan@patientsdirect.org
Tel: +44 141 946 7888
www.patientsdirect.org

Thanks to medical writer Dr Bobby A Brown BSc (Hons) PhD CAPM for assistance with this article.

Have your say:

What are the potential obstacles to Adaptive Licensing being a success in Europe?