Biosimilar medicines

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ABSTRACT

Biological medicines have become indispensable in the treatment of patients with serious diseases such as cancer and inflammatory diseases. Biosimilars are medicines which are developed to be similar to existing biological medicines (the 'reference product'). For the European market, they are approved by the European Medicines Agency. Owing to the rising importance of biosimilar medicines, the European Association of Hospital Pharmacists (EAHP) decided to set out its position on key issues concerning biosimilar medicines in a position paper. The topics included the role of hospital pharmacists in the uptake of biosimilar medicines in healthcare with regard to selection, procurement, logistics, information, education and collecting real-life experience (eg, in monitoring and pharmacovigilance). In addition, the paper touches on the views of the association for the naming of biosimilar medicines, extrapolation of indications, interchangeability, switching and substitution of biosimilar medicines and the provision of information about biosimilar medicines.

Technical update of the position paper approved by the EAHP General Assembly, June 2018.

This paper sets out the position of the EAHP on biosimilar medicines.

The objective of the paper is to set out the position of EAHP on important issues concerning biosimilars, including the role of hospital pharmacists regarding the uptake of biosimilars in healthcare in terms of selection, procurement, logistics, information, education and collecting real-life experience (eg, in monitoring and pharmacovigilance).

A biological medicine is a medicine that contains one or more active substances made by, or derived from, a biological source—ie, living cells or organisms. The European Medicines Agency (EMA) defines a biosimilar medicine as "a medicine that is developed to be highly similar to another biological medicine already marketed in the EU (the so-called 'reference medicine')."[1]

Overall, EAHP has confidence in EMA's regulatory pathway for biological reference products and biosimilar medicines. EAHP, as for all medicines, recommends informed patient involvement and shared decision-making.

NAMING OF BIOSIMILAR MEDICINES

Policy debate in respect to how biosimilar medicines should be named has been conducted at international[2] and national[3] levels. Both the World Health Organisation (WHO) and the American Food and Drug Administration (FDA) advocate for the use of the same non-proprietary name to which a randomly generated four-letter code should be affixed at the end.[4] Opponents argue that giving biosimilar medicines the same INN designation could make it harder to track adverse reactions and/or that random generated suffixes will make product recognition by prescribers, healthcare professionals and patients difficult. This could potentially compromise patient safety. By contrast, in Japan, regulations have been instituted that require the biosimilar medicine to carry the non-proprietary name of the reference product, a mention that it is a 'biosimilar' and a number indicating the order in which the biosimilar has been approved.[5]

Reflecting on these arguments, EAHP takes the position that biosimilar medicines should hold the same INN as the reference product. This avoids confusion over, or undermining of, well-formed regulatory oversight mechanisms for the safety of biosimilar medicines. Moreover, a suffix will make the naming system more confusing for prescribers, other healthcare professionals and patients.

Extrapolation of indications

Extrapolation of indications is defined as the regulatory and scientific process of granting a clinical indication to a medicine without own/new clinical efficacy and safety data to support that indication. In such cases, clinical data are typically generated in one indication and, taking into account the overall information gained from the comparability exercise, may then be extrapolated to the other indications.[6]

EAHP supports the practice of EMA that uses scientific and regulatory principles when assessing whether extrapolation of indications is appropriate.

Interchangeability, switching and substitution of biosimilar medicines

The regulatory process of EMA ensures that an approved biosimilar is highly similar to its reference product in terms of quality, safety and efficacy, including immunogenicity. Given the remit of EMA, the agency cannot have an opinion on interchangeability. However, in Kurki *et al* it is stated that given the regulatory process, a biosimilar is interchangeable with its reference product.[7] The authors have published the article as employees of their respective national medicines agencies.

Further, since biosimilars have been shown to be highly similar to the same reference product, it is highly unlikely that there would be any problems concerning interchangeability between biosimilars. So far no studies have addressed this question, but the risk management plans of all biosimilars include an obligation to search for switch-related adverse events (Kurki P, personal communication).

EAHP supports the view that a reference product and its biosimilar(s) are interchangeable and therefore can be switched. EAHP holds the same view for biosimilars to the same reference product. Nevertheless, due to patient specific issues there are

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Interchangeability: The possibility of exchanging one medicine for another medicine that is expected to have the same clinical effect. This could mean replacing a reference product with a biosimilar (or vice versa) or replacing one biosimilar with another.[1]

Switching: The decision by the treating physician to exchange one medicine for another medicine with the same therapeutic intent.[1]

Substitution: The practice of dispensing one medicine instead of another equivalent and interchangeable medicine at the pharmacy level without consulting the prescriber.[1]

instances where it is not appropriate to make a switch. It should therefore be ensured that the considerations of the prescriber, the pharmacist and the patient whether to choose the reference product or its biosimilar are taken into account.

Provided that the above safeguards are in place, EAHP supports substitution at hospital pharmacy level.

In both instances, it is acknowledged by EAHP that decisions regarding switching and substitution may be taken on either national or local level.

Information on biosimilar medicines

The provision of unbiased information to the relevant stakeholders in national health systems is key to enable sound discussions, resulting in appropriate decisions on the use of biosimilar medicines. Such information should make it possible to understand the relevant terms and concepts— i.e. 'biosimilar', 'reference product', 'comparability exercise', 'extrapolation', 'interchangeability', 'switching' and 'substitution'. (The terms and concepts mentioned here are dealt with in more detail by the Information guide for healthcare professionals).[1]

Competent authorities and other unbiased information providers such as national medicines information centres should be responsible for the dissemination of information about biosimilar medicines to stakeholders in the national health systems (payers, health professionals and patients).

EAHP advocates that the providers should refer to and consult the expertise of the hospital pharmacy profession in the development and dissemination of such information, including education of patients and healthcare personnel.

The role of the hospital pharmacist

As stewards of appropriate selection, procurement, logistics and use of medicines and key players in pharmacovigilance, hospital pharmacists are capable of and uniquely positioned to promote the appropriate utilisation of biosimilar medicines.

Hospital pharmacists provide a 'hub of information' in terms of the uptake, good use and evidence base (ie, monitoring of outcomes, real-world use and reporting of adverse events). Their role is therefore particularly relevant with regard to switching and providing the evidence on patient safety and treatment quality. Their expert knowledge also puts hospital pharmacists in a position to provide advice on the quality, safety and efficacy of biosimilar medicines to different fora, including, but not limited to, pharmacy and therapeutics committees, national and international advisory boards as well as patient organisations.

On matters concerning *naming of biosimilar medicines*, EAHP
- ► Supports biosimilar medicines holding the same international non-propietary name (INN) as the reference product.

On matters concerning *extrapolation of indications*, EAHP
- ► Supports that where regulatory approval exists, extrapolation of indications is appropriate.

On matters concerning *interchangeability, switching and substitution of biosimilar medicines*, EAHP
- ► Supports that a reference product and its biosimilar(s) are interchangeable and therefore can be switched.
- ► Supports that a biosimilar product and other biosimilar(s) to the same reference product are interchangeable and therefore can be switched.
- ► Supports that decisions regarding switching and substitution should involve the relevant stakeholders (patients, prescribers, pharmacists and others).
- ► Acknowledges that such decisions may be made on national level, involving the relevant stakeholders (patients, prescribers, pharmacists and others).
- ► Supports that under certain conditions substitution on hospital pharmacy level can occur.

On matters of *information about biosimilar medicines*, EAHP
- ► Calls upon competent authorities to take lead responsibility for the dissemination of unbiased information about biosimilar medicines. The expertise of hospital pharmacists should be consulted in the development of such information.

On matters relating to *the role of the hospital pharmacist*, EAHP
- ► Advocates for the use of the the hospital pharmacist's knowledge in promoting the appropriate selection, procurement, logistics and use of biosimilar medicines, and in providing education about them to both patients and other healthcare professionals.
- ► Encourages the involvement of hospital pharmacists in pharmacovigilance.
- ► Calls for the utilistation of the expertise of hospital pharmacists by the relevant fora dealing with biosimilar medicines.

Collaborators Delegates of the 48th EAHP General Assembly.

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