

The blind spots in drug research

How much money does the public sector invest in the development of medicines? The AIHTA aims to shed light on this issue and uses antibiotics as an example: Without public subsidies and grants, there are no new products.

‘It is not only the pharmaceutical industry that is an innovator, but also the public sector’. With these words, Priv. Doz. Dr Claudia Wild, Managing Director of the Austrian Institute for Health Technology Assessment (AIHTA), sums up what the EU will require of the industry in future: companies that want public healthcare systems to purchase their products must disclose how much public funding was involved in the entire development process. From the basics of research to market access. By the end of 2025, the AIHTA - as part of an EU-funded project - wants to provide health insurers and health authorities in the member states with a manual for price negotiations with the industry. In this country, this could be of specific use to regional hospitals and social insurance organisations. ‘It is intended to provide guidance for self-help,’ explains Wild. In detail, it is about how to request data from manufacturers or how to research it yourself. Initial experience of incorporating such information into price negotiations has already been gained in Italy and France.

The first part has now been completed by the AIHTA commissioned by the EU using antibiotics as an example and has also been tested for practicability: ‘Piloting a Framework for analysing the public contributions to R&D: new antibiotics in focus’ has now been published. Wild: ‘We want to provide support when it comes to finding out where public funds have flowed along the value chain - directly or indirectly.’ This includes basic research, for example, which is largely funded by the public sector almost everywhere. University spin-outs, which are later taken over by industry, or location and economic development programmes for production facilities are also to be quantified - as is the infrastructure in hospitals that are used for large clinical trials by industry. All 126 antimicrobial drugs under development, discontinued and authorised in the last ten years were examined.

Antibiotics as an example of market failure

When it comes to important medications like antibiotics, the results that have now been presented make people pay close attention. They show that new products for the fight against resistance are developed almost exclusively with public funds. The background to this is that the interests of the industry are different, as the market fails for new preparations: they are only used in emergencies and are ‘only’ effective against one pathogen. From the companies’ point of view, this means that there is little potential for profit. The public sector has therefore stepped in to help with development. Since 2014, 27 new antimicrobial agents have been authorised, 17 of which were developed by large pharmaceutical companies, but ten - and therefore more than a third - by SMEs. There are 17 compounds in phase 3, 5 of which were developed by large companies and 11 by SMEs.

The pattern is always the same - for all drug groups, says Wild: ‘Practically all basic research is carried out by the public sector.’ Each university then has a technology transfer office for knowledge transfer - to support patents and find industrial partners. These usually only come on board in the clinical phases, when it is largely clear that a development can no longer fail. The risk cited by the industry,

which results in high asking prices during negotiations, is therefore often borne by the public sector, which in turn works with venture capital. Wild: 'The public sector also bears a risk. It just doesn't talk about it as often as companies do.' An in-depth investigation into the antibiotic drug Venatorx, for example, revealed public investments totalling around 655 million US dollars, which clearly dwarfs private investment funds at 45 million.

Transparent database is missing

However, the way in which public funds are used is very broad and often difficult to grasp. There is no reporting on what exactly happens with the money and what objectives are associated with it. In the public debate, this fundamental role of the public sector, the financial commitment and the risk that is assumed, is completely lost. 'We all live in the myth that the pharmaceutical companies alone are the innovators and that the prices are the result of the high risk. This is wrong,' says Wild, summarising the latest AIHTA findings. And she puts her finger in an open wound: while the EU explains what it does with the money and a corresponding database is available, there are currently no such transparent processes at national level. In Austria, as in the other member states, a transparent, structured processing of the data is needed to shed light on the darkness.

Wild C, Sehic O, Schmidt L, Fabian D. Public Contributions to R&D of Health Innovations: a Framework for Analysis categories for analysis. <https://doi.org/10.1016/j.healthpol.2024.105235>.

Schmidt L, Sehic O, Theuretzbacher U, Fabian D, Wild C. Piloting a Framework for analyzing the public contributions to R&D: new antibiotics in focus. <https://doi.org/10.1080/20523211.2024.2449045>.

For further information please contact:

AIHTA
Priv. Doz. Dr. Claudia Wild
Director AIHTA

p.: +43(0)1-2368119-0
e-mail: office@aihta.at

HTA Austria - Austrian Institute for Health Technology Assessment GmbH
Garnisongasse 7/20
1090 Wien, Österreich
Tel.: +43(0)1-2368119-0
Fax: +43(0)1-2368119-99
E-Mail: office@aihta.at
aihta.at