Drug research and development more efficient than expected

February 27 2015

Drug R&D costs have increased substantially in recent decades, while the number of new drugs has remained fairly constant, leading to concerns about the sustainability of drug R&D and question about the factors that could be responsible.

To investigate the efficiency in the development of new drugs, the researchers analyzed a data set consisting of new drugs approved by the FDA. They looked at efficiency indicators that could potentially positively influence the approval of new drugs.

Lower costs, faster approval

The study lead by Prof. Thomas D. Szucs analyzed 257 new drugs that were approved by the FDA from 2003 to 2013. To assess the so-called innovation efficiency, the researchers analyzed specific parameters and factors. The study shows: Although there remains some potential for efficiency enhancement, several parameters have developed positively in the past decade.

The researchers also discovered that new drugs get approved earlier and with less use of resources, when they entered the approval process assigned to special categories or programs. Affiliation to these categories alone reduces for example the probability of having to conduct expensive pivotal trials - a clinical trial designed to test the effectiveness of a drug against a placebo control group.

In conclusion the results show that market access of new drugs is not inefficient. Important is that "both industry and authorities work together in further developing drug approval in order to provide innovation to patients in a timely manner", says Szucs.

More information: *Nature Reviews Drug Discovery* (2015), published online 27 February 2015, DOI: 10.1038/nrd4563

Provided by University of Basel

Citation: Drug research and development more efficient than expected (2015, February 27) retrieved 19 November 2023 from https://medicalxpress.com/news/2015-02-drug-efficient.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.