Is the pharmaceutical industry improving with regard to access to essential medicines?

Despite progress in many countries, about a third of the world’s population does not have regular access to essential medicines. The responsibility to resolve this problem lies with many, including the pharmaceutical industry. Since 2008, the Access to Medicine Index (the Index) has ranked the 20 largest research-based pharmaceutical companies according to their efforts in making relevant products more available, affordable, and accessible in developing countries.

The 2012 Index ranking is based on companies’ commitments and actions to provide medicines, vaccines, and diagnostic tests in 103 low-income and middle-income countries, focusing on 33 high-burden communicable, non-communicable, and neglected tropical diseases, as well as a range of maternal and neonatal disorders. Information received from companies is cross-checked with other sources, and peer reviewed by experts. The ranking is based on 101 indicators in seven technical areas: organisation and management of access programmes; conduct of relationships with policymakers, competitors, customers, and the public; research and development on relevant products; pricing policies and distribution; patent and licensing practices; capacity building in developing countries; and product donations and philanthropic activities. For each technical area four aspects are assessed: company commitment, transparency, performance, and innovation.

To complement the relative rankings of the 20 companies in the biennial index, we did an assessment of absolute changes in company performance over time. We did two analyses: a crude assessment of change in overall company scores, and a more detailed analysis of changes in the individual indicators that could be reliably compared across timepoints and which showed the highest correlation with overall company scores. We also identified the six most representative indicators for research activities and used the underlying absolute figures to assess progress in company financial investments, research partnerships, and the pipeline of relevant molecules. Details of the methods and full results of our study are available elsewhere.

Of 101 indicators in the Index, ten fulfilled all comparability criteria for the detailed longitudinal analysis, and six core-scored indicators with the highest correlation with overall scores were used for the detailed longitudinal analysis. We made several important observations. First, the crude analysis of all 101 indicator scores showed that 17 of 20 companies increased the overall score underlying their Index ranking between 2010 and 2012 (appendix). Although many indicators cannot be compared fully, this finding presents a first indication of change. Second, 50 (42%) of 120 company scores for the six core indicators increased in value, whereas only two (2%) of 120 decreased. These changes represent a very strong signal on the direction of change in company behaviour. The size of this change is not easy to measure, but an observed 84% rise in the overall average of the six indicators from 1·45 to 2·67 (scale 0–5) is the best available estimate. This difference is not significant because of the wide variation between the companies, but all six underlying average scores are also rising (figure). Finally, we found that all six average numbers underlying the research indicators are also increasing, with a median increase of 132% (range 49–348%), suggesting that companies have more than doubled their research and development activities in diseases covered by the Index.

These average values mask many differences between technical areas and between companies. For example, the industry seems well advanced in the area of governance and donations, but has a long way to go in data exclusivity and patents. Differences between companies are presented in the full report.

The question remains whether an increase in Index scores shows real progress in company behaviour. Companies with clear strategies to increase their Index ranking will have strengthened both their activities and their reports. However, all Index indicators, and especially those selected for this study, were chosen for their robustness and potential for verification. We believe that progress in the Index scores for these indicators is likely to represent real progress.

We therefore conclude that many of the top-20 research-based pharmaceutical companies are moving in the right direction in their commitments and activities to promote access to essential medicines in low-income and middle-income countries. This first longitudinal assessment adds a dynamic perspective to the biennial Index ranking, and will be used as a baseline for future assessments.

Figure: Changes in six core ATM indicators, 2010–12
R&D=research and development.
This study was funded by the ATM Foundation, which receives most of its funding from the Bill and Melinda Gates Foundation, the UK Department for International Development, and the Government of the Netherlands. We declare that we have no conflicts of interest.

*Hans V Hogerzeil, Jayasree K Iyer, Lisanne Urlings, Tara Prasad, Sara Brewer

hans.hogerzeil@bluewin.ch

Access to Medicine Foundation, Haarlem, Netherlands, and Department of Global Health, University of Groningen, Netherlands (HVH); and Access to Medicine Foundation, Haarlem, Netherlands (JKI, LU, TP, SB)


