Addendum: Low-value approvals and high prices might incentivize ineffective drug development

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In hindsight, we realize that we could have been more precise when using the terms ‘profit’ and ‘revenue’ in our article ‘Low-value approvals and high prices might incentivize ineffective drug development’. Total revenue is defined as the receipts from sales¹. Profit is defined as the excess of the receipts from sales over the spending of a business during any period¹. Hence, profit is the total revenue minus the costs of a business, over a given period. Profit calculations include credit transactions and asset revaluations as well as cash transactions and changes in the value of real assets¹.

Nevertheless, this imprecision does not affect the validity of our insight. In our analysis we show that the break-even point for revenue and cost of development (under the specific conditions of our ‘thought experiment’) would be US\$440 million. The annual revenue from the sale of many approved cancer drugs now routinely exceeds \$1 billion, and thus we conclude that “pharmaceutical companies could, hypothetically, turn a profit by testing inert chemical compounds in phase III trials”. In the conditions we define in our thought experiment, companies would therefore receive sufficient revenues to make a profit.

References

1. Black, J., Hashimzade, N. & Myles, G.A. *A dictionary of economics*, 4th edn online. (Oxford, 2013).

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