# The Fair Pricing of Medicines

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## **INTRODUCTION**

A formula for the fair pricing of medicines may be used by the manufacturing industry in the context of establishing a fair price for a pharmaceutical product. It may also be used within a critical context in order to evaluate the price of a marketed product. This would be especially useful in developing countries where medicines account for up to 60% of health spending (Cameron et al. 2008).

## **AIMS**

To develop a formula for the assessment of medicine prices by:

- Identifying critical factors which influence price-making decisions
- Evaluating current medicine prices
- Applying the formula to indicate the fairness of the price

#### **METHOD**

Several factors which affect the price of a drug were identified and selected for the preliminary drafting of the formula. Such factors included the effectiveness of a drug, whether the drug satisfies an unmet medical need, the severity or seriousness of the targeted disease or condition, the complexity of the active pharmaceutical ingredient (API) and the quality adjusted life years gained, among other factors (Table 1).

British National Formulary and Epocrates were used to obtain drug prices.

Factors influencing the prices of a medicinal products are assessed depending on their nature. A numerical scale of 1-5, 1-3 or an unrestricted numerical value was used.

#### Discussion

The formula will be drafted and will contain the relevant factors which affect the product's price. This formula will result in an index which, when set within a range of defined bands of values, will indicate whether a drug should be sold at a cheaper or higher retail price.

Once the formula is applied to the selected drugs and a result is obtained, these will be grouped according to their deviation from the theoretical values obtained from the formula.

The factors shown in Table 1 are being assessed with regards to drugs from 5 classes: Angiotensin converting enzyme (ACE) inhibitors, β-blockers, anticoagulants, oncology drugs and selective serotonin reuptake inhibitors (SSRIs).

<u>Factor</u>	Assessment Scale
Effectiveness	Numerical: 1-5
Unmet Medical Need	Numerical: 1-5
Seriousness of disease	Numerical: 1-5
Degree of innovation	Numerical: 1-5
Complexity of API	Atomic Mass Units
Complexity of formulation	Numerical: 1-5
Complexity of dosage form	Numerical: 1-5
Chronic or Acute Treatment	Numerical: 1-3
Number of potential consumers	Numerical: 1-5
Patent Coverage	Numerical: 1-2
Purchasing power parity	Numerical: 1-2
Availability of third-party payers	Numerical: 1-3
Lack or reduction of side-effects	Numerical: 1-2
Need for blood monitoring	Numerical: 1-2
Need for other monitoring	Numerical: 1-2
Life years gained	Numerical Value
Quality Adjusted Life Years Gained	Numerical Value
Selection of therapy	Numerical: 1-2

Table 1: Factors to be considered for the drafting of the formula

## CONCLUSION

Such a formula could help in the decision-making process involved in pricing a new pharmaceutical product in order to result in a fair price which the patient, consumer or third-party payer can afford.

#### References

1. Cameron, A. Ewen, M. Ross-Degnan, D. Ball, D. and Laing, R. Medicine prices, availability, and affordability in 36 developing and middle-income countries: a second analysis. Lancet. 373, 240-249 (2009)