Threshold Pricing Model: Not Just Another Cost-effectiveness Model

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BACKGROUND

- Economic evaluation evolved, in part, to address payer concerns over pharmaceutical prices.
- In the early days of economic evaluation, drug products were often evaluated in terms of their budget impact.
- Manufacturers began retaining part of the cost benefit for themselves, which increased the need for cost-effectiveness models.
- Cost-effectiveness analysis (CEA) quantified the incremental cost and net health benefit of different treatment strategies.
- Payer representatives commonly used CEA to inform reimbursement, pricing, and market access decisions. If the incremental cost-effectiveness ratio (ICER) was not favorable for the new drug, the manufacturer might be encouraged to withdraw it, which could create a loss of opportunity for the patient who needs the drug.
- As a result, the model is restricted to the intended target indication, price has been used as the basis for internal decision making and before investing in phase 3 trials.

METHODS

- We considered the case of a hypothetical new pharmaceutical agent (Drug A) with a novel mechanism of action and a potential use in treating a specific disease.
- We anticipated pricing the drug at a 20% price premium to the comparator for reimbursement and market access opportunities.
- The model is restricted to the intended target indication, and it might assume a position in the treatment pathway for the comparator (Drug B), which is a disease-modifying drug.
- We used the following steps to solve for maximum value-based price opportunity for Drug A, given an expected product profile, focusing on attributes that would be salient to a payer perspective.
- We considered the case of a hypothetical new pharmaceutical agent (Drug A) with a novel mechanism of action and a potential use in treating a specific disease.
- We tested the model for a range of AE incidence rates.

OBJECTIVE

- To define a new threshold pricing model that takes into account the underlying mathematical structure, inputs, and outputs of a threshold pricing model compared with a traditional cost-effectiveness model, and demonstrate its application.

METHODS

- Figure 1 presents the steps taken to develop a threshold pricing model, which are the same steps taken to develop a traditional cost-effectiveness model.
- The model is restricted to the intended target indication, and it might assume a position in the treatment pathway for the comparator (Drug B), which is a disease-modifying drug.
- We used the following steps to solve for maximum value-based price opportunity for Drug A, given an expected product profile, focusing on attributes that would be salient to a payer perspective.
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- We developed a target and an ideal version of the new drug’s product profile, focusing on attributes that would be salient to a payer perspective.

RESULTS

- We evaluated the following steps to solve for maximum value-based price opportunity for Drug A, given an expected product profile, focusing on attributes that would be salient to a payer perspective.
- We developed a target and an ideal version of the new drug’s product profile, focusing on attributes that would be salient to a payer perspective.
- We anticipated pricing the drug at 20% price premium to the comparator for reimbursement and market access opportunities.
- We considered the case of a hypothetical new pharmaceutical agent (Drug A) with a novel mechanism of action and a potential use in treating a specific disease.
- We tested the model for a range of AE incidence rates.

CONCLUSIONS

- A threshold pricing model is a powerful early decision tool for helping drug manufacturers strategize about the price of a new drug and the best strategy for positioning it in the marketplace.
- The threshold pricing model also can be useful for bringing clarity to a new product development team: quantifying, testing, and clarifying explanations of new-product performance, and achieving target price and adequate market access.
- Constructed appropriately, threshold pricing models can be used to prioritize among possible redirections, identify target subpopulations, select the appropriate line of therapy, and dosage and clarify required performance against competitors.

REFERENCE


DISCLOSURE

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