

# Cost Effectiveness Comparison of a Dry Powder Inhaler to a Metered Dose Inhaler plus Valved Holding Chamber based on an In-Vitro Drug Delivery Model

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## BACKGROUND

- In a previous study, healthy participants were asked to inhale from either a dry powder inhaler (DPI) or metered dose inhaler (MDI) + valved holding chamber (VHC). Results indicated that differing amounts of medication could be available to the lungs, depending on the delivery system used.<sup>1</sup>

## OBJECTIVE

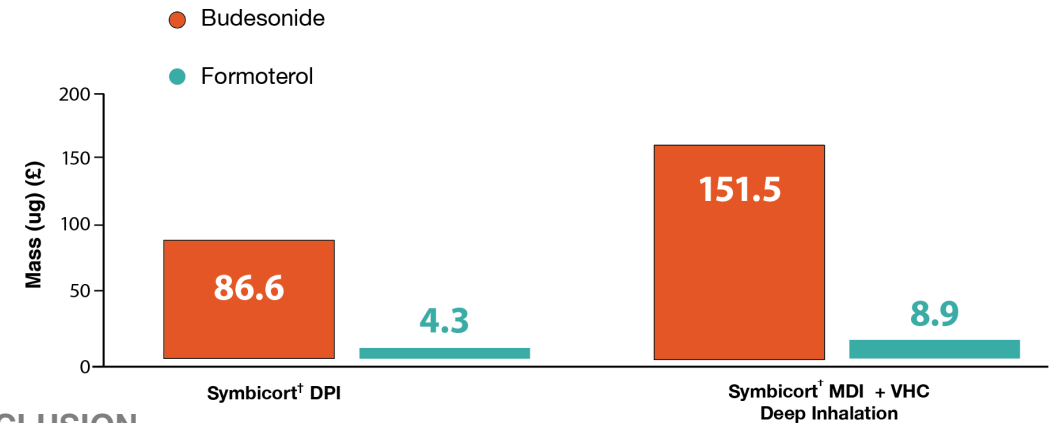
- To compare the relative cost of using a DPI and an MDI+VHC to deliver budesonide/formoterol (BUD/F; Symbicort<sup>†</sup>) in patients for whom low-dose ICS maintenance therapy is appropriate

## METHODS

- Comparisons were based on BUD/F 200/6 $\mu$ g twice daily with yearly cost inputs of £336 for the DPI and £336 + 5.2 for the MDI + VHC obtained from a relevant source in the United Kingdom ([www.rightbreathe.com](http://www.rightbreathe.com)). Drug delivery data was taken from the aforementioned lab study.

## RESULTS

- Results: The mass ( $\mu$ g) of Budesonide and Formoterol delivered per  $\text{£}$  are reported below.



## CONCLUSION

- From a UK perspective, BUD/F delivered via an MDI + VHC offers an economic benefit for the treatment of patients with mild asthma. Further analysis is required to determine if there would be any quality-adjusted life-year (QALY) effects based on the chosen intervention.

