

An Evaluation of Analytical Techniques for Characterising the Velocity and Force of pMDI Ex-Actuator Plumes

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There is scope for improving pulmonary and nasal pMDI devices by making changes to the formulation, valve and actuator design so as to increase pharmaceutical performance and to improve the comfort for patients. Before these improvements can be optimised it is important to develop suitable analytical tools to characterise the ex-actuator plumes of inhalation products.

This poster describes the use of two analytical tools for characterising ex-actuator open plumes. Firstly, high speed laser imaging and secondly, plume force measurements using the Copley Scientific Spray Force Tester SFT1000.

The advantages and disadvantages of the techniques will be discussed together with an analysis of data from a range of marketed products.