2016/17 Summer Scholarship Project

Project title: Comparison of Aerosol Performance between generic Indian and international marketed Dry Powder Inhalers and Metered Dose Inhalers

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Project type: Laboratory-based work

Research theme: Respiratory Diseases

Project description:
There are a number of generic inhalers manufactured by pharmaceutical companies in India. The less stringent regulations in India means it is easier and faster to get a product to market. There are no published reports on the performance of these generic inhalers. Therefore, this project aims to compare original branded dry powder inhalers (DPI) and metered dose inhalers (MDI) to two equivalent Indian generic inhaler products. Two international marketed DPIs, Seretide® Accuhaler® and Symbicort® Turbuhaler®, and two MDIs, Seretide® and Flutiform®, will be used. Specifically, you will compare the dose uniformity and aerosol performance of the international DPIs and MDIs to two equivalent Indian generic inhaler products according to methods outlined in the British Pharmacopoeia (BP). The aerosol performance will be assessed with an impactor and the amount of drugs deposited in the impactor will be quantified using high pressure liquid chromatography.