

Abstract

On the Bibliometric Profile of Metered Dose Inhaler Research [†]

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Abstract: Pulmonary drug delivery systems (PDDS) have gained particular attention of pharmaceutical scientists due to their potency in the therapy of both pulmonary diseases and systemic diseases. Metered dose inhalers (MDI) as a delivery approach of PDDS have ample advantages over other approaches. No drying process is associated with MDI, which avoids the chemical and physical instability. MDI are cost-effective, portable and can be self-administered. It was recently reported that MDI have occupied a large proportion of the respiratory drug market since the last century. To facilitate the future studies on MDI, this work was aimed at conducting bibliometric analysis of the publications of MDI in Science Citation Index Expanded database of Web of Science from 2000 to 2020 (2858 in total). The documents were processed by Clarivate Analytic tool equipped by Web of Science, VOSviewer, Statistical Analysis Toolkit for Informetric (SATI) and bibliometric online platform, and the data were visualized. After describing the detailed bibliometric profile of MDI publications, which included publication years, countries/regions, organizations, research areas, publication media, authorship and funding agencies, we assessed the publication tendencies by virtue of analysis of co-citation, bibliographic coupling, keywords and co-occurrence. Based on the results, we put forward three promising topics for future studies of MDI. Taken together, we believe that MDI became a topic under investigation around the world, and will still be important for fundamental and translational researches.

Keywords: metered dose inhalers; publication landscape; bibliometric analysis; Web of Science

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