COMPOSITIONS AND METHODS FOR TREATMENT OF ASTHMA

RELATED APPLICATION

[001] The present application claims benefit of priority to US Provisional Application No. 63/363,767, filed April 28, 2022, the content of which is hereby incorporated by reference in its entirety for all purposes.

FIELD

[002] The present disclosure provides a method of treating asthma in a subject at risk of asthma exacerbation, and a method of as-needed treatment or prevention of bronchoconstriction in a subject, and/or prevention of exacerbation in a subject with asthma, comprising administering as needed to the subject a composition comprising therapeutically effective amounts of albuterol and budesonide, wherein the composition is administered via a metered dose inhaler, wherein the method reduces risk of severe asthma exacerbation by at least about 15% as compared to administration of a composition comprising a same dose of albuterol alone, as measured by time-to-first severe asthma exacerbation. Also provided is a pharmaceutical composition comprising: albuterol and budesonide in the form of particles; a suspension medium comprising a hydrofluoroolefins (HFO) propellant and/or a hydrofluorocarbon propellant (HFC), and a plurality of respirable suspending particles, wherein the particles of albuterol and budesonide associate with the plurality of respirable suspending particles.

BACKGROUND

[003] Asthma is a heterogeneous disease that manifests as variable airflow obstruction with recurring symptoms driven by underlying persistent, yet fluctuating, airway inflammation. With loss of asthma control, patients often focus on obtaining immediate symptom relief by relying on their rescue medication, typically a short-acting β2-agonist (SABA). However, SABAs have little effect on underlying airway inflammation, and SABA overreliance serves as a metric for poor asthma control associated with severe exacerbation risk. Because severe exacerbations contribute to significant morbidity and mortality, exacerbation prevention represents an imperative in asthma management.

SUMMARY

[004] In some embodiments, the present disclosure provides a method of treating asthma in a subject at risk of asthma exacerbation, comprising administering as needed to the subject a