

JOINT EVENT

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ColdZyme forms a protective barrier in the oropharynx that deactivates major common cold viruses

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ColdZyme® Mouth Spray (ColdZyme) is a medical device that is designed to form a barrier on the mucuous membrane of the oropharynx and to degrade attachment proteins on viral surfaces to protect against diseases such as the common cold. ColdZyme is primarily composed of glycerol and Atlantic cod trypsin and has a high safety profile to match a mild disease such as the common cold. It is intended to directly inhibit infection by blocking viruses at their point of entry, reduce the probability of catching a cold and help shorten the duration of a cold. Based on its design, duration of ColdZyme in the oropharynx and its ability in deactivating common cold viruses was tested. The presence and duration of the ColdZyme barrier was measured in the oropharynx in a clinical investigation. The half-life of the barrier was measured to be about 4.5 minutes, resulting in the duration of the barrier being around 10 to 20 minutes. Most cases of common cold are caused by rhinovirus followed by human coronavirus, respiratory syncytial virus and adenovirus. The virus deactivating ability of ColdZyme was demonstrated against these four major common cold viruses and influenza in a virucidal efficacy suspension test. Based on the results, ColdZyme showed an effective broad-spectrum impact against common cold viruses. These findings and its duration in the oropharynx indicate that ColdZyme represents a device with clinical benefits in prevention and treatment of respiratory viral infections by deactivating viruses within the respiratory tract.

Biography

Bjarki Stefansson obtained his BS in Biochemistry from the University of Iceland (Iceland) and his PhD in Microbiology and Molecular Biology in the Department of Microbiology, University of Virginia School of Medicine (USA). He works in Design & Development at Zymetech, an Icelandic biotechnology company involved in research, purification and therapeutic application of enzymes extracted from Atlantic cod.

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