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Title: Large eddy simulation of the flow pattern in an idealized mouth-throat under unsteady inspiration flow conditions

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Highlights

Welling understanding airflow is important to improve the drug delivery.

Secondary vortices, impinging jet and recirculation zone are important flow structures.

They are studied using large eddy simulation under inspiration flow pattern.

The airflow is more turbulent at decelerating phase than accelerating phase.

Airflow is much more different at acceleration phase than deceleration phase.

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