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Inhaled hyaluronic acid microparticles extended pulmonary retention and suppressed systemic exposure of a short-acting bronchodilator

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Highlights

- Inhalable hyaluronic acid microparticles with high loading of salbutamol sulphate could be fabricated with the technique of spray drying.
- The inhalable hyaluronic acid microparticles possessed enhanced mucoadhesive property and sustained release profiles *in vitro*.
- The inhalable hyaluronic acid microparticles had much longer pulmonary retention and reduced systemic exposure *in vivo*, compared to spray dried plain salbutamol powder.

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