INTRODUCTION

• The current sustained-release inhalation therapies for pulmonary arterial hypertension (PAH) require frequent dosing (treprostinil, Tyvaso®; 6 mg/kg 16 times daily, and 4-8 times daily due to fast elimination of the active drug).

METHODS

• A sustained-release formulation of treprostinil (TRE) may potentially reduce frequency of dosing compared with TRE. TPDs with alkyl chains of lengths C12 and C16 yielded the most promising results.

RESULTS

• Male Sprague Dawley rats were anaesthetised and tested with endotracheal tube for ventilation.

• Male Sprague Dawley rats were anaesthetised and treated with endotracheal tube for ventilation. 1000 mg/kg of TPD-LNP suspension was nebulised for a period of 30 to 60 minutes. Time corresponds to the time after beginning of nebulisation.

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