

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511093992 A

(19) INDIA

(22) Date of filing of Application :30/09/2025

(43) Publication Date : 14/11/2025

(54) Title of the invention : ORAL THIN FILM FORMULATIONS OF ROTIGOTINE FOR TRANSMUCOSAL ADMINISTRATION

(51) International classification	:A61K0009000000, A61K0009200000, A61K0009700000, A61K0031381000, A61P0025000000	(71)Name of Applicant : <b>1)Chitkara University</b> Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Punjab India <b>2)Chitkara Innovation Incubator Foundation</b>
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	<b>1)Atul Lanjewar</b>
(33) Name of priority country	:NA	<b>2)Prateek Ghatak</b>
(86) International Application No	:	<b>3)Tanuja</b>
Filing Date	:01/01/1900	<b>4)Hiti Narula</b>
(87) International Publication No	: NA	<b>5)Dr. Sonia Dhiman</b>
(61) Patent of Addition to Application Number	:NA	<b>6)Dr. Thakur Gurjeet Singh</b>
Filing Date	:NA	<b>7)Dr. Chander Parkash</b>
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention provides fast-dissolving oral thin films of rotigotine for transmucosal delivery, mitigating first-pass metabolism and enabling rapid onset with improved patient acceptability. The films comprise rotigotine within a polymeric matrix containing a primary film-forming polymer, an optional co-polymer, a plasticizer, and pharmaceutically acceptable excipients selected from disintegrant, surfactant, sweetener, flavor, antioxidant, and buffer. Prepared by solvent casting, the films exhibit rapid disintegration ( $\leq 30$  seconds), uniform content, and controlled thickness. Unit doses are obtained by cutting to area based on drug load, enabling flexible strengths for sublingual or buccal administration. Moisture- and oxygen-barrier packaging preserves stability and supports scalable manufacturing.

No. of Pages : 15 No. of Claims : 10