



## PARKINSON'S DISEASE NEWS

<http://www.viartis.net/parkinsons.disease/news.htm>

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### ORALLY DISSOLVING FILM FOR TAKING ROPINIROLE

Ropinirole is a dopamine agonist used for Parkinson's Disease. It is sold as Requip, Reprevé, Ronirol, and Adartrel. For more information go to : <https://www.rxlist.com/requip-drug.htm>

However, ropinirole undergoes extensive metabolism, resulting in a low oral bioavailability. The necessity of frequent administration due to the short half-life of ropinirole may also lessen patient compliance. There is consequently a pressing need to devise formulations for the delivery of ropinirole that allow simple and easy administration. It was aimed at overcoming all these challenges by using orally-dissolving films via sublingual delivery (under the tongue) or buccal delivery (via tissues that line the mouth).



The ropinirole oral film was found to be non-toxic, exhibited fast disintegration and dissolution, and was also physically stable. Upon buccal and sublingual administration of the oral films, ropinirole reached the systemic circulation within 15 minutes and bioavailability was significantly improved. This may be attributable to the avoidance of first-pass metabolism via absorption through the oral cavity.

In conclusion, the ropinirole oral film improved bioavailability after sublingual or buccal administration. This formulation potentially overcomes biopharmaceutical challenges and provides a convenient means of administration of ropinirole and also other Parkinson's Disease drugs.

Reference : Colloids and Surfaces, B Biointerfaces [2017] 163 : 9-18 [Epub ahead of print] (K.L.Lai, Y.Fang, H.Han, Q.Li, S.Zhang, H.Y.Li, S.F.Chow, T.N.Lam, W.Y.T.Lee)

Complete abstract : <http://www.ncbi.nlm.nih.gov/pubmed/29268211>

<http://www.viartis.net/parkinsons.disease/news/171227.pdf>

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