

its long-term effects on morbidity and mortality as well as to compare these agents with other RAAS blockers in long-term clinical studies; this represents a research effort for another 7–8 years.

Jambhekar, S. S. and P. J. Breen (2013). "Drug dissolution: Significance of physicochemical properties and physiological conditions." *Drug Discov Today* 18(23–24):1173–1184.

Oral bioavailability of a drug is determined by a number of properties, including drug dissolution rate, solubility, intestinal permeability, and presystemic metabolism. Frequently, the rate limiting step in drug absorption from the GI tract is drug release and drug dissolution from the dosage form. Therapeutic agents with aqueous solubilities less than 100 $\mu\text{g/mL}$ often present dissolution limitations to absorption. Physicochemical, formulation-related, and physiological factors can all influence drug dissolution. In this review, the authors will discuss the important physicochemical properties of a drug and physiological conditions in the GI tract that play an important part in drug dissolution and absorption processes and, consequently, the bioavailability of a drug.

Jost, W. H. and L. Bergmann (2010). "Clinical data of the prolonged-release formulation of ropinirole." *Fortschr Neurol Psychiatr* 78 Suppl 1:S20–S24.

Ropinirole is a nonergoline dopamine agonist with medium elimination half time, which has been licensed for the therapy of idiopathic Parkinson syndrome in mono- and add-on therapy for more than 10 years. Since 2008 a prolonged-release formulation has been available in Germany, which can be taken once daily. This formulation results in less plasma level fluctuations compared to the thrice-daily immediate-release formulation enabling smoother dopaminergic therapy with symptomatic efficacy day and night. Ropinirole PR has shown good efficacy and tolerability in controlled trials in monotherapy in early patients as well as in add-on studies in advanced patients. In a head-to-head comparison of both formulations as add-on therapy in advanced patients, higher doses were achieved with ropinirole PR accompanied by a higher mean decrease of L-Dopa dose. Under these conditions significantly higher efficacy was observed. The titration regime of ropinirole PR is faster with significant efficacy versus placebo as early as in week 2. Especially in patients with preexisting Parkinson-related poor sleep quality positive effects on sleep and nocturnal symptoms were shown.

Koudelka, S. et al. (2015). "Liposomal delivery systems for anti-cancer analogues of vitamin E." *J Control Release* 207:59–69.

Proapoptotic analogues of vitamin E (VE) exert selective anticancer effect on various animal cancer models. Neither suitable formulation of alpha-tocopheryl succinate (alpha-TOS), representative semi-synthetic VE analogue ester, nor suitable formulations of the other VE analogues for clinical application have been reported yet. The major factor limiting the use of VE analogues is their low solubility in aqueous solvents. Due to the hydrophobic character of VE analogues, liposomes are predetermined as suitable delivery system. Liposomal formulation prevents undesirable side effects of the drug, enhances the drug biocompatibility, and improves the drug therapeutic index. Liposomal formulations of VE analogues, especially of alpha-TOS and alpha-tocopheryl ether-linked acetic acid (alpha-TEA), have been developed. The anti-cancer effect of these liposomal VE analogues has been successfully