



# Neurohormonal modulation in pulmonary arterial hypertension

Eva L. Peters <sup>1,2</sup>, Harm Jan Bogaard<sup>1</sup>, Anton Vonk Noordegraaf <sup>1</sup> and Frances S. de Man<sup>1</sup>

<sup>1</sup>Dept of Pulmonology, Amsterdam UMC, Amsterdam, The Netherlands. <sup>2</sup>Dept of Physiology, Amsterdam UMC, Amsterdam, The Netherlands.

Corresponding author: Frances S. de Man ([fs.deman@amsterdamumc.nl](mailto:fs.deman@amsterdamumc.nl))



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**Better insight into neurohormonal changes throughout the development of pulmonary arterial hypertension and associated right heart failure is needed to allow efficacious intervention** <http://bit.ly/2NCV0nO>

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## Abstract

Pulmonary hypertension is a fatal condition of elevated pulmonary pressures, complicated by right heart failure. Pulmonary hypertension appears in various forms; one of those is pulmonary arterial hypertension (PAH) and is particularly characterised by progressive remodelling and obstruction of the smaller pulmonary vessels. Neurohormonal imbalance in PAH patients is associated with worse prognosis and survival. In this back-to-basics article on neurohormonal modulation in PAH, we provide an overview of the pharmacological and nonpharmacological strategies that have been tested pre-clinically and clinically. The benefit of neurohormonal modulation strategies in PAH patients has been limited by lack of insight into how the neurohormonal system is changed throughout the disease and difficulties in translation from animal models to human trials. We propose that longitudinal and individual assessments of neurohormonal status are required to improve the timing and specificity of neurohormonal modulation strategies. Ongoing developments in imaging techniques such as positron emission tomography may become helpful to determine neurohormonal status in PAH patients in different disease stages and optimise individual treatment responses.

