Measurement of hypoxia in the lung in idiopathic pulmonary fibrosis: a matter of control

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To the Editor:

We read with great interest the paper by Porter *et al.* [1] published in the October 2021 issue of the *European Respiratory Journal*. The authors' aim was to explore the potential benefit of the hypoxia tracer [^{18}F]fluoromisonidazole ([^{18}F]F-MISO) in idiopathic pulmonary fibrosis (IPF). Given the lack of non-invasive imaging tools for the diagnosis and/or the follow-up of patients with IPF, this study appears to be an essential first step towards the personalised management of IPF patients through imaging biomarkers for early/active fibrosis. *In vivo* molecular imaging, in particular positron emission tomography (PET), has become a crucial tool in preclinical research, clinical trials and medical practice, especially in the field of oncology. In lung fibrosis, recent advances have been made with the aim of developing molecular imaging tools in preclinical models, a necessary step toward clinical certification [2]. Among tracers validated at the preclinical level, imaging probes targeting collagen (^{68}Ga-CBP8 [3]), integrins ([^{18}F]FB-A20FMDV2 [4]) and glucose metabolism ([^{18}F]FDG [5]) have been successfully evaluated in clinical trials and may ultimately improve IPF management.