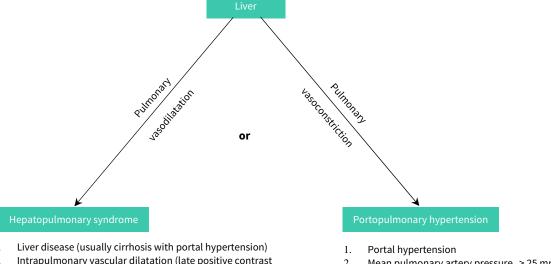
## Appendix 1 (as supplied by the authors): Hepatopulmonary syndrome versus portopulmonary hypertension



- Intrapulmonary vascular dilatation (late positive contrast echocardiogram)\*
- Abnormal arterial oxygenation (alveolar-arterial oxygen gradient ≥ 15 mm Hg [> 20 mm Hg if age > 64 years])
- Mean pulmonary artery pressure > 25 mm Hg
- Pulmonary vascular resistance > 3 Wood units (240 dynes/s/cm<sup>-5</sup>)
- Pulmonary artery wedge pressure < 15 mm Hg

Figure: Liver disease can result in two "opposite" phenotypes: hepatopulmonary syndrome or portopulmonary hypertension. \*Microbubbles in the left heart ≥ 3 cardiac cycles after microbubbles in right heart, following injection of 10 mL of agitated saline into a peripheral arm vein. Intrapulmonary vascular dilatation can also be diagnosed and quantified through a radioisotope macroaggregated albumin shunt scan, in the absence of an intracardiac shunt.<sup>1</sup>

## **Reference:**

1. Krowka MJ, Fallon MB, Kawut SM, et al. International Liver Transplant Society practice guidelines: diagnosis and management of hepatopulmonary syndrome and portopulmonary hypertension. Transplantation 2016;100:1440-52.