Temporal trends in pulmonary arterial hypertension: results from the COMPERA registry

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In this analysis of temporal trends in PAH treatment patterns and survival in 2010–2019, this study found an increase in the use of targeted combination therapies but only a slight, nonsignificant trend towards improved survival 3 years after diagnosis https://bit.ly/3FExlK5

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Abstract

Background Since 2015, the European pulmonary hypertension guidelines recommend the use of combination therapy in most patients with pulmonary arterial hypertension (PAH). However, it is unclear

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to what extent this treatment strategy is adopted in clinical practice and if it is associated with improved long-term survival.

Methods We analysed data from COMPERA, a large European pulmonary hypertension registry, to assess temporal trends in the use of combination therapy and survival of patients with newly diagnosed PAH between 2010 and 2019. For survival analyses, we looked at annualised data and at cumulated data comparing the periods 2010–2014 and 2015–2019.

Results A total of 2531 patients were included. The use of early combination therapy (within 3 months after diagnosis) increased from 10.0% in patients diagnosed with PAH in 2010 to 25.0% in patients diagnosed with PAH in 2019. The proportion of patients receiving combination therapy 1 year after diagnosis increased from 27.7% to 46.3%. When comparing the 2010–2014 and 2015–2019 periods, 1-year survival estimates were similar (89.0% (95% CI 87.2–90.9%) and 90.8% (95% CI 89.3–92.4%), respectively), whereas there was a slight but nonsignificant improvement in 3-year survival estimates (67.8% (95% CI 65.0–70.8%) and 70.5% (95% CI 67.8–73.4%), respectively).

Conclusions The use of combination therapy increased from 2010 to 2019, but most patients still received monotherapy. Survival rates at 1 year after diagnosis did not change over time. Future studies need to determine if the observed trend suggesting improved 3-year survival rates can be confirmed.