Reviewer 1 v.1

Comments to the Author

Real world data (RWD) from an administrative data base to describe healthcare utilization and associated costs in the United Kingdom.

Comments/Questions:

While the authors note that there is no standardized method of examining RWD of pulmonary hypertension, they adopted a very complex algorithm to identify "Group 1 PAH" patients described in methods (pp5-6) and figure 2. In that vein, please address the following:

-Inclusion of the 101 patients that entered in the algorithm on the CTEPH path (Fig 2) and ultimately were determined to be group 1 PAH at the bottom.

-Approximately 45% of the cohort was age 60 or greater. It is unusual the group 1 PAH patients to present at that age. What was the age breakdown of the incident patients?

-Page 10: authors comment that they may have missed "some" PAH patients (limes 19-20); however, in 2015 the PH Centers had >3000 PAH patients and the study captured <1800. The "some" would be closer to 40%!

Discussion of hospitalizations (p10, line 53 to p11, line5): Suggest adding some thought to the risk of readmission after 1st (Burger Chest 2014 REVEAL study of hospitalizations) and also the implications of worse survival for PAH related hospitalizations (Burger same study) and all-cause hospitalizations (Benza Chest 2019 REVEAL 2.0).

Top 20% Analysis: need to add cautionary notes as the data does not distinguish between increased risk (no severity data, no subgroup data such as that of scleroderma-related or POPH, no renal function) versus under treatment (monotherapy vs dual therapy, prostacyclin for high risk).

Lack of data on number and type of PAH medications as well as pharmaceutical cost should be noted as a limitation.