MINOR ESSENTIAL REVISIONS:

1. You state in the Introduction that several treatment options are available for PAH. I am wondering whether you have information on treatment of these patients to show, and whether you could analyse if treatment is significantly associated with survival.

2. The criteria for including variables in the multivariable analysis are reported in the note to Figure 2. I think that you should report them in the Methods section, and that you should also made it more explicit whether only 2 variables (age and creatinine clearance) were still significant in the multivariable analysis. Could you please briefly explain what redundancy analysis and forward stepwise algorithm are?

3. Have you tested the proportional-hazard assumption in the Cox models?

4. You comment on the older age at diagnosis in the incident vs prevalent groups. However, many characteristics were different between the two groups. Isn’t it surprising that the NYHA FC class was more severe in the incident than prevalent groups? Could this set of differences possibly explain the discrepancy in incidence (but not prevalence) rates in the Czech Republic than in other registers? Do these findings (and the big number of cases diagnosed in 2007 vs. previous period) suggest major diagnostic temporal changes?

5. Page 7, line 2. Which reference equation was used to compute normal values? Please provide a reference.

6. Page 8, Ethics. I have some doubt on defining this study as an analysis of “aggregate” data. Individual data were analysed and then aggregate results were reported.

7. Table 1, caption. Remove “in all patients and”. In this table I would prefer one more column with p-values reported, since numbers are small in the analysis and the reader could get more information from (borderline) p-values. I would report one single p-value for the NYHA FC comparison. Is BMI SD=23.4 in the prevalent group a typo?

8. Table 2. Please revise the statistical analysis. I think that one single statistical test (p-value) is more logical than 5 tests.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests