Reviewer’s report

Title: Preoperative single ventricle function determines early outcome after second-stage palliation of single ventricle heart.

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Reviewer: Lamia Air-Ali

Reviewer’s report:

General considerations: in this retrospective study Pjak et al evaluate the post operative outcome after II stage palliation achieved by Hemi-Fontan or bidirectional Glenn in single ventricle patients. They investigate if one of those surgical technique is associated with higher post-operative adverse outcome and the second aim was to identify preoperative predictors for early adverse outcome in this population. From their data pre-operative ventricular dysfunction (a known risk factor) was associated with a higher post-op mortality.

Major limitation:

why the authors evaluated only the mortality and not others adverse outcome as LOS; duration of mechanical ventilation.

I don't understand which parameters were tested in the univariate analysis (table 3 cited is not reported)

Did you test the ventricular type, the diagnosis, age at procedure?

There is no information about the pulmonary arteries, an important risk factor in single ventricle physiology?

Minor comments:

-State in the limitations section that the ventricular function was evaluated semi-quantitatively

-Surgical technique: any patient the tricuspid valve surgery was associated to the surgical procedure?

-The result section is very confusing please divide in paragraphs

-Patients characteristics are reported in the texts, I suggest rather to insert them and differences between groups in a table, Characterize better you population for instance the type of the single ventricle, type of first stage.
- In Group I, 4 (17%) children died. Three (75%) demonstrated significant atrioventricular valve regurgitation: before operation or after?

**Level of interest**
Please indicate how interesting you found the manuscript:

An article of limited interest

**Quality of written English**
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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