Background
Cardiopulmonary exercise testing (CPET) is a valuable tool to objectively measure exercise capacity. Evidence supports its role as a prognostic tool and to guide treatment however its use in children with PH is extremely limited, partly because of concerns regarding its safety.

Objectives
1. To assess the safety profile of CPET in a large cohort of paediatric PH patients.
2. To understand if specific features, i.e. PH diagnostic groups, are associated with an increased risk of events during CPET.

Materials and methods
Retrospective data from all consecutive patients undergoing CPET at a single center between March 2004 and November 2013.

Exclusion criteria for CPET were:
- Height <120cm
- WHO class IV
- History of syncope or significant ischemia/arrhythmias during exercise.

Significant events recorded included were:
- Symptoms reported by patients
- Arrhythmias
- Abnormalities detected on ECG
- Abnormal responses of arterial O2 saturation (SaO2).

References

Conclusions
CPET in mild to moderately symptomatic children with PH is safe in a controlled environment and with an experienced team.

• No side effects of the test were serious and all resolved promptly when the test was terminated.
• Adverse events were less likely in those children who were not receiving any regular PH medication.

Clinical Perspective
This work advocates a more liberal use of CPET in paediatric PH, particularly to fully harness its utility as a tool to guide and monitor treatment.

Limitations
Our cohort was largely idiopathic and CHD related PH.

• Those with less common causes of PH need to be represented in larger quantity in future studies.