



# Wexner Medical Center

Division of Cardiac Surgery

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Adult Cardiothoracic Surgery

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Robotic Surgery

Heart Transplantation

Mechanical Heart Devices

Cardiothoracic Research

February 10, 2015

Dear Editor,

Please find the edited manuscript in Word format (file name: 16068-edited.docx).

**Title:** Mechanical circulatory support in lung transplantation: Cardiopulmonary bypass, extracorporeal life support, and ex-vivo lung perfusion.

**Author:** Shaylyn C Bennett, Eliza W Beal, Curtis A Dumond, Thomas Preston, Jim Ralston, Amy Pope-Harman, Sylvester Black, Don Hayes, Jr., Bryan A Whitson

**Name of Journal:** *World Journal of Respiriology*

**ESPS Manuscript NO:** 16068

We would like to thank the reviewers for their thoughtful comments. The following revisions have been made according to the reviewer suggestions:

- (1) Discussion of the lack of adequately powered randomized controlled trials comparing CPB to non-CPB was added on page 27.
- (2) Data was added on survival, transfusion rate, duration of mechanical ventilation, and length of stay on pages 7-8. Aside from increased blood transfusions there were no consistent differences between CPB and non-CPB groups. On review of the literature, no articles were found pertaining to the differences cost-effectiveness between CPB and non-CPB. There will increased cost with increased transfusion and potential risks of transfusions as well as the costs associated with CPB itself; however it could be inferred that patients requiring CPB are sicker and therefore would incur greater costs regardless of utilization of CPB.
- (3) A section was added entitled, *Donation after Cardiac Death*, pages 25-26.
- (4) A section was added entitled, *Blood Stream Infections Associated with Mechanical Circulatory Support*, pages 21-22.
- (5) The heading *Cardiopulmonary Benefits of Cardiopulmonary Bypass* was changed to *Advantages of Cardiopulmonary Bypass*, page 6.
- (6) The heading *Cons* was changed to *Drawbacks of Cardiopulmonary Bypass*, page 8.
- (7) The section *Inflammatory Response to Cardiopulmonary Bypass* was moved to precede the section *Cardiopulmonary Bypass and Early Graft Failure*



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(8) Manufacturer

details were provided for the NovaLung ® system, page 14.

(9) The sentence, "We have spoken before of the critical organ shortage for lung transplantation" was changed to, "The issue of critical organ shortage for lung transplantation has already been previously mentioned," page 22.

(10) The references were reformatted.

We would like to again thank the reviewers for their critique.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. Whitson', with a stylized flourish at the end.

Bryan A. Whitson, MD, PhD