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## *Journal of Heart and Lung Transplantation* releasing themed issue on MCS to coincide with ISHLT2019

• ISHLT Mechanically Assisted Circulatory Support Registry (IMACS) data goes public

ORLANDO, FLA – April 3, 2019 -- The *Journal of Heart and Lung Transplantation* will publish its theme Issue on Mechanical Circulatory Support to coincide with the 39<sup>th</sup> Annual Meeting of the International Society for Heart and Lung Transplantation being held April 3 – 6 in Orlando, Fla.. This special issue highlights several innovations, multi-center trials and information from the IMACS worldwide registry. Some highlight articles:

First human use of a wireless coplanar energy transfer coupled with a continuous-flow left ventricular assist device (Pya et al): This Innovation article discusses the first fully implantable LVAD configuration with an internal power source charged externally using wireless techniques. In two patients, this system was successfully implemented and allowed incremental "unholstered" ambulation for as much six-to-eight hours at a time for 30 day use. Currently, the quality of life of for patients implanted with LVADs is impeded greatly by the need to power these devices externally through a drive-line that exits the abdomen and is connected to a battery power source by a holstered mechanism. This is prone to infection and limits the degree of activity for patients. Thus, these case reports of a fully internally implantable LVAD power source system could represent an important disruptive advance in the field if the performance can be shown to be sustained, durable and generalizable.

The Annual IMACS Registry Report (Goldstein et al): The ISHLT Mechanically Assisted Circulatory Support Registry (IMACS) report provides the first global look into trends and outcomes with durable mechanical circulatory support systems and will allow for analyses to appreciate differences in use of devices in geographically diverse regions of the world. The IMACS is currently comprised of four large collectives (INTERMACS, USA; EUROMACS, Europe; JMACS, Japan and UK Registry, United Kingdom). An additional 24 hospitals provide data directly into the Registry. This year, the contemporary report contains data from 16,286 individuals and focuses on trends in the use of centrifugal and axial continuous flow pumps. This registry does not contain data on the more recently introduced pump, the HeartMate 3 since most experience with this device accrued under the aegis of experimental clinical trials which do not report into this registry. The aggregate information suggests that in the era of these continuous flow pumps, four-year survival approximates 60 percent (about 10% lower than transplant survival at four years).

Other papers featured in this issue include:

- The LATERAL clinical trial (McGee et al), which was first presented at ISHLT 2018; Analyses from IMACS in infections with current generation LVADs (Hannan et al);
- An investigation into the "quality of death" in LVAD treated patients from the INTERMACS database (McIlvennan et al);
- Outcomes in children implanted with durable LVADs (VanderPluym et al)
- An analysis from the MEDAMACS group on outcomes in ambulatory advanced heart failure patients (Ambardekar et al).

In addition, several studies in children with congenital heart disease that require mechanical pump support, novel trans-aortic support devices, studies to understand the implications of blood pressure control with LVADs and investigations into protocols for facilitated myocardial recovery round out this issue.

## Rapid Publications Online to Coincide with Symposium or Science presentations at the Annual Meeting

This year, the JHLT has partnered with selected investigators and presenters to publish a number of breakthrough science, consensus statements and perspective papers to coincide with ISHLT's annual meeting. The simultaneous publication of this work will allow attendees to gain a closer and more detailed appreciation of the work being presented and allow for more meaningful dialogue as the meeting evolves. The IMACS annual report, will debut for the first time, as a simultaneous publication in the journal during its presentation at the plenary forum. Two consensus statements in lung transplantation of CLAD and RAS have been fast tracked and will be released at the meeting; Several research papers, which will be noted by the presenters as simultaneously published, will be made available online for detailed reads; finally, critical perspectives on important issues such as that of Marijuana use in heart transplantation candidates will be released.

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## About The Journal of Heart and Lung Transplantation

The Official Publication of the International Society for Heart and Lung Transplantation, *The Journal of Heart and Lung Transplantation* brings readers essential scholarly and timely information in the field of cardiopulmonary transplantation, mechanical and biological support of the failing heart, advanced lung disease (including pulmonary vascular disease), and cell replacement therapy. Importantly, the journal also serves as a medium of communication of pre-clinical sciences in all these rapidly expanding areas. www.jhltonline.org

## About ISHLT

The International Society for Heart and Lung Transplantation is a not-for-profit, multidisciplinary professional organization dedicated to improving the care of patients with advanced heart or lung disease through transplantation, mechanical support and innovative therapies. With more than 3,800 members in more than 45 countries, ISHLT is the world's largest organization dedicated to the research, education and advocacy of end-stage heart and lung disease. ISHLT members represent more than 15 different professional disciplines. www.ishlt.org