NEWS RELEASE

ESC Congress 2014 highlights: Treating cardiac patients who have sleep apnoea with positive airway pressure (PAP) therapy shown to reduce mortality up to 38%

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Analysis of over 4 million patient records highlights the importance of diagnosis and effective treatment of this prevalent cardiac co-morbidity

BARCELONA--(BUSINESS WIRE)--Aug. 31, 2014-- ResMed (NYSE: RMD), a pioneer and global leader in sleep and respiratory medicine, today announced results from a major analysis of the German Statutory Health Insurance (SHI) database presented at a Rapid Fire session at the ESC Congress 2014 in Barcelona, Spain. Results showed that the three-year mortality of people with sleep apnoea – a prevalent co-morbidity in coronary heart disease (CHD) and heart failure (HF) – was significantly lower in patients who were treated with positive airway pressure (PAP) devices compared to a comparable cohort that received no PAP treatment. Mortality was reduced by 37.9% in patients with CHD ($p=0.0002$) and by 31.6% in patients with HF ($p<0.0001$).

“Sleep apnoea is a highly prevalent co-morbidity in both coronary heart disease and heart failure, yet it remains frequently undiagnosed and thus undertreated,” said Professor Michael Böhm, Professor of Cardiology, University of the Saarland, Homburg, Germany and co-author of the analysis. “The results from this analysis highlight just how important it can be to identify and appropriately treat this condition, not only to improve quality of life, but also patient survival. It is vital that, as a community, cardiologists do more to recognise this and explore how we can ensure patients receive respiratory device therapy when needed.”

The analysis assessed outcomes for a total of over 4 million individuals covered by the SHI database (approximately 5% of the German SHI population). A group of patients with sleep apnoea being treated with PAP therapy was chosen (4,068 patients). Propensity score was used to define a control group of an equal number of patients with sleep apnoea who received no PAP treatment. Patients were followed over three years after initiation of their PAP therapy with results showing that the three-year mortality rate was significantly lower in patients treated with PAP compared with the no PAP group (4.5% vs 7.2%, 37.5% reduction; $p<0.0001$). Three-year rates for CHD mortality (4.5% vs 7.2%, 37.9% reduction; $p=0.0002$) and HF mortality (14.7% vs 21.4%, 31.6% reduction; $p<0.0001$) were also significantly lower in the PAP vs. no PAP group.1

In the spotlight at the ESC Congress 2014: A route to simpler, more accurate diagnosis of sleep apnoea

An additional study presented at the ESC Congress 2014, has highlighted that HF patients with sleep-disordered breathing (SDB, also referred to as sleep apnoea) could be more accurately diagnosed through longer-term use of the at-home, contactless SleepMinderTM device than through a single hospital-based polysomnography (PSG) assessment, which is currently the gold-standard of care.2 This study also noted potential for misdiagnosis from overnight assessments compared to just two weeks of home-based analysis with SleepMinderTM.

HF affects around 15 million people in Europe and it is thought that between 50-75% of these patients will have some form of sleep apnoea.3,4,5 It is the most common HF co-morbidity, yet is also one of the least recognised by cardiologists, despite being linked to poorer outcomes including mortality, hospitalisations and quality of life.6

The investigating team reported that, after just two weeks assessment with SleepMinderTM, 57% of patients were consistently above a threshold that would require treatment for their SDB (AHI≥15). This rose to 74% in patients who were followed up for 12 months. The study also noted that SDB diagnosis via a single night of inpatient PSG frequently lead to an underestimation of a patient's SDB severity when compared to a two week assessment with SleepMinderTM.

ResMed in cardiology: SERVE-HF, the largest randomised trial of sleep-disordered breathing in heart failure

A common type of SDB, central sleep apnoea with Cheyne-Stokes respiration (CSA-CSR), can be successfully treated with PaceWaveTM Adaptive Servo-Ventilation (ASV) therapy. In 2013 ResMed completed enrolment of the 1,325th patient in SERVE-HF, the world's largest randomised study investigating by what degree the treatment of central SDB (CSA-CSR) with PaceWaveTM ASV may improve survival and outcomes of patients with stable HF. Results are expected to report in 2015 and could lead to significant changes in cardiology clinical practice.

Study information, updates, and news can be obtained at the dedicated SERVE-HF study website **www.servehf.com**.

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NOTES TO EDITORS

About ResMed

ResMed is a leading developer, manufacturer and distributor of medical equipment for treating, diagnosing and managing SDB and other respiratory disorders. We are dedicated to developing innovative products to improve the lives of those who suffer from these conditions and to increasing awareness among patients and healthcare professionals of the potentially serious health consequences of untreated SDB. For more information on ResMed, visit **www.resmed.com**.

References

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