

RHINOMED SUPPORTS STUDY EXAMINING LINK BETWEEN SLEEP AND SUICIDE

- **Rhinomed will support Monash University in a study seeking to determine the relationship between the temporal pattern of suicide among Australian populations and establish if a relationship between nocturnal wakeful activity and suicide exists.**
- **The study seeks to replicate a landmark 2016 US Study that demonstrated that after adjusting for the likelihood of being awake at a given time that nocturnal suicides are 3.6 times more likely to occur than predicted.**
- **Both Monash University and the Department of Justice Human Research Ethics committee have provided the necessary Ethics approvals.**

June 28th, 2019. Melbourne. Rhinomed (ASX:RNO), a Melbourne based medical device company and a global leader in sleep and airway technology has today announced that it will be supporting a vitally important new study to be carried out by Monash University looking at the link between Sleep and Suicide.

At the 2018 American Sleep Meeting, Rhinomed CEO Michael Johnson met with Prof Michael Grandner of the University of Arizona – one the lead authors of a landmark 2016 US based study *Nocturnal Wakefulness as a Previously Unrecognised Risk Factor for Suicide* (J.Clin Psychiatry 77:6, June 2016). The study demonstrated that being awake at night confers a greater risk for suicide than being awake at other times of the day suggesting that disturbances of sleep or circadian neurobiology may potentiate suicide risk. The results of this study were confronting. When 6-hour blocks were examined, the observed frequency at night was 3.6 times higher than would be expected by chance ($P < 0.001$).

To our knowledge no Australian study has formally assessed the time of day at which suicides occur, nor demonstrate that if nocturnal suicides are over-represented when adjusting for the likelihood of wakefulness. If this finding was reproduced among the Australian population it may indicate that poor sleep provides an important target in the prevention of suicide.

Rhinomed is therefore supporting research by Professor Darren Mansfield and the team at Monash University, who will now seek to repeat this trial in Australia and establish if a relationship between nocturnal wakeful activity and suicide exists after adjusting for the probability of nocturnal wakeful activity based on Australian community norms.

Methods

An application to the National Coronial database held by the Victorian State Coroner by Prof Mansfield's team has now been successful. This database stores documentation for all suicides in Australia. Data stored includes demographic information, known health co-morbidities (physician and mental), the circumstances surrounding the death including timing and mode of death.

The national coronial database will be examined over a 10-year period to include approximately 30,000 events. Data will be de-identified, block extracted and the time of death analysed in unadjusted format and adjusted for the percentage of the population expected to be conducting wakefulness activities at the time of death as determined from the Australian Bureau of Statistics working times survey. Analysis will take place over the coming months and a further update on the study will be provided in due course.

Ethics approval received

Prof Mansfield and the team at Monash University have received ethics approval from the Department of Justice Human Research Ethics committee to proceed with the study.

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About Rhinomed Limited (ASX: RNO)

Rhinomed Limited is a Melbourne based technology firm with a focus on nasal, respiratory and breathing management technologies. The company is seeking to radically improve the way we breathe, sleep maintain our health and wellness and take medication. For more information go to www.rhinomed.global

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