

Lay Summary

BRAIN UK Ref: 23/021

Expression of OxR1 in hypothalamus and pons from normal donors and those with Prader-Willi Syndrome (PWS).

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Prader-Willi syndrome is a genetic disorder caused by the lack of expression of specific genes related to the father. It is believed that the impaired development of two brain regions, the hypothalamus and the locus coeruleus, plays a key role in the condition in young adults. The syndrome affects appetite control, leading to obesity, and issues with energy levels and sleep patterns.

Cerevance has created a safe and effective compound known as CVN766, which targets the Orexin 1 receptor (Ox1R). Ox1R is found in neurons within the hypothalamus and pons of the human central nervous system (CNS). We want to find out if Ox1R in these brain regions is the same between individuals without Prader-Willi Syndrome and those with it.

This investigation is of utmost importance and is expected to provide valuable insights for the potential use of CVN766 as a treatment for various psychiatric conditions, including binge eating and obesity, substance use disorders, and Prader-Willi Syndrome.