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PRESS RELEASE

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Severe obesity in childhood can halve life expectancy, stradoo® modelling study finds

- *Impact of age of onset, severity and duration of childhood obesity quantified for the first time*
- *Early onset obesity model finds that a child who is living with severe obesity at age 4 and doesn't lose weight has life expectancy of just 39. But weight loss can give back decades of life.*
- *Childhood obesity is a life-threatening disease, say researchers*

stradoo® developed an innovative model on severe obesity in childhood based on age of obesity onset, obesity duration, irreversible risk accumulation (a measure of irreversible risks of obesity – health effects that remain even after weight loss) and severity of obesity.

The new research being presented at the European Congress on Obesity (ECO) in Venice, Italy (12-15 May) has, for the first time, quantified the impact of different aspects of childhood obesity on long-term health and life expectancy.

The presentation has received global attention throughout the medical and lay press ***LINK to Press Clipping to be added***.

The modelling by stradoo®, a globally acting life sciences consultancy in Munich, Germany, initiated and supported by Rhythm Pharmaceuticals and presented by Jan Luca Schorfheide and Dr. Urs Wiedemann, of stradoo, as well as colleagues at universities and hospitals in the UK, Netherlands, France, Sweden, Spain, USA and Germany found that age of onset, severity and duration of obesity all take their toll on life expectancy.

The development of obesity at a very young age was found to have a particularly profound effect.

For example, a child living with severe obesity (BMI Z-score of 3.5) at the age of four, who doesn't subsequently lose weight, has a life expectancy of 39 years– about half of the average life expectancy.

Dr. Wiedemann says: "While it's widely accepted that childhood obesity increases the risk of cardiovascular disease and related conditions such as type 2 diabetes

(T2D), and that it can reduce life expectancy, evidence on the size of the impact is patchy."

"A better understanding of the precise magnitude of the long-term consequences and the factors that drive them could help inform prevention policies and approaches to treatment, as well as improve health and lengthen life."

To learn more, **stradoo®** created an early onset obesity model that allowed them to estimate the effect of childhood obesity on cardiovascular disease and related conditions such as type 2 diabetes (TD2), as well as life expectancy.

Data came from 50 existing clinical studies on obesity and obesity-related comorbidities, such as type 2 diabetes, cardiovascular events and fatty liver. The studies included more than 10 million participants from countries around the world, approx. 2.7 million of whom were aged between 2 and 29 years.

Dr Wiedemann says: "The early onset obesity model shows that weight reduction has a striking effect on life expectancy and comorbidity risk, especially when weight is lost early in life. The impact of childhood obesity on life expectancy is profound."

"It is clear that childhood obesity should be considered a life-threatening disease. It is vital that treatment isn't put off until the development of type 2 diabetes, high blood pressure or other 'warning signs' but starts early. Early diagnosis should and can improve quality and length of life."

For any further questions, please do not hesitate to contact stradoo at any time and muenchen@stradoo.com.