05 Feb 2024

Objective: Initiate research on the interaction between insulin and dopamine signalling for the review paper.

Tasks Completed:

1. Discussion with Dr. Rodrigo Mansur:

- Dr. Mansur recommended exploring the data on insulin-dopamine interaction, considering human and preclinical studies.
- Suggested the possibility of a systematic or narrative review based on the quantity and quality of identified studies.

2. Response to Dr. Mansur:

- Sent a confirmation email expressing enthusiasm and commitment to the research.
- Conveyed the intention to provide an initial list of relevant papers by the end of the day.
- Acknowledged the suggestion of a systematic or narrative review.

3. Created 4 lists for different types of research articles to consider:

- Human research: 6
- Animal research: 4
- Locked research (research that I think is important but cannot access): 2
- Review articles for reference: 5

Conclusion: after reviewing the research articles I collected, it became apparent that the relationship between insulin and dopamine signalling is by no means simple. Under normal circumstances, insulin is intricately involved in modulating dopamine levels and neurotransmission, influencing various brain regions associated with reward, motivation, and cognitive function. However, this delicate interplay can be disrupted in conditions such as obesity, diabetes, and insulin resistance, leading to complex alterations in dopamine function that may contribute to the development or manifestation of neurological and psychiatric disorders.

Notes: The search for research articles is still ongoing. Additionally, we have yet to decide upon a type of review article (systematic vs narrative). Moreover, after sending this to Dr. Mansur, I will await feedback!