BodyTime - A new diagnostic tool to assess the internal clock



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SUMMARY

The circadian clock is a biological program that structures physiology and behaviour according to the time of day. It is active in practically all cells of our bodies. The circadian clock is thus a cell-based program that is essential to health and well-being. The team has developed a new diagnostic tool to probe human internal time and rhythm using a single blood sample. It has utility in defining the correct time of day for drug dosing, in order to achieve the least adverse effects. Of note, >50% of the top selling drugs target clock-controlled genes and thus likely have specific time of day effectiveness. This solution can therefore offer value in reducing side effects as well as helping with sleep disorders or work performance.

PROJECT ACHIEVEMENTS DURING & AFTER SPARK

- Identified core set of time-telling genes
- Patent filed in 2018
- Developed a robust assay and predictive algorithm with 30 min accuracy
- Follow-on funding by the BIH Digital Health Accelerator
- Started beta-testing with different patient cohorts in 2019
- Startup <u>BODYCLOCK Technologies</u> founded in 2021

