

# Novel drugs strengthening endogenous immuno-regulatory processes



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## SUMMARY

The balance in the immune system between suppression or activation of immune responses is highly complex, very tightly regulated and fine-tuned with multiple cell types orchestrated. If this fine-tuning is out of balance, diseases such as autoimmunity occur.

In this project, the team is focusing on the suppressive capacity of the immune system and evaluates the use of drugs to bring this arm back in balance. The team has developed a high-throughput-screening platform and has already identified several bioactive molecules with re-balancing capacity. They validate these drug candidates in primary human immune cells and assess the resulting immune reaction in order to determine their potential impact on autoimmune disorders.

## PROJECT ACHIEVEMENTS DURING & AFTER SPARK

- Hits from drug screen validated
- Immune responses partially dissected
- Target validation and drug development ongoing
- Major hurdles have been identified in pursuing the idea into the clinic