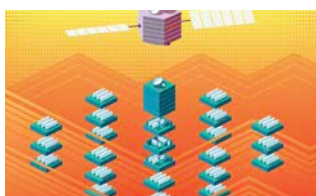


NTD Drug Discovery Booster – Accelerating drug discovery and cutting costs



Images from the NTD Booster film

WHAT?

The NTD Drug Discovery Booster is a global consortium of pharmaceutical companies collaborating to identify new potential treatments for neglected tropical diseases.

Focused primarily on leishmaniasis and Chagas disease, the collaborators use computational approaches to mine their chemical collections (“compound libraries”), looking for molecules that could help DNDi design the next generation of oral treatments for these diseases.

WHO?

With the support of the Japanese GHIT Fund, the project brings together eight pharmaceutical companies: AbbVie, Astellas Pharma Inc., AstraZeneca plc, Celgene Corporation, Eisai Co., Ltd., Merck, Shionogi & Co., Ltd., and Takeda Pharmaceutical Limited. The project is coordinated by DNDi, with experimental screening support conducted at Institut Pasteur Korea.

HOW?

By using a simultaneous search process across the eight global pharmaceutical companies, DNDi can access millions of unique compounds, generated over many

decades of research, to screen for molecules that hold promise for further development as potential drug candidates.

The NTD Drug Discovery Booster has provided twelve hit series so far, and compounds from four of these have been investigated for proof of principle. Two compounds demonstrated *in vivo* efficacy, and improved compounds are scheduled for profiling in 2018. Improved compounds from two other series will be investigated.

WHY?

Traditional early stage drug discovery to find new treatments is an expensive and time-consuming process. Pharmaceutical companies have vast, well-curated libraries of novel, proprietary drug-like compounds built up over decades of research into various disease areas. They also have access to state-of-the-art (and often proprietary) algorithms and computational approaches for assessing chemical “similarity” between molecules.

Such resources are normally closely guarded and would not be shared externally, and certainly not between competitors. However, the Booster process allows partners to share the most pertinent data without compromising proprietary processes.