

## Newsletter April 2021

RespiriTb and RespiriNTM are now almost two years into the project making steady progress in their search for novel assets to combat infections with *M. tuberculosis* and non-tuberculous mycobacteria.

The RespiriNTM team has completed a high throughput phenotypic screening of over 800K compounds of the Janssen library, resulting in active HIT series that are currently further explored by Medicinal Chemistry team. The team is well on to enter the Hit to Lead stage by Q2 of this year and hope to deliver their first New Molecular Entity (NME) by Q3 of 2023.

RespiriTb worked hard on the different tracks that are explored in search of a new asset for *M. tuberculosis* and is now ready to start screening for Mtr inhibitors. Within the Host Directed Therapy (HDT) track, the team identified several compounds active against intracellular *M. tuberculosis* which will be tested in combination with existing anti-bacterial compounds. The HDT team has also published its first review article “Host- directed therapy to combat mycobacterial infections” in *Immunological Reviews* ([Link](#)). Additionally, hits identified in the RespiriNTM phenotypic screen were also tested against *M. tuberculosis*, resulting in the selection of active hit series, which are currently further explored by RespiriTb Medicinal Chemistry team. This demonstrates the synergy and cross collaboration between the two projects.

The consortium was also lucky and thankful to meet on February 2020, face to face in Antwerp at its first General Assembly meeting, right before the COVID-19 pandemic hit us. Although COVID-19 had a significant impact on access to the facilities and slowed down some of the work, the consortium is confident to be able to meet its objectives for both projects.