€7.6M drug development programme underway to target leishmaniasis, sleeping sickness and Chagas disease.

A consortium of eleven EU academics and SMEs are beginning a European Commission-funded (FP7) programme to optimise anti-trypanosomal drug leads, previously discovered by the partners.

The lead compounds target mechanisms that are associated with protozoan virulence and pathogenicity. In addition, the interdisciplinary consortium will also screen fungal natural products and Sudanese medicinal plants to discover new lead compounds for development.

The major objectives of this 3-year project are: i) development of drug leads which may be used in combination with a known or an investigational drug, by using a common drug discovery platform established by experts in their respective fields, and ii) the development of pharmacodynamic biomarkers enabling the proteomic profiling of compound efficacy and early identification of drug resistance.

The new platform enables high throughput screening of compound libraries, lead to candidate drugs development, proof of concept testing, and toxicology and safety testing. NMTrypI will translate drug leads into drug candidates to enter the international drug development pipelines.

The infectious diseases burden imposed by the parasites of Trypanosomatidae family represents a huge problem in people’s lives in countries where these diseases are endemic. Problems associated with existing drugs include inefficient delivery, insufficient efficacy, excessive toxicity and increasing resistance. New drugs are urgently needed now and in the foreseeable future.

The New Medicines for Trypanosomatidic Infections (NMTrypI) consortium, which also includes non EU groups from disease-endemic countries (Brazil and Sudan) is funded by the European Commission 2013 initiative for Health Innovation for SME-guided activity and promotion, and will align alongside other on-going neglected disease programmes to take advantage of synergies to enlarge the European platform in neglected disease research.

The programme will be formally launched at the University of Modena on 12-13 March 2014. More information can be obtained by contacting the project coordinator Professor Maria Paola Costi, Department of Life Science, University of Modena, Modena, Italy (mariapaola.costi@unimore.it)