Paris, 24 september 2015

Communiqué de presse

ENS@T-HT, launch of a large scale Europe H2020 project coordinated by Inserm for improved diagnosis and treatment of arterial hypertension through an omics-based approach

An international group of scientists from 6 countries bring together their expertise to improve diagnosis and therapeutic care for primary and secondary forms of arterial hypertension. ENS@T-HT, which is coordinated by Maria-Christina Zennaro, Research Director at Inserm (Paris Cardiovascular Research Center), was officially launched this month in Paris and will last 5 years.

Hypertension affects up to 45% of the general population and is responsible for 9.4 million deaths per year worldwide. Even small rises in blood pressure are associated with increased risk of stroke and heart disease. However, despite a large array of available treatments, blood pressure is still not properly controlled in many patients.

Approximately 10% of current hypertension cases could be treated and cured if properly diagnosed. These include disorders of the adrenal gland that increase the production of hormones affecting blood pressure. Correct identification of these disorders is crucial to proper management of the underlying disease and prevention of cardiovascular complications. However, due to the complexity of diagnosis, proper treatment of these conditions can be delayed by several years, exposing patients to increased cardiovascular and metabolic risk and diminished quality of life.

ENS@T-HT is a five-year-long European H2020 research project created to tackle these issues. It received funding of €7.6m and involves 13 academic institutions from France, Germany, Italy, the United Kingdom, the Netherlands and Australia. The main objective is to develop a programme to improve diagnosis of various adrenal forms of hypertension, enabling curative treatments and preventing complications. This will be achieved using various cutting-edge 'omics' techniques to identify biomarkers in patients' blood that provide a distinctive signature for their condition. Useful biomarkers will also permit the stratification of patients, so that those most likely to benefit from particular treatments are identified in order to maximise the effectiveness and cost efficiency of treatment.

Maria-Christina Zennaro, coordinator of ENS@T-HT (Inserm Unit 970, Paris Cardiovascular research center) says: « *The ambition of this project is twofold: first we want to establish omics-derived biomarkers and validate their accuracy in the diagnosis of patients with adrenal forms of hypertension. Second, and most importantly for patients, we want to use these biomarkers to accelerate and optimize the diagnosis and management of these conditions. We can then stratify those patients who could most benefit from specific targeted treatment* ».

More detail about ENS@T-HT, a multiple-step-project with access to unique cohorts of patients in Europe

-- In an initial exploratory phase partners will establish omics-derived signatures of patients with PA, PPGL and CS through bioinformatics modelling of large datasets derived from multiple platforms.
-- The signatures will be validated as stratification biomarkers by establishing reference values and variability in healthy controls.
-- They will subsequently be used in a prospective clinical study to identify endocrine forms of hypertension and to stratify patients with arterial hypertension. The usefulness and cost-effectiveness of this approach will be evaluated in comparison to current standard of care outcomes and costs.
ENS@T-HT is based on the exploitation of unique cohorts of patients with PA, PPGL and CS recruited by reference centers for adrenal disorders organized within the European Network for the Study of Adrenal Tumors ENS@T (www.ensat.org). ENSAT-HT will take advantage of the prospective collaboration of six European Society of Hypertension ESH Centres of Excellence (http://www.eshonline.org/), providing a unique capability for the recruitment and workup of a large cohort of hypertensive patients.

Website : http://www.ensat-ht.eu/

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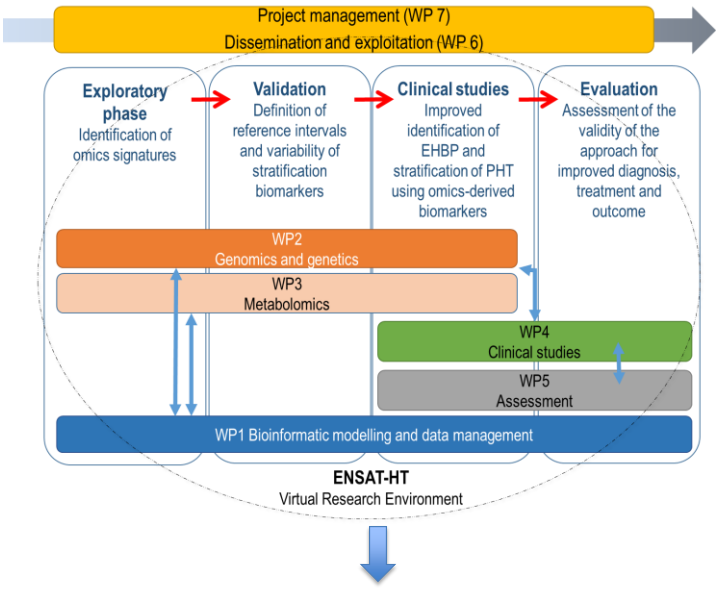

Health promotion and disease prevention through personalized medicine for endocrine forms of arterial hypertension

ENSAT-HT participants:

Inserm, Paris, France : http://www.inserm.fr/
Assistance Publique – Hôpitaux de Paris, France : http://www.aphp.fr/
Ludwig-Maximilans-University Munich, Germany: www.endocrine-research.mki.klinikum.uni-muenchen.de
Helmholtz Zentrum München, Germany: https://www.helmholtz-muenchen.de/
Technische Universität Dresden, Germany :http://www.uniklinikum-dresden.de
University of Torino, Turin, Italy: http://www.unito.it
University of Padua, Italy: http://www.unipd.it
University of Dundee, United Kingdom: http://www.dundee.ac.uk/
University of Glasgow, United Kingdom: http://www.gla.ac.uk/researchinstitutes/icams/
University of Birmingham, United Kingdom: http://www.bham.ac.uk
Radboud University Medical Centre, Netherlands: https://www.radboudumc.nl
University of Melbourne, Australia: http://www.unimelb.edu.au
Inserm Transfert, Paris, France: http://www.inserm-transfert.fr/fr/