Abstract

The InGenious HyperCare Network of Excellence’s goal is that of integrating complementary but still fragmented experience in the mechanisms of blood pressure control and hypertension development, in phenotyping initiation and progression of organ damage and in exploring genetics, genomics, and proteomics of proneness to hypertension and hypertension-related cardiovascular disease. A better prevention of hypertension and its cardiovascular consequences is an essential public health goal in Europe, where cardiovascular diseases are the major cause of mortality and morbidity. The Network plans to integrate the research efforts of 31 research teams (including a SME) and 1 SME experienced in EC project management.

Mission

The strategic objective of the proposed Network of Excellence, applying for EC support for 4 years, is the integration of 31 research teams (including a SME) working on genetics, functional genomics, and
molecular mechanisms of hypertension and hypertension-related cardiac and vascular damage and 1 SME experienced in EC project management, in 11 EC countries, 1 Associated State (Switzerland), and two countries having S&T cooperation agreements with EU (Russian Federation and China) by integrating complementary but still fragmented experiences in studying the physiological mechanisms of blood pressure control and hypertension development, in phenotyping initiation and progression of organ damage and in exploring genetics, genomics, and proteomics of hypertension-related disease.

**Consortium History**

During the project, 31 research groups in 13 European countries collaborated to identify which genetic variations play a part in hypertension. The researchers investigated individuals with extremes of blood pressure, comparing those with very high levels to those with completely normal blood pressure.

The new research has identified a common mutation of the genes that produce two essential hormones – aldosterone and cortisol – in the adrenal gland as being influential in the development of hypertension. This gene variation is present in around 40 % of the population.

Drugs that target aldosterone are already used to treat hypertension, so this study emphasizes that they should be used more widely. In addition, the discovery will help in the development of new therapies for the disease.

The Ingenious Hypercare project has been very successful in laying the foundation towards achieving better prevention of hypertension in Europe by identifying its genetic causes. However, a lot more work is required before we see the practical benefits of the research in new treatments to prevent high blood pressure.

**Structure & Governance**

The project is coordinated by the European Commission’s 6th Framework Programme
Financing

Financed by the European Commission’s 6th Framework Programme

Impact/Accomplishment

For links to news items and accomplishments, click here

Links/Social Media Feed

Homepage http://www.hypercare.eu/

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