

## THE DANISH CENTER FOR STRATEGIC REASEARCH IN TYPE 2 DIABETIS (THE DD2 STUDY)

## Henning Beck-Nielsen

Department of Endocrinology, Odense University Hospital, Denmark.

Type 2 diabetes (T2D) is a rapidly growing disease worldwide. According to estimations, about 10 % of the Danish population, will have diagnosed T2D in 2025 with substantial impact on morbidity, mortality, and quality of life. Resent pathophysiological and clinical findings have revealed knowledge that could improve diabetes guidelines and organization. The main aim of the DD2 study is to use the present knowledge to improve quality of life for T2D patients in Denmark: 1) by implementing international guidelines and a new organization plan for all newly-diagnosed T2D patients, 2) by establishing a national register that enrolls 10.000 newly-diagnosed T2D patients a year, and 3) by following this T2D cohort through the unique Danish register. The main outcomes are expected to be improved individual care and an increased knowledge of the clinical course. This original main part of the DD2 study is conducted in collaboration with the Danish national health authorities and the Danish diabetes lay organization.

In addition to the above described plans, the Danish DD2 study will be a platform for two large scale clinical intervention studies. It is believed that physical training is one important way to postpone and maybe also treat T2D, but it is unknown if physical training improves quality of diabetes care and demonstrated that patients can follow the guidelines their entire life. Thus, we aim to test this hypothesis.

Today T2D patients are treated according to guidelines developed from large clinical trials. However, recently identification of new genes and pathways involved in T2D predisposition and increased risk of diabetes complications has revealed, that new individualized strategies could improve tailored individual treatment outcome. Thus, we aim to test this. Furthermore, the cost-effectiveness of the new individualized treatment will be analyzed and compared to the current treatment of T2D patients.

Additionally we expect, the new T2D database is a optimal platform for the pharmaceutical industry to make anti-diabetic drug testing and post marketing surveys with large number of patients.