PRESS RELEASE

**Number of People with Type 2 Diabetes Projected to Increase to 12 Million in Germany by 2040**

**Currently, depending on the respective estimate, at least 7.2 percent of the population in Germany have diabetes, most of them type 2 diabetes. The number of people with diabetes will increase significantly in the next two decades. Scientists at the German Diabetes Center (DDZ) in Düsseldorf and the Robert Koch Institute (RKI) in Berlin predict that in 20 years up to 12 million people in Germany could have type 2 diabetes. This would correspond to an increase of up to 77 percent between 2015 and 2040.**

**Düsseldorf (DDZ)** – Based on the data of around 65 million insurees of the German statutory health insurance and the Federal Statistical Office, the DDZ scientists and their colleagues from the RKI published for the first time extensive projections of the future number of type 2 diabetes cases in Germany for all age groups. In their calculations for the development of case numbers between 2015 and 2040, current developments with regard to new diagnosed cases, increasing life expectancy and decreasing mortality rates due to medical progress were taken into account. This allowed scientists to calculate case numbers more accurately than in previous projection studies. "In previous projections, either only specific age groups were taken into account or temporal developments in mortality rates and new cases were not included," explains Dr. Ralph Brinks, head of the study at the DDZ. The calculations were carried out as part of the establishment of a national diabetes surveillance system funded by the German Federal Ministry of Health and recently published in the journal *Diabetic Medicine.*

**Not only the aging of the population influences the future number of cases**

In the calculation, the simple projection of the age-specific incidence of disease in 2015 on the probable age structure of the population in 2040 showed an increase in diabetes cases by 21 percent to 8.3 million. The authors argue that it is not sufficient to consider only the development of the age structure. In addition, the mortality rate of people with and without type 2 diabetes and the incidence rate of new cases must be taken into account over time. For the first time, the following three parameters were therefore related to each other to calculate the number of future diabetes cases:

**Prevalence**: The prevalence of the disease indicates the percentage of people in Germany who suffer from diabetes at a certain point in time.

**Incidence rate**: The incidence rate indicates the number of newly occurring diabetes cases in Germany during a certain period of time, for example, in one year.

**Mortality rate**: The mortality rate for people with and without diabetes.

**Diabetes-related excess mortality:** Comparison of the death rates among people with diabetes to those without diabetes.

At present, mortality rates among people with diabetes in Germany are still about twice as high as among people without diabetes. Based on medical progress with better treatment options for diabetes and its sequelae, scientists assume that fewer people will die prematurely with diabetes in the future than was previously the case. Such trends have already been observed in other countries.

Of decisive importance is the future development of incidence rates, which is also determined by the development of important diabetes risk factors, such as physical inactivity, unhealthy diet, obesity in the population.

**More than 10 million people with diabetes in 2040**

Taking into account these three parameters and an increasing life expectancy, the scientists at the DDZ calculated a relative increase in type 2 diabetes cases of 54 percent (+3.8 million cases) to 77 percent (+5.4 million cases) from 2015-2040, with different assumptions for the development of the incidence rate and diabetes-related excess mortality. This means that, according to their predictions, 10.7 to 12.3 million people will be affected by type 2 diabetes in 2040. The number of elderly people with type 2 diabetes is increasing particularly rapidly.

**Conclusion: Increased need for diabetes specialists and preventive measures**

"According to these calculations by the DDZ and RKI expert teams, Physicians’ practices and clinics must adapt even more than previously assumed to the treatment of elderly people with type 2 diabetes," said Professor Michael Roden, chairman of the German Diabetes Center and director of the Clinic for Endocrinology and Diabetology at Düsseldorf University Hospital. This prognosis requires more expert training and the establishment of specialized centers. According to the DDZ and RKI scientists, the future number of cases will depend primarily on how many people will actually develop diabetes in the next two decades. This is a factor that can be positively influenced by prevention and training measures.

**Publication:** Tönnies, T. , Röckl, S. , Hoyer, A. , Heidemann, C. , Baumert, J. , Du, Y. , Scheidt‐Nave, C. and Brinks, R. (2019), Projected number of people with diagnosed Type 2 diabetes in Germany in 2040. Diabet. Med. <https://doi.org/10.1111/dme.13902>

**Photo: Diabetes clock**

(February 7, 2019)

The German Diabetes Center (DDZ) serves as the German reference center for diabetes. Its objective is to contribute to the improvement of prevention, early detection, diagnosis and treatment of diabetes mellitus. At the same time, the research center aims at improving the epidemiological data situation in Germany. The DDZ coordinates the multicenter German Diabetes Study and is a point of contact for all players in the health sector. In addition, it prepares scientific information on diabetes mellitus and makes it available to the public. The DDZ is part of the Leibniz Association (Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz, WGL) and is a partner of the German Center for Diabetes Research (DZD e.V.).

**For more information, please contact:**

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Every 135 seconds, the number of people with diabetes increases

7,987,604

\*134.56 seconds

Prevalence Incidence

New Diabetes Cases in Germany 2019

Every 55 seconds, a person falls ill with diabetes

58,755

\*55.02 seconds

Prevalence Incidence