

we are
MERCK

**We live in a world
of possibilities.**

A world where exploration and discovery are celebrated. Our meticulous and research-driven businesses deliver diverse, high-quality products that enrich lives and enable us to share business success with our customers.

Founded in Darmstadt, Germany, in **1668** by Friedrich Jacob Merck, we are the world's oldest pharmaceutical and chemical company.





€15.327 bn
sales
in 2017



€2.098 bn
invested in
R&D in 2017



~53,000
employees



66
countries



1668
founded



**publicly listed
& majority
family-owned**

**350th
Celebration
2018**

**Vibrant
Science &
TechNoLogY**

Therapeutic Areas of Focus

Our Expertise



IMMUNO-ONCOLOGY & ONCOLOGY

Helping patients fight cancer, with innovation that makes a meaningful difference to lives around the world.



NEUROLOGY & IMMUNOLOGY

Changing the treatment paradigm for those with chronic progressive diseases, including multiple sclerosis.



FERTILITY

Helping create life for over two million families around the world.



GENERAL MEDICINE & ENDOCRINOLOGY

Providing access to healthcare solutions that can help to improve the lives of our patients.

Introduction to Connected Health & Devices

MERCK

What is a medical device?

'Medical device' is defined in Regulation (EU) 2017/745 as:¹



Any **instrument, apparatus, appliance, software, implant, reagent, material or other article** that is intended for:

- diagnosis, prevention, monitoring, prediction, prognosis, treatment or alleviation of **disease**
- diagnosis, monitoring, treatment, alleviation of, or compensation for, an **injury or disability**
- investigation, replacement or modification of the **anatomy** or of a physiological or pathological process or state
- providing information by means of *in vitro* examination of **specimens** derived from the human body, including organ, blood and tissue donations

... and which does not achieve its principal intended action by **pharmacological, immunological or metabolic means in or on the human body, but which may be assisted by such means**

Our devices enable Merck Healthcare to differentiate and create value in the market



CHD brings competitive advantage through innovative technologies and solutions (1/2)

Fertility

Currently on offer from CHD

Pergoveris®



150 IU/75 IU follitropin alfa/lutropin alfa powder and solvent for solution for injection, for the stimulation of follicular development in adult women with severe LH and FSH deficiency



GONAL-f®
FOLLITROPIN ALFA

GONAL-f 75 IU (5.5 micrograms) follitropin alfa powder and solvent for solution for injection. Follitropin alfa is a gonadotropin that is involved in reproduction and fertility in both men and women



Future plans

Work in progress

Neurology & Immunology

Currently on offer from CHD

RebiSmart®



Electronic injection device that delivers 22 micrograms/0.5 mL Rebif® (interferon beta-1a) solution. It was developed by CHD to address the needs of patients with relapsing multiple sclerosis



Digital application that connects with RebiSmart® so that nurses or physicians can view details of Rebif® administration

adveva®
FOR REBIF®-PATIENTEN

Patient support programme for patients with multiple sclerosis prescribed Rebif®

Future plans

Work in progress

CHD brings competitive advantage through innovative technologies and solutions (2/2)

Endocrinology

Currently on offer from CHD

Future plans



easypod® is an automated drug delivery device for Saizen® [somatropin] for injection. Saizen® is a human growth hormone produced by recombinant DNA technology



Software designed to display patients' adherence information from easypod™ electronic auto-injector used with Saizen® on a secure online database



Application available on iPhone and Android devices that enhances the benefits of the easypod™ system



Work in progress

Biosimilars

Currently on offer from CHD

Future plans



IDACIO® (adalimumab 40 mg biosimilar) pre-filled pen offers built-in simplicity for administration

Work in progress

Our history at Merck with connected health & devices



**Connecting patients
to doctors & nurses**



John's Wall

20 Nov 2015	Height	144cm
	Weight	35.0kg
20 Apr 2015	Height	140cm
	Weight	32.0kg

12 years of experience

500 000 devices produced

20 000 connected patients

50 countries