

CORONARY ARTERY DISEASE

FACTS AND FIGURES

SYMPTOMS INCLUDE^{1,2}

- CHEST PAIN OR DISCOMFORT
- PAIN OR DISCOMFORT IN ARMS OR SHOULDER
- NAUSEA OR VOMITING
- FATIGUE
- LIGHT HEADEDNESS
- HEART BURN
- SHORTNESS OF BREATH
- SWEATING
- PAIN IN THE NECK, JAW, THROAT, ABDOMEN OR BACK



*Clinical presentation may vary in men and women

#1 cause of death worldwide³

CAD global statistics, 2019⁴



197 million prevalent cases
182 million DALYs
9.14 million deaths

COVID-19

More severe course of COVID-19 in patients with pre-existing CAD⁷

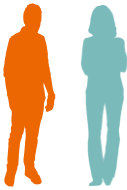
Every 40 seconds, a heart attack occurs in the US⁸



RISK FACTORS⁵



- ✓ Old age
- ✓ Unhealthy diet
- ✓ Obesity
- ✓ Family history
- ✓ Sedentary lifestyle
- ✓ Smoking
- ✓ Alcohol use
- ✓ High blood pressure
- ✓ Diabetes
- ✓ High cholesterol



Men are generally at a greater risk of CAD, but women have a higher mortality and worse prognosis^{5,6}

Risk for women increases after menopause⁵

In the US, ~900,000 PCIs are performed every year⁹



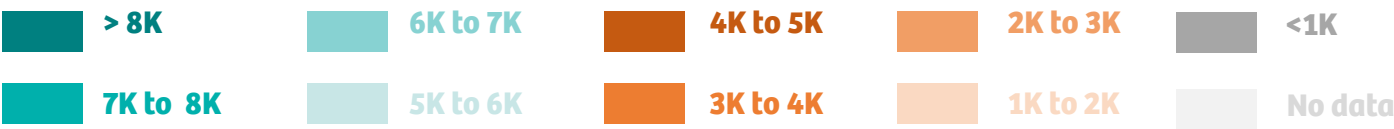
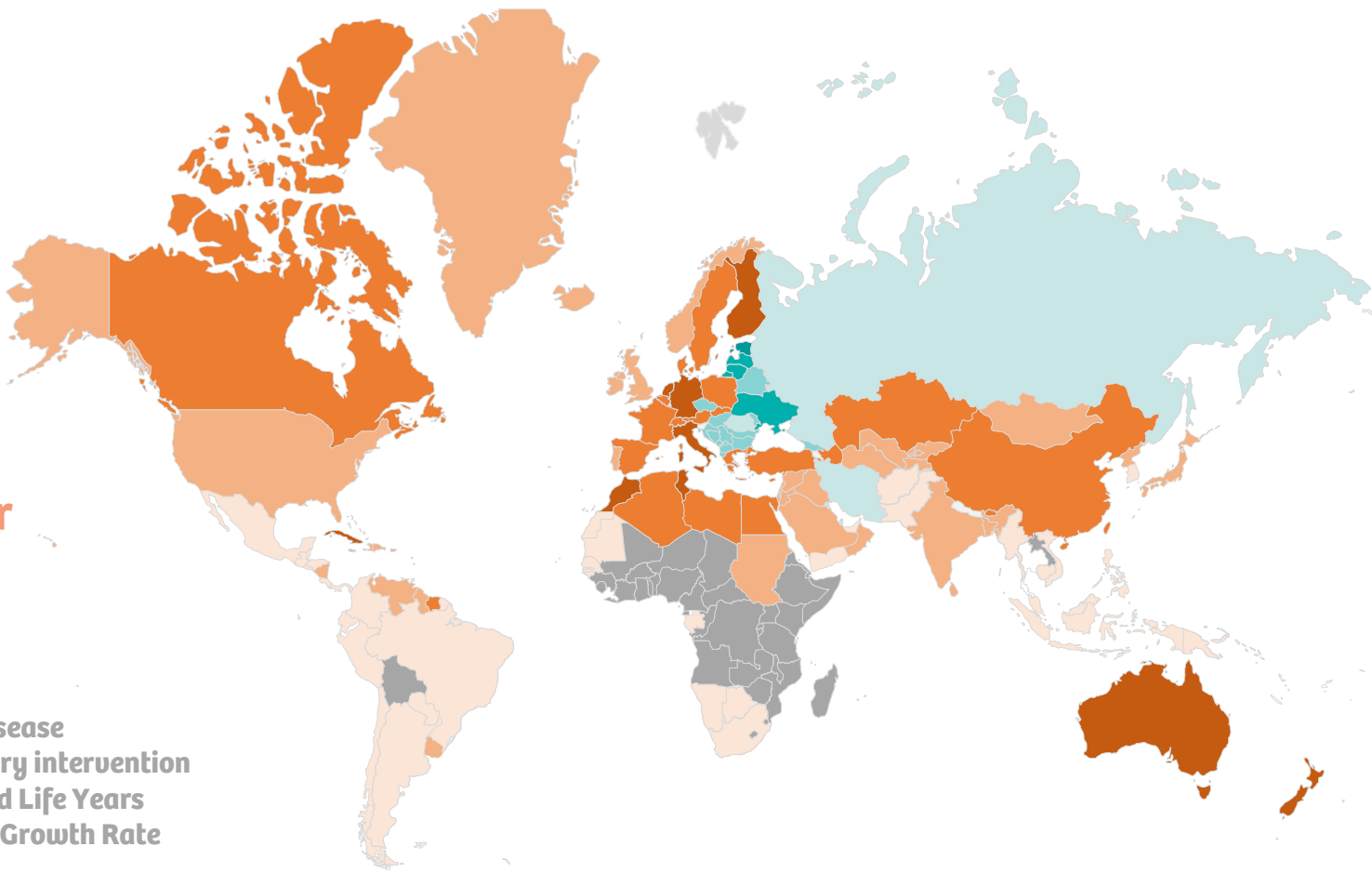
Coronary stent market¹⁰



CAGR of 3.3%

CAD global prevalence per 100,000 people, 2019¹¹

*CAD – Coronary artery disease
PCI – Percutaneous coronary intervention
DALYs - Disability Adjusted Life Years
CAGR - Compound Annual Growth Rate



Disclaimer:
This publication on the coronary artery disease pathway framework was updated on 10.04.2023. It cannot be taken as a recommendation for the readers, especially not as a guideline for treatment, and it is not a medical document. There is no guarantee for completeness or global correctness, the various pain points, solutions, and statistical data are examples only. Sources are multiple, such as public statistics, expert opinions, open innovation workshops, research, own data and many more (see references). The products and features mentioned may not be available in all countries and their future availability cannot be guaranteed. Some products mentioned are planned and under development.

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CORONARY ARTERY DISEASE

Disease pathway analysis with pain points and solution examples

An extensive research-based analysis from 40+ scientific articles and journals in combination with hospital workflow experience allowed the identification of pain points and solutions.

These solutions were proposed based on AI, IoMT, AR/VR, biosensors, nanorobotics and smart wearable technologies.

**THROUGH THIS CAREPLAN WE
HIGHLIGHT DATA FROM
A COLLECTION OF**

52
pain points

67 solutions

16

**connected to
different stakeholders**

Solution categories



 Existing in healthcare



Ongoing research in healthcare

 **Futuristic solution
(may or may not be
implemented)**

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The products and features mentioned may not be available in all countries and their future availability cannot be guaranteed. Some products mentioned are planned and under development.

*Atellica® VTLi Patient-side Immunoassay Analyzer (SHS): The products/features (mentioned herein) are not commercially available in all countries. Not available for sale in the U.S.A. Their future availability cannot be guaranteed.

