**1**

Today, AI is considered a branch of engineering that implements novel concepts and novel solutions to resolve complex challenges. With continued progress in electronic speed, capacity, and software programming, computers might someday be as intelligent as humans. One cannot neglect the important contribution of contemporary cybernetics to the development of AI.

**2**

Artificial intelligence (AI) is generally accepted as having started with the invention of robots.

**3**

Artificial Intelligence (AI) is a general term that implies the use of a computer to model intelligent behavior with minimal human intervention. AI is generally accepted as having started with the invention of robots.

**4**

The study of artificial intelligence (AI) has been a continuous endeavor of scientists and engineers for over 65 years.

**5**

AI is believed to be one of the major drives to change socio-economical lives. In another aspect, AI contributes to the advancement of state-of-the-art technologies in many fields of study, as helpful tools for groundbreaking research.

**6**

AI in medicine can be dichotomized into two subtypes: Virtual and physical. The virtual part ranges from applications such as electronic health record systems to neural network-based guidance in treatment decisions. The physical part deals with robots assisting in performing surgeries, intelligent prostheses for handicapped people, and elderly care.

**7**

The virtual branch includes informatics approaches from deep learning information management to control of health management systems, including electronic health records, and active guidance of physicians in their treatment decisions. The physical branch is best represented by robots used to assist the elderly patient or the attending surgeon. Also embodied in this branch are targeted nanorobots, a unique new drug delivery system.

**8**

Modern medicine is faced with the challenge of acquiring, analyzing and applying the large amount of knowledge necessary to solve complex clinical problems. The development of medical artificial intelligence has been related to the development of AI programs intended to help the clinician in the formulation of a diagnosis, the making of therapeutic decisions and the prediction of outcome. They are designed to support healthcare workers in their everyday duties, assisting with tasks that rely on the manipulation of data and knowledge. Such systems include Artificial neural networks (ANNs), fuzzy expert systems, evolutionary computation and hybrid intelligent systems.

**9**

Artificial intelligence-powered medical technologies are rapidly evolving into applicable solutions for clinical practice. Deep learning algorithms can deal with increasing amounts of data provide by wearables, smartphones, and other mobile monitoring sensors in different areas of medicine.

**10**

Although the field of augmented medicine seems to encounter success with patients, it can be met with a certain resistance by healthcare professionals, in particular physicians: concerning this phenomenon, four widely discussed reasons should be provided. First, unpreparedness as to the potential of digital medicine is due to the evident lack of basic and continuing education regarding this discipline. Second, the early digitization of healthcare processes, very different from the promise of augmented medicine came with a steep increase of the administrative burden mainly linked to electronic health records, which has come to be known as one of the main components of physician burnout. Third, there is increasing fear as to the risk of AI replacing physicians, although the current and mainstream opinion in the literature is that AI will complement physician intelligence in the future. Fourth, the current world-wide lack of a legal framework that defines the concept of liability in the case of adoption or rejection of algorithm recommendations leaves the physician exposed to potential legal outcomes when using AI.