

# Translational Medicine and its Perspectives in Poland

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## Abstract

This article presents Translational Medicine (TM), one of today's 'buzz words'. Moreover, it seeks to identify the factors which stimulate or impede TM's development in Poland, based on desk research and a series of expert interviews conducted in four countries. TM is a new trend in research and clinical practice. It stems from two sources: observation of how ineffective the traditional drug development process is, and from the public need for innovative therapies. Strategies developed within the translational approach optimize medical innovation development so that the chasm between impressive scientific discoveries and poor pharma productivity is filled. Our diagnosis shows that Poland is a minor player on the market of new technologies, particularly drugs. However, Polish scientists and industry do have a potential that will enable them to play major roles in international research teams that work on innovative, global projects.

**Key words:** translational medicine, pharmaceutical industry, R&D, innovations, SWOT, project SPIN

**Słowa kluczowe:** medycyna translacyjna, sektor farmaceutyczny, B+R, innowacje, SWOT, projekt SPIN



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## Introduction

Translational Medicine (TM) is a new trend in biomedical research and clinical practice, which has been gaining growing international popularity for several years. The aim of this article is to assess whether the idea and practice of translational medicine is likely to take root in Poland, thus supporting medical innovations based on Polish companies and R&D staff. The following paragraphs provide a detailed description of the concept of translational medicine in its many meanings typical of the different groups participating in the development of new medical technologies. We refer mainly to the major assumptions and postulates made by practitioners of translational medicine. Next, we present results of the SWOT (strengths, weaknesses, opportunities, threats) analysis in order to assess the prospects for the development of translational medicine in Poland. The presented facts, opinions

and conclusions are based on the results of a study carried out as part of the project titled 'SPIN – Model of Innovation Transfer in Malopolska'. The study included the analysis of existing data (review of scientific literature, own calculations based on publicly available data) and a series of in-depth interviews. All respondents are professionally involved in the development of new medical technologies (at its different stages), or in their implementation in clinical practice. The pool of sixteen interviews included six interviews with scientists, five with representatives of the pharmaceutical industry (or persons conducting clinical trials on behalf of private companies), and another five with representatives of the institutions supporting the development of medical technologies, including one American, one Swiss and one German company. All interviews were conducted in the second half of 2012.

Poland is a peripheral player on the market of innovative therapies, and so we think that it is not possible