## Historical Achievements of Self-Monitoring of Blood Glucose Technology Development in Japan

Shigeki Yamada, B.Sc.

## Abstract

Japanese companies were the first in the world to achieve a colorimetric glucose measurement meter back in 1973. Over the following 40 or so years, they succeeded in achieving a much greater level of user-friendliness and performance and in so doing, have contributed to the spread of self-monitoring of blood glucose. This article aims to unravel the history of blood glucose measurement's technological developments; to look at the direction and features of the development path Japan is taking; as well as to introduce some Japanese products that are on the market.

J Diabetes Sci Technol 2011;5(5):1300-1306

Author Affiliation: ARKRAY Global Business, Inc., Kyoto, Japan

Abbreviations: (FAD-GDH) flavin adenine dinucleotide-dependent glucose dehydrogenase, (GOx) glucose oxidase, (SMBG) self-monitoring of blood glucose

Keywords: blood glucose, blood glucose meter, colorimetric, electrochemistry, Japan, self-monitoring of blood glucose

Corresponding Author: Shigeki Yamada, B.Sc., ARKRAY Global Business, Inc., KYOTO MIYUKI Bldg. 10F, 689 Takanna-cho, Nakagyo-ku Kyoto, Japan, 604-8153; email address <u>yamadashi@arkray.co.jp</u>