August 19, 2014

Tanaka Precious Metals
Tanaka Holdings Co., Ltd.

TANAKA Develops Kit Enabling Simple Test for Diabetes in approximately 10 Minutes

To Be Provided in Emerging Countries with Rapidly Growing Diabetic Populations Such as China, Taiwan and India

Simple, fast and inexpensive tests made possible by colloidal gold are expected to assist prevention and early detection

Tanaka Holdings Co., Ltd. (a company of Tanaka Precious Metals; Head office: Marunouchi, Chiyoda-ku, Tokyo; President & CEO: Akira Tanae) today announced that Tanaka Kikinzoku Kogyo K.K. (Head office: Marunouchi, Chiyoda-ku, Tokyo; President & CEO: Akira Tanae), which operates the Tanaka Precious Metals' manufacturing business, has developed "PersonalA1c", a highly sensitive screening kit enabling simple testing of diabetes in approximately 10 minutes by using colloidal gold(*1).

Tanaka Kikinzoku Kogyo plans to conclude partnership agreements with companies in emerging countries with rapidly growing diabetic populations, and the partner companies will market "PersonalA1c" as a screening test agent. Tanaka aims to commence sales in the rapidly growing diabetic populations of China, Taiwan and India by 2015, followed by other countries such as Russia, Brazil, Mexico and Bangladesh.

Advantages of "PersonalA1c"

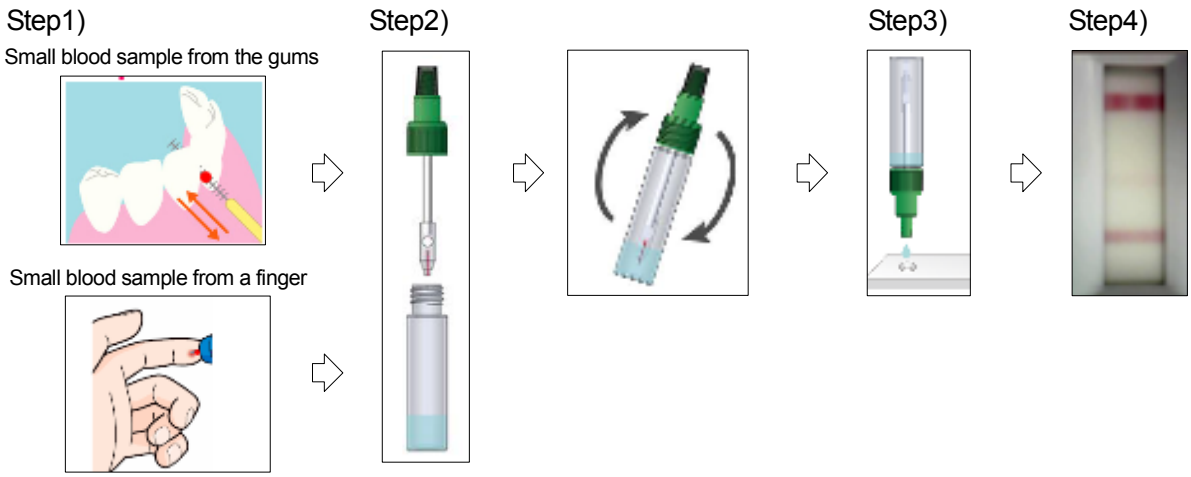
"PersonalA1c" is a highly sensitive testing kit able to test the concentration of HbA1c (hemoglobin A1c)(*2), an indicator of blood sugar, in approximately 10 minutes simply by retrieving a small amount of blood from the fingertips or gums. It employs immunochromatography(*3) using colloidal gold, and enables simple testing for diabetes in a short period of time at low cost without the need for special equipment or skills.

The test kit contains a test strip with two lines that become colored to indicate the test result, and the user can easily determine the HbA1c value by visually comparing the coloration of the lines.

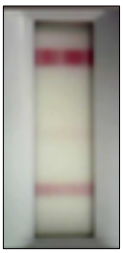
"PersonalA1c" is used as follows.

<Testing Procedure>

Step 1) Use an interdental brush to take a small sample of blood from the gums, or prick a fingertip with a pin to take a small sample of blood.
Step 2) Place the collected blood sample in the special solvent and shake well.
Step 3) Place a droplet of the sample solution prepared in Step 2 onto the test strip.
Step 4) Approximately 10 minutes afterwards, visually assess the indicator lines.



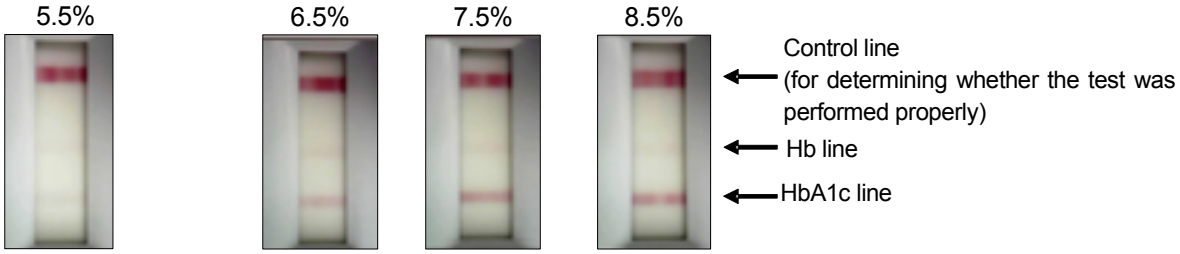
<Test strip inside the testing kit when diabetes is suspected>



<How to interpret the results>

A) If the HbA1c line is almost the same color as the Hb line, the results are normal.
B) If the HbA1c line is darker than the Hb line, diabetes is suspected.

A) Normal range B) Diabetes suspected



<Reference Materials>

HbA1c value(*)	5.6% or less	6.5% or more
	Normal range	Diabetes is strongly suspected
		Immediate examination by a medical institution recommended

* The figures are the NGSP (National Glycohemoglobin Standardization Program) value used as an international standard.

Diabetes patients increasing rapidly in emerging countries

The diabetic population is growing rapidly in emerging countries due to changing lifestyles and eating habits, but the practice of testing for diabetes has not become established because hospital infrastructure is lagging behind, and there is an urgent need for prevention and early detection of diabetes.

The *Diabetes Atlas 6th Edition* published by the International Diabetes Federation estimates the number of people with diabetes to be around 382 million as of 2013, and that this number will increase to approximately 592 million by 2030 unless effective measures are taken. Per country, the largest populations of adult diabetics are China (98.40 million), India (65.07 million) and the United States (24.40 million), and the order of these top three countries is not expected to change by 2030. In particular, the number of people with diabetes is expected to exceed 100 million in both China and India. In another study, it was found that the number of people likely to become diabetic greatly exceeded the number of people with diabetes in China. Although importance is being placed on prevention and early detection, measurement of the HbA1c value, which is a standard used for diagnosing diabetes, could only be performed in hospitals and testing organizations, and there has been demand for a simple testing method.

Tanaka Kikinzoku Kogyo developed “PersonalA1c” to address this issue. This will enable users to easily test their blood condition with minimal discomfort, providing an effective means of preventing diabetes. Furthermore, the PersonalA1c can also be used by hospitals and companies as an early detection tool for

diabetes, or for conducting preliminary screening. In addition, “PersonalA1c” can contribute on a national level as a means of preventing diabetes, and could also lead to the reduction of social medical expenses and the promotion of economic growth as a result.

When selling “PersonalA1c”, Tanaka Kikinzoku Kogyo will conduct clinical trials and provide the know-how required for manufacturing “PersonalA1c” to partner companies, while manufacturing and supplying certain components. Partner companies in each company will purchase and manufacture other materials, and assemble the kits, with sales scheduled to commence in 2015. Tanaka Kikinzoku Kogyo has concluded a partnership agreement with Abnova Corporation (Head office: Taipei, Taiwan) for sales to China and Taiwan, and Abnova has already received IRB(*4) approval for the commencement of clinical trials of “PersonalA1c”. The clinical trials will be conducted at the Chung Shan Medical University Hospital (Taichung, Taiwan), and will assess reproducibility and accuracy of HbA1c as a rapid testing kit in 200 cases. Tanaka Kikinzoku Kogyo aims to achieve an annual sales figure of around 12 million kits worldwide 5 years after the commencement of sales, by selling “PersonalA1c” through partner companies in each country.

*1 Colloidal gold
Stably dispersed gold particles processed on a nano level. Colloidal gold appears red due to localized surface plasmon resonance (a phenomenon in which the vibration of free electrons in metal and incident light resonate on the surface of metal nanoparticles).

*2 HbA1c
Hemoglobin joined with glucose in the blood. The average blood sugar level over the past one to two months can be determined by assessing the HbA1c value. A value of 6.5% or more is used as a criterion for diagnosing diabetes.

*3 Immunochromatography
A measurement method in which a complex of antigens, dye-labeled antibodies and capture antibodies is formed in the process of a sample moving across a sheet of chromatography paper, and the accumulation of labeled dye is visually observed.

*4 IRB
An Institutional Review Board is an organization for reviewing the clinical trial designs reported to the authorities when an institution performs clinical trials. The board reviews the ethics, safety and scientific validity of clinical trials.

■Tanaka Holdings Co., Ltd. (Holding company of Tanaka Precious Metals)

Headquarters: 22F, Tokyo Building, 2-7-3 Marunouchi, Chiyoda-ku, Tokyo

Representative: Akira Tanae, President & CEO

Founded: 1885 Incorporated: 1918 Capital: 500 million yen

Employees in consolidated group: 3,562 (FY2013)

Net sales of consolidated group: 967.6 billion yen (FY2013)

Main businesses of the group:

Manufacture, sales, import and export of precious metals (platinum, gold, silver, and others) and various types of industrial precious metals products. Recycling and refining of precious metals.

Website: http://www.tanaka.co.jp/english (Tanaka Precious Metals),
http://pro.tanaka.co.jp/en (Industrial products)

■Tanaka Kikinzoku Kogyo K.K.

Headquarters: 22F, Tokyo Building, 2-7-3 Marunouchi, Chiyoda-ku, Tokyo

Representative: Akira Tanae, President & CEO

Founded: 1885 Incorporated: 1918 Capital: 500 million yen

Employees: 1,430 (FY2013)

Sales: 929 billion 60 million yen (FY2013)

Main businesses:

Manufacture, sales, import and export of precious metals (platinum, gold, silver, and others) and various types of industrial precious metals products. Recycling and refining of precious metals.

Website: http://pro.tanaka.co.jp/en

<About the Tanaka Precious Metals>

Established in 1885, the Tanaka Precious Metals has built a diversified range of business activities focused on the use of precious metals. On April 1, 2010, the group was reorganized with Tanaka Holdings Co., Ltd. as the holding company (parent company) of the Tanaka Precious Metals. In addition to strengthening corporate governance, the company aims to improve overall service to customers by ensuring efficient management and dynamic execution of operations. Tanaka Precious Metals is committed, as a specialist corporate entity, to providing a diverse range of products through cooperation among group companies.

Tanaka Precious Metals is in the top class in Japan in terms of the volume of precious metal handled, and for many years the group has developed and stably supplied industrial precious metals, in addition to providing accessories and savings commodities utilizing precious metals. As precious metal professionals, the Group will continue to contribute to enriching people's lives in the future.

The eight core companies in the Tanaka Precious Metals are as follows.

- Tanaka Holdings Co., Ltd. (pure holding company)
- Tanaka Kikinzoku Kogyo K.K.
- Tanaka Kikinzoku Hanbai K.K.
- Tanaka Kikinzoku International K.K.
- Tanaka Denshi Kogyo K.K.
- Electroplating Engineers of Japan, Limited
- Tanaka Kikinzoku Jewelry K.K.
- Tanaka Kikinzoku Business Service K.K.