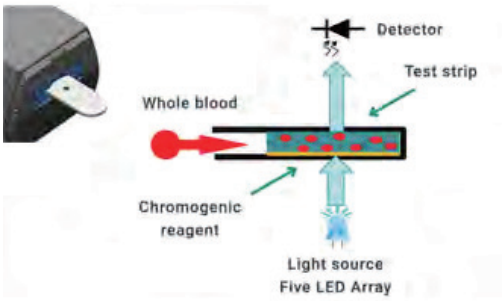
TERUMO

Terumo's blood glucose measurement technologies are developed to provide both high accuracy and ease of use

Insulin administration with blood glucose measurement accuracy of ±8%*

In general, it is said that the higher the accuracy, the lower the possibility of developing complications, and the mission of Terumo's blood glucose measurement technologies is to measure blood glucose as accurately as possible. Terumo has achieved measurement accuracy of ±8%* by employing 5-wavelength transmitted light measurement and its original analysis algorithm, thereby supporting the optimum amount of insulin administration.



Multi-wavelength sensing

- **5-wavelength measurement enables greater precision**
  Terumo has developed 5-wavelength transmitted light measurement, an advanced new blood glucose measurement technology. Since high-accuracy measurement is possible while narrowing down the measurement area, blood sampling of patients can be minimized.
- **Technologies that produces color and applies on test strip were developed to improve measurement accuracy**
  To improve the accuracy of 5-wavelength transmitted light measurement by colorimetry, Terumo has developed an original color-producing technology for precisely and accurately applying blood to a test strip, enabling unprecedented high-precision measurement.

Heat-resistant reagent that maintains measurement performance even at a storage temperature of around 50˚C

Normally, it is necessary to store the device at 30˚C or lower for accurate blood glucose measurement. In hotter storage environments, the measurement performance may deteriorate, decreasing the accuracy. Terumo has developed a technology that maintains measurement performance even at a storage temperatures of around 50˚C.

- **Technology for stable quality control**
  Blood glucose measurement device is normally sensitive to heat and humidity, so usually need to be kept under 30˚C. However, together with its partner companies, Terumo has developed heat resistance technology of up to 60˚C*. Since the technology does not deteriorate measurement performance even if left at temperatures of around 50˚C, more accurate blood glucose measurements could be gathered, even using the same transportation and storage methods as previously.

*1 Innovative optical transmission absorbance system to realise±5% high accurate BGMS. T. Moriuchi, et al., EASD 2019, ePoster#886.
*2 High accurate BGMs based on innovative optical transmission absorbance system to realize accuracy within ±5%. T. Moriuchi, et al., ATTD 2020, Oral Presentation Session 08.

Combining your strengths with ours to create new value

For more details, https://diabetes.terumo.com