

October 14, 9:00- 9:40 Plenary Lecture

Toward precision medicine of metabolic diseases based on genetic ancestry.

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Most of metabolic diseases such as obesity, diabetes and hypertension are becoming serious health problems in not only developed but also developing countries. To achieve precision medicine for these diseases, numerous genetic studies including genome-wide association studies have been performed that produced important information for understanding genetic bases of these disorders, but are difficult to use in daily practice. One practical way is to better understand differences of diseases in different races or with different genetic ancestries. For example, obesity is far less common in East Asians, but more common in Pacific Islanders.

Most of other races are in between. Clinical pictures of diabetes mellitus are also different.

Importance of understanding these differences in daily practice and their genetic background will be discussed.