

Symposium

## [S48]Development of antibody-drug conjugate investigation

Organizers: Shino Manabe (RIKEN/Tohoku Univ), Yuji Itoh (Kagoshima Univ)

Sat. Mar 28, 2020 1:45 PM - 3:45 PM [Room E] Room E (1F)

Antibody-drug conjugates (ADCs) and radioimmunotherapy (RIT) are regarded as next-generation therapeutic approaches using antibodies with high efficiency and low adverse effect. The basic sciences required for ADCs and RIT development, such as organic chemistry, protein chemistry, imaging technology, structural biology, and biomarker identification, are abundant and have been actively investigated in pharmaceutical science field. In this symposium, several investigations from both academia and industry will be presented.

Linker technology, involving the use of peptide linkers, is important in the development of homogenous ADC preparation and suitable drug releasing mechanism. In nuclear medicine, the "theranostics" strategy has been receiving much interest. Photoimmunotherapy (PIT) is also expected to be a promising treatment approach. The antibody carrying a near-infrared fluorescence probe induces an immune response. In theranostics, diagnosis and treatment are possible by changing conjugated radio nuclei to the same antibody. In addition, a peptide-drug conjugate, which releases the drug outside cancer cells to overcome the cancer microenvironment, will be introduced.

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1:45 PM - 1:55 PM

### [S48-Opening]趣旨説明

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