Survey and Promotion of Use of Radioisotopes in Molecular Imaging and Cancer Research

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1. Background

Japan Radioisotope Association is an organization promoting the beneficial use of radioisotopes to contribute to the development of science and technology in Japan. Facing a decreasing trend of the use of radioisotope (RI) reagents, we conducted customer surveys. The result shows there is a potential demand in the fields of molecular imaging and cancer research. It is also found that the services providing information and supplying short-lived RI are required to encourage the use in these fields. We carried out further investigation to know what information and which nuclides the researchers in these fields need.

2. Information service

We conducted a questioner survey to know what type of information is needed. Based on the result of the survey, we created the user's guides about 1) usage of RI in the field of molecular imaging, 2) fundamental method of life-science experiment using RI and 3) safety handling of RI reagents in cooperation with the experts.

3. Supply of short-lived RI

We carried out another survey about the needs for the short-lived RI. The result shows there is an increasing interest in short-lived RI such as Cu-67, Zr-89, I-124, At-211, Ra-223, and Ac-225. To date, we have established the supply routes of these short-lived RI products except for At-211.

4. Future development

As a future development, we are planning the service to introduce the news and reviews on molecular images and cancer therapy researches. Also, we will continue the survey on the customer's needs for the information and shortlived RI to meet the demand timely.