

Laboratory of Hematological Malignancy **KOTANI LAB**

幸谷研究室



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Research on hematological malignancy for development of novel therapy

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Background and Motivation

Hematological malignancy is one of the cancers which have been extensively studied. As a result, the innovative therapy such as molecular target therapy of bcr-abl, antibody therapy by use of antiCD20 antibody, differentiation induction therapy by use of retinoic acid, and hematopoietic stem cell transplantation were established as standard therapy.

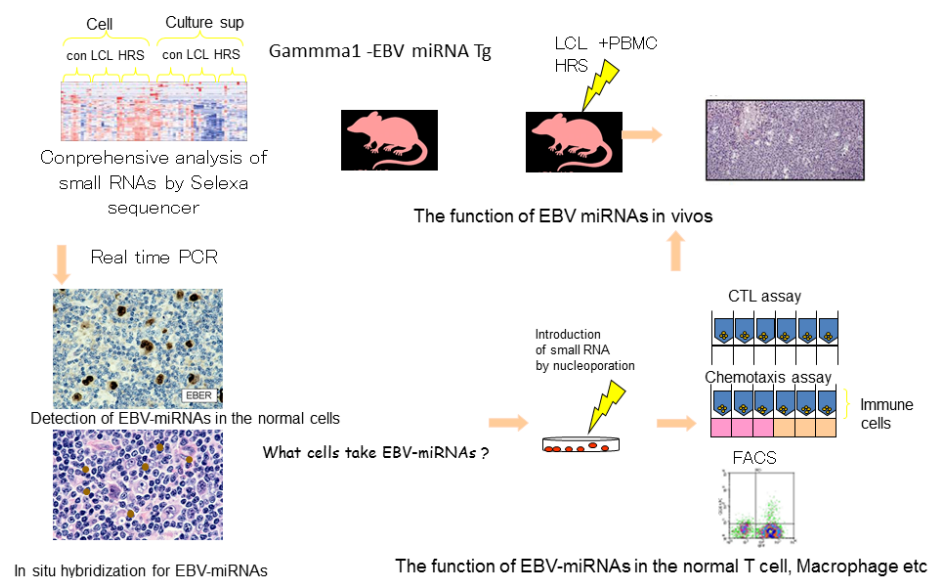
Still, some of hematological malignancies have not been controlled by the existing therapy. Accordingly, still many patients, including young people, suffer from these terrible diseases.

So our research motivation is "Development of the novel therapy for incurable hematological malignancy by use of new concept, new molecule, and so on."

Now three projects are ongoing:

1. Research on small RNAs in hematological malignancy
2. Research on AID as a target of hematological malignancy
3. Research on new strategy for control relapsed or refractory malignancy.

Experimental design



Originality

Focusing on protein coding genes will likely not suffice to unravel mechanisms of incurable hematological malignancy and perhaps investigating the potential roles of non-coding RNAs, novel points of view, in the biology of hematological malignancy is critical and original.

Impact and Perspective

Our research is quite basic so it is still far from for its application. However, small RNAs are new field and good targets for drug.

AID is also promising target for some hematological malignancy. Therefore, the elucidation of their functions in hematological malignancy is beneficial for further strategy for developing drug targeting them.

■ For more information:

www.u-tokai.ac.jp/tuiist/english/tt/announcement_koutani.html

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