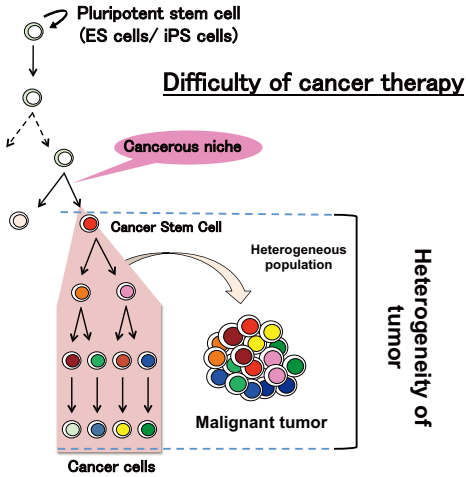


Cancer stem model cells derived from iPS cells

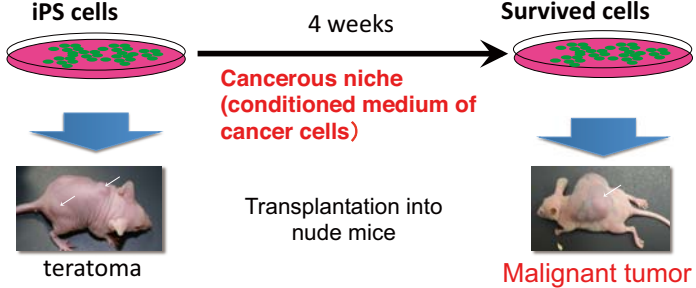
Masaharu Seno, Akifumi Mizutani, Tomonari Kasai, Hiroshi Murakami
 Graduate school of Natural Science and Technology, Okayama University

A concept of "Heterogeneity in tumor" arose from cancer stem cell theory



An important character of cancer

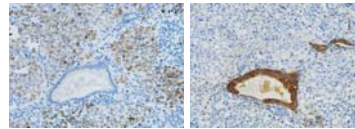
iPS cells cultured with the conditioned medium from various cancer cell lines



Cancerous microenvironments direct differentiation of stem cells (iPSCs) into CSCs *in vivo*.

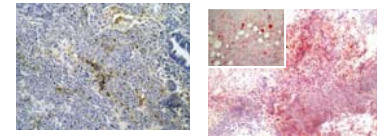
miPS-CSC 1

Tumorigenicity (carcinoma like)

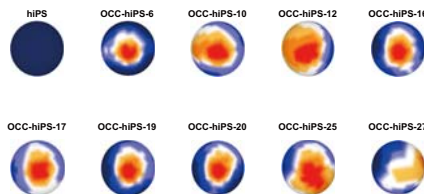


miPS-CSC 2

Tumorigenicity (sarcoma like)



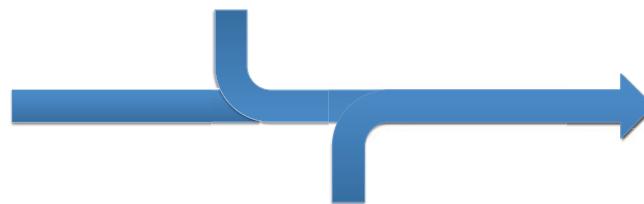
Establishment of a library of CSC derived from human iPS cells



OCCカタログ (例)



Categorization of CSCs by cellular profiles, such as gene expression



Drug screening based on cell types

CSC catalogue



Compare patent samples

Conversion of human iPS cells to CSCs

Choice of Drugs, planning of treatment

Tailor-made treatment of cancer

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