There are a lot of medicines for treatment of diseases. The medicines are provided in clinical practice through several strategies of drug discovery and development. Although new drugs are invented by the conventional strategies it is not necessarily sufficient for patient benefit especially in the anticancer drugs. Therefore, as one of the solutions, the author proposed a new strategy of drug discovery, "Module Drug Discovery". This is the strategy to improve and modify the active substances in module units based on the efficacy and safety information for cancer patients, and to create a new substance.

In this dissertation, the author presented the three examples of anticancer drugs as a practical research by using the module drug discovery. In the first example, DFP·11207 was developed the upgrading the active substance focused on an oral fluorouracil by the exchanging and assembling modules based on the toxicity and safety information for cancer patients. In the second example, DFP-10917 was developed the advancing functional mechanism for the module of the active substance focused on a deoxycytidine analog based on the information of recurrence and refractory cancer patients. In the third example, DFP·10825 was developed the assembling deliver and administration system focused on a RNA interference based on the information of peritoneal disseminated cancer patients.

These examples supported the proposal for "Module drug discovery". The author is convinced that the strategy of the module drug discovery will be established as a new strategy for drug discovery beyond anticancer drugs.