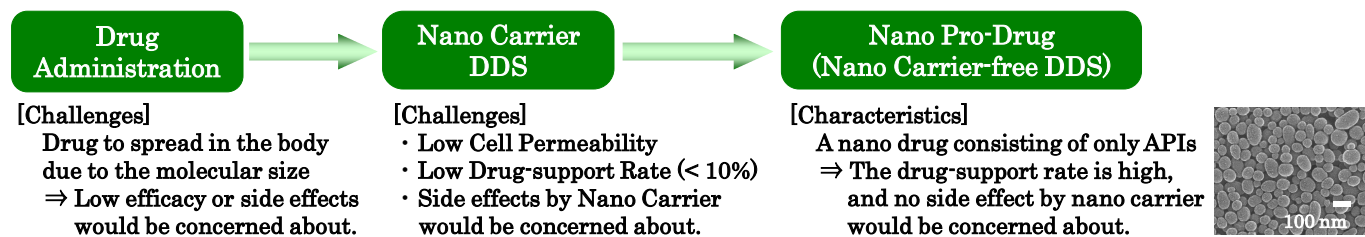


# Nano Pro-Drug

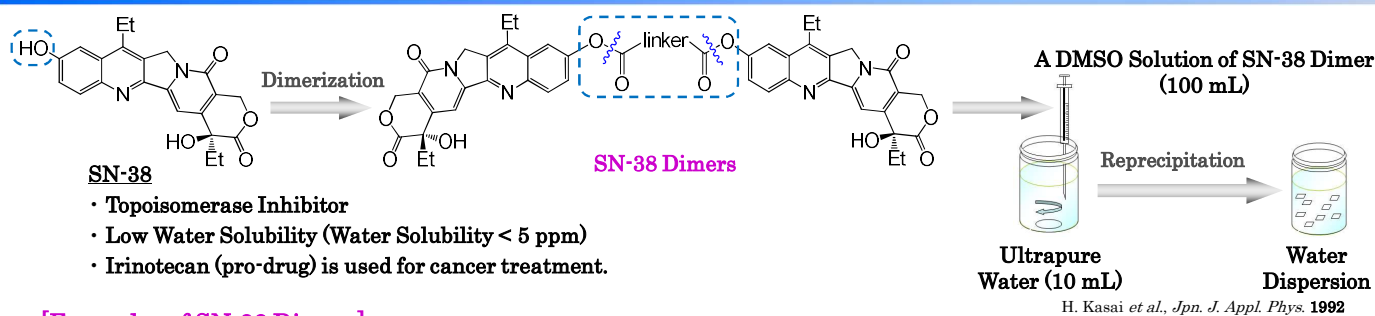
## ~ Design & Efficacy of Nano Carrier-free DDS ~

### KEY INVENTION

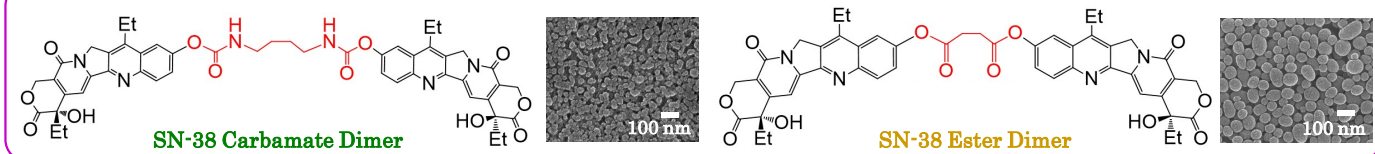
A novel Drug Delivery System (DDS) selectively to deliver drugs to the target cells (tissues) has been developed with no use of Nano Carriers.



### SUMMARY of INVENTION

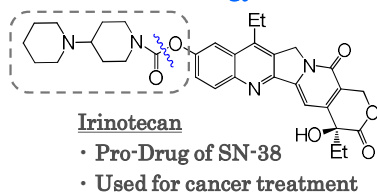


#### [Examples of SN-38 Dimers]



### COMPARISON with and ADVANTAGE over CURRENT TECHNOLOGY

#### [Current Technology]



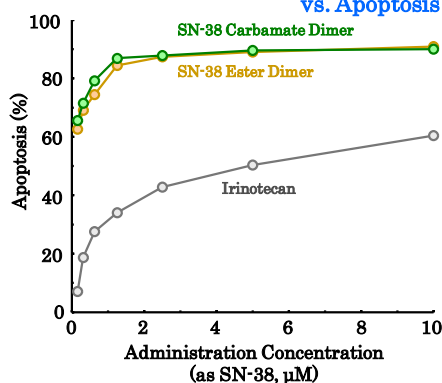
#### cf. Comparison of SN-38 with Irinotecan

	Water Solubility	Efficacy
SN-38	×	⊙
Irinotecan	○	△

The water solubility of Irinotecan is higher than that of SN-38.

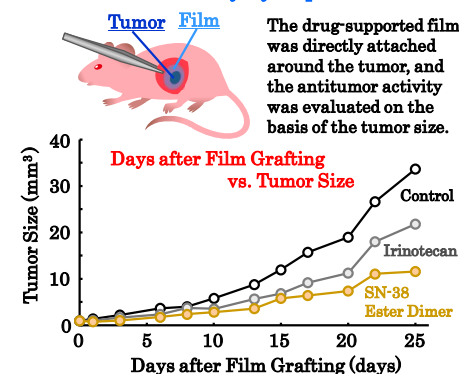
#### [Efficacy Comparison of this technology with the current technology]

##### a. Administration Concentration vs. Apoptosis



SN-38 dimers induce apoptosis at a higher late than Irinotecan.

##### b. Antitumor Activity by Topical Treatment



SN-38 dimer shows a higher antitumor activity than Irinotecan.

### APPLICATION expected

- ⊙ Development of the low-molecule drugs such as antitumor agents using nano pro-drug as an alternative of the current DDS technologies
- ⊙ Development of the novel DDS technology without nano carrier

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**Licensable Patent**

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