Regulatory consideration on development of biological products for treatment of cancer

Luo Jianhui

CDE SFDA, P.R.China

General introduction

- Legal compulsion
 <u>Drug Law of China</u>; September 1984, update February 2001;
- Regulatory requirement
 <u>Regulation for the Implementation of Drug Registration;</u> August 2002;

 <u>Management of Drug Registration</u>, 1999, update, July 2007;
- Guideline documents
 1999, update and add-on since 2005;

Management of Drug Registration Section 3 clinical trail of drugs

item 31, clinical trail, phase I to phase IV;

item 36, quality control by NICPBP;

item 44, prerequisite for international multi-center study;

International clinical trail application or registration application

44.2 special requirements for international multi- center trail;

44.5 clinical data requirements for registration;

Guideline documents

- 57 documents available concerning chemical drug, Chinese herbs drug and biologics;
- 15 documents concerning biological products;
- 6 documents concerning quality control of mammalian cell substrate, non-clinical and clinical study of therapeutic or prophylactic biological products, or validation of analytical assay used for quality control of biological products;

Basic Structure and function of Regulatory Authority

SFDA

CDE

NICPBP

Biologics division

Evaluation of IND or BLA application

Testing laboratory

Quality control Testing products for clinical trail Checking Batch release on market

Others

Advancing procedure of cancer

Disease & Cancer cell

Outcome

sensitive growth relapse cachexia, dying

under control metastasis resistant

lost control, death

Key aspects to consider

Tumor cell nature, malignance and behavior ?

Therapy adopted, radiation, chemical drug, operation, biotherapy ?

Patient's physical condition, response to therapy, tolerance to treatment, quality of life ?

Medical practice, patient's willingness, therapy availability, ethical consideration?

Clinical trail design For therapeutic vaccine or cell therapy:

What kind of clinical trail should be considered of for cancer patient at different disease stage ?

Should early cancer patients be involved in explorative clinical trail ?