Regulation of Regenerative Medicine in Japan

GLOBAL
REGULATORY PARTNERS

Definition

- Regenerative medical products are defined as processed (more than minimal manipulation) live human/animal cells that are intended to be used ;
  1) for either
     (1) the reconstruction, repair, or formation of structures or functions of the human body or
     (2) the treatment or prevention of human diseases, or
  2) for gene therapy

Regulatory Framework

Regenerative Medicine

The act on Safety of Regenerative Medicine (Safety Act)

Deals with all the medical care and clinical research whose safety and effectiveness data has not been studied

The Act on Pharmaceuticals and Medical Devices (PMD Act)

Deals with the commercial product marketing and authorization purpose

Authorities governing regenerative medicines

MHLW – Ministry of Health, Labor and Welfare

- Health policy bureau
- Pharmaceutical and Health Bureau

- **PMDA – Pharmaceutics and Medical Device Agency**
  - Office of cellular and Tissue based Product
  - Office of Manufacturing, Quality and Compliance
  - Office of Safety I

Regulatory Framework

Regenerative Medicine

The act on Safety of Regenerative Medicine (Safety Act)

Deals with all the medical care and clinical research whose safety and effectiveness data has not been studied

The Act on Pharmaceuticals and Medical Devices (PMD Act)

Deals with the commercial product marketing and authorization purpose

Risk based Classification

Class	Example
Class I (High risk)	Transplantation of retinal pigment epithelium sheets derived from autologous iPS cells in patients with age related macular degeneration
Class II (Medium risk)	Autologous bone marrow cell infusion therapy for liver cirrhosis
Class III (Low risk)	Activated lymphocyte therapy for malignancies

Regulatory Submission overview

High Risk (Class I)

- Plan submitted to the certified special committee
- Health Science Council gives opinion to the MHLW
- MHLW gives decision within 90 days

Medium Risk (Class II)

- Plan submitted to the certified special committee
- MHLW gives decision

Low Risk (Class III)

- Plan submitted to the certified committee
- MHLW gives decision

Special Committee = 48 members

Committee = 102 members

Risk Categorizing System

Regulatory Framework

Regenerative Medicine

The act on Safety of Regenerative Medicine (Safety Act)

Deals with all the medical care and clinical research whose safety and effectiveness data has not been studied

The Act on Pharmaceuticals and Medical Devices (PMD Act)

Deals with the commercial product marketing and authorization purpose

PMD Act

- PMD Act involves
  - Evolving early access schemes
  - Develop Guidelines

Submission for Clinical Trial Notification

- **Documents needed:**
  - Statement justifying the reason of sponsorship
  - Protocol of the trial
  - Sample case report form
  - Current Investigational Brochure

- **Timeline:**
  - First notification: Before 31 days

PMD Act

- PMD Act involves
  - Evolving early access schemes
  - Develop Guidelines

Evolving Early Access Scheme

Orphan Designation

- Orphan designation is given to drugs, medical device or regenerative medical products affecting less than 50,000 of the population per year in Japan

Conditional Authorization

- A system that provides companies with the opportunity to market their regenerative medical products after early stage clinical trials

SAKIGAKE

- SAKIGAKE designation helps in the promotion of R&D in Japan aiming at early practical application of innovative pharmaceuticals, medical devices and regenerative medical products

Orphan Designation

Clinical Trials

- Evaluation frequently needs to be done based on a small number of study participants due to patient scarcity
- Controlled clinical trials are frequently difficult to perform

Post Approval

- Follow-up investigations conducted on all patients (and/or follow-on clinical trials) to accumulate adequate data
- Limit the number of medical institutions that are allowed to administer the drug to ensure proper use

Conditional / limited term approval

Clinical Trials

- Evaluation frequently needs to be done based on a small number of study participants due to patient scarcity
- Controlled clinical trials are usually difficult to perform
- Cellular heterogeneity makes it difficult to evaluate based on a fixed/limited number of study participants

Post Approval

- Follow-up investigations conducted on all patients to accumulate adequate data
- Limit the number of medical institutions that are allowed to administer the drug to ensure proper use
- Limit the number of years of approval to a term of no more than 7 years

SAKIGAKE designation

Designation Criteria

- Products in need of innovation therapy
- Already applied for approval in Japan
- Prominent safety can be determined by non-clinical study and early phase trials

Advantages

- Prioritized consultation: ~~2 months~~ 1 month
- Prioritized review: ~~12 months~~ 6 months

PMD Act

- PMD Act involves
  - Evolving early access schemes
  - Develop Guidelines

Personnel Exchange Program

- PMDA and NIHS cultivate human resources from medical institutions and universities to develop guidelines
- Guidelines can be developed in iPS cells, Platelets, Quality Evaluation of Processed cells, ES cells, Stroke, etc.,.

Thank You

ありがとうございました

Suzan Davis
+1 781-672-4200
info@globalregulatorypartners.com
Global Regulatory Partners GK

GLOBAL
REGULATORY PARTNERS