Promotion of Early Patient Access to Medical Devices in the U.S. and Japan – US Regulatory View on Current and Prospective Activities

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December 11, 2019

CDRH Overview

- CDRH's commitment to ensuring patients and providers have timely and continued access to safe, effective, and high-quality medical devices does not occur in a vacuum

- Engage with global regulatory, clinical, and industry stakeholders to leverage available resources and information and promote regulatory consistency and predictability

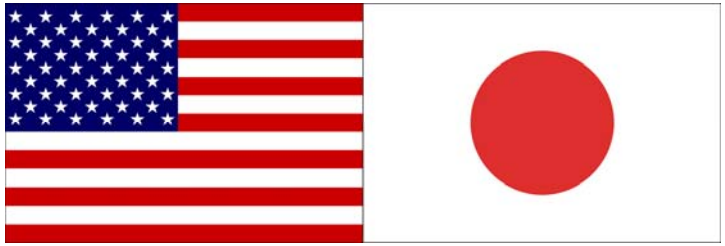
CDRH Strategic Priorities: 2018 - 2020

- Employee Engagement, Opportunity, and Success
- Simplicity
- Collaborative Communities

Our Measure of Success:
"By December 31, 2020, more than 50 percent of manufacturers of novel technologies for the U.S. market intend to bring their devices to the U.S. first or in parallel with other major markets."

What About Japan?

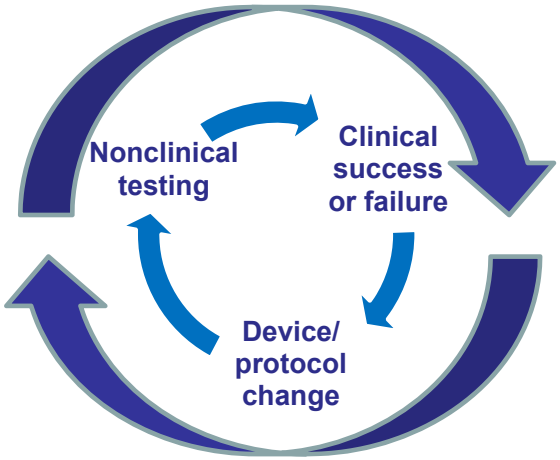
- Similar to US in many ways
  - Large markets
  - Strict regulatory systems
  - Comparable levels of clinical care
- Similar focus on improving the environment for medical device development and access



How Can We Promote Patient Access Together Throughout the Total Product Life Cycle?

Early Feasibility Studies

- Promote early-stage clinical research in US
  - Small number of subjects
  - Device design not necessarily final
  - "Just-in-time" non-clinical testing



- Additional focus on streamlining non-regulatory processes
  - IRB approval and site initiation
  - Reimbursement

Early Feasibility Studies

Through HBD, promoted EFS pathway in Japan

4C Medical Plans First Early Feasibility Study For An Implantable In Japan

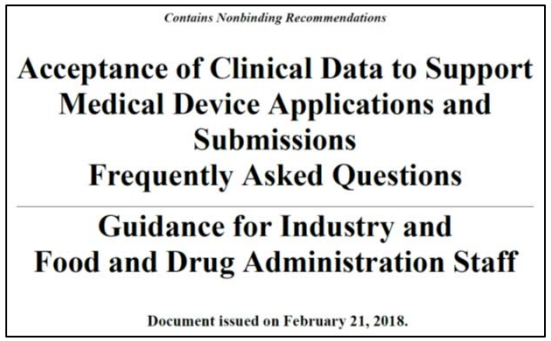
06 Mar 2019 | NEWS

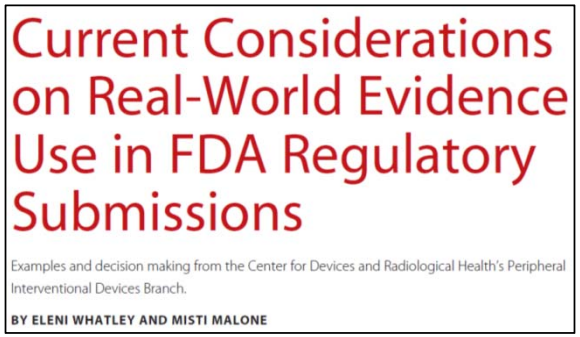
How can we best utilize multi-national EFS studies and leverage these experiences?

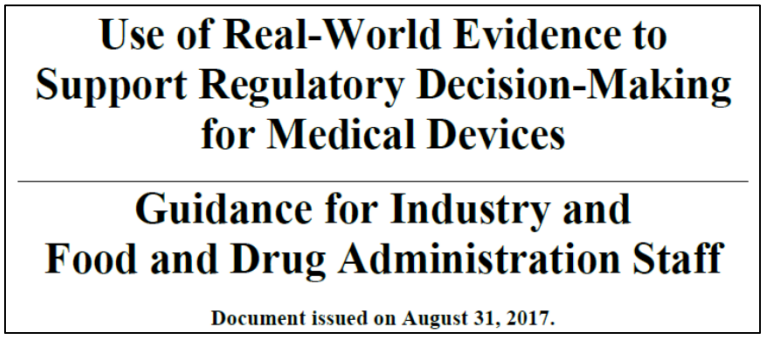
How much do differences in clinical practice, clinical study infrastructure, patient/physician attitudes matter?

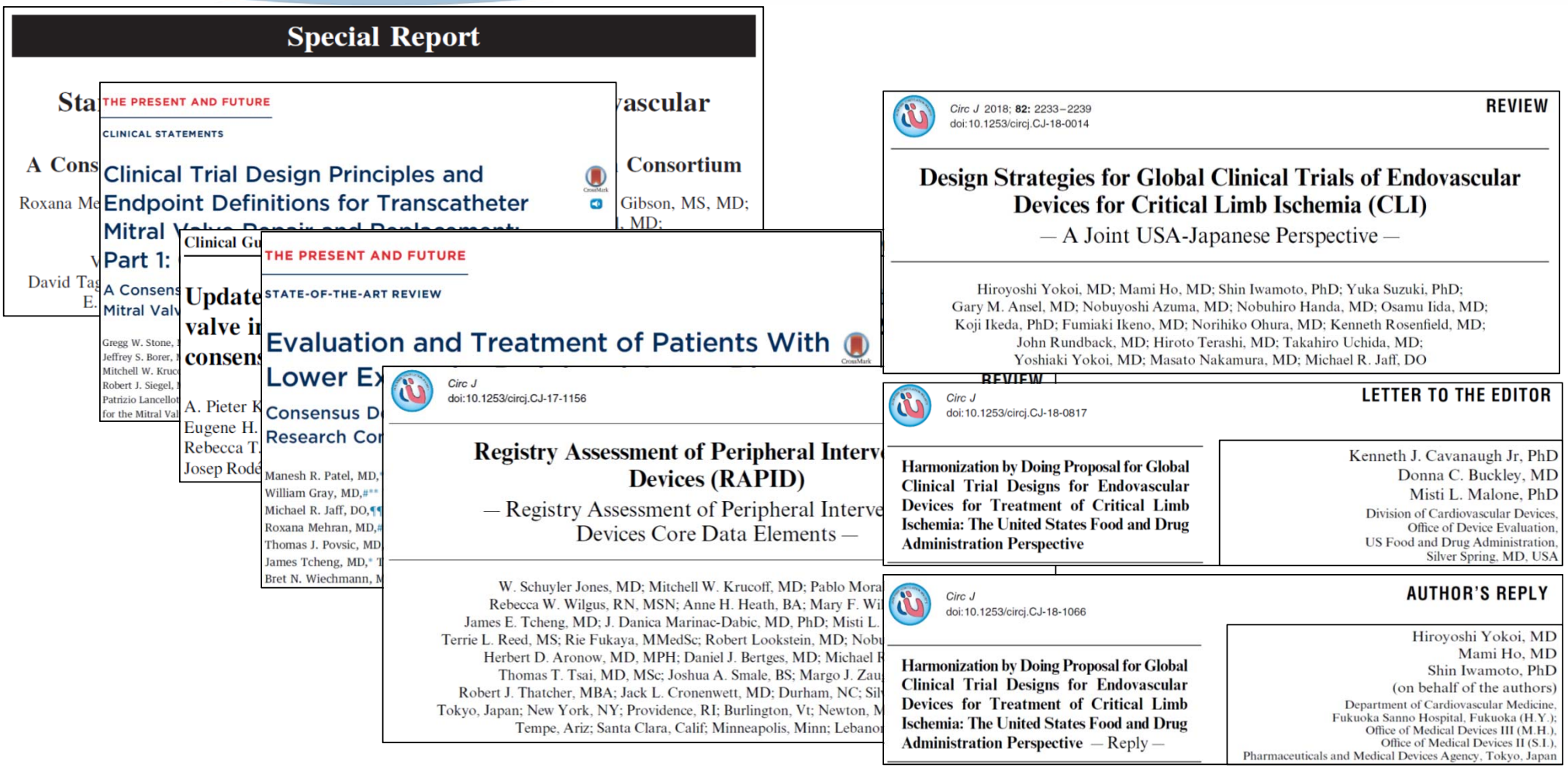
Clinical Study Harmonization

- Multiple efforts to enhance the quality and utility of clinical data
  - Acceptance of non-OUS data
  - Standardization of clinical definitions and endpoints
  - Use of real-world evidence (RWE)









Special Report

THE PRESENT AND FUTURE

CLINICAL STATEMENTS

Clinical Trial Design Principles and Endpoint Definitions for Transcatheter Mitral Valve Repair and Replacement: Part 1:

THE PRESENT AND FUTURE

STATE-OF-THE-ART REVIEW

Evaluation and Treatment of Patients With Lower Ex

Circ J
doi:10.1253/circj.CJ-17-1156

Registry Assessment of Peripheral Interv Devices (RAPID)

— Registry Assessment of Peripheral Interve Devices Core Data Elements —

Circ J 2018; 82: 2233–2239
doi:10.1253/circj.CJ-18-0014

REVIEW

Design Strategies for Global Clinical Trials of Endovascular Devices for Critical Limb Ischemia (CLI)

— A Joint USA-Japanese Perspective —

Hiroyoshi Yokoi, MD; Mami Ho, MD; Shin Iwamoto, PhD; Yuka Suzuki, PhD; Gary M. Ansel, MD; Nobuyoshi Azuma, MD; Nobuhiro Handa, MD; Osamu Iida, MD; Koji Ikeda, PhD; Fumiaki Ikeno, MD; Norihiko Ohura, MD; Kenneth Rosenfield, MD; John Rundback, MD; Hiroto Terashi, MD; Takahiro Uchida, MD; Yoshiaki Yokoi, MD; Masato Nakamura, MD; Michael R. Jaff, DO

Circ J
doi:10.1253/circj.CJ-18-0817

LETTER TO THE EDITOR

Harmonization by Doing Proposal for Global Clinical Trial Designs for Endovascular Devices for Treatment of Critical Limb Ischemia: The United States Food and Drug Administration Perspective

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AUTHOR'S REPLY

Harmonization by Doing Proposal for Global Clinical Trial Designs for Endovascular Devices for Treatment of Critical Limb Ischemia: The United States Food and Drug Administration Perspective — Reply —

Hiroyoshi Yokoi, MD
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Clinical Study Harmonization

Japan and US moving in similar directions

Circ J 2018; 82: 636–643
doi:10.1253/circj.CJ-17-0533

REVIEW

Rapid Globalization of Medical Device Clinical Development Programs in Japan
— The Case of Drug-Eluting Stents —

Madoka Murakami, PhD; Yuka Suzuki, PhD; Toshiyoshi Tominaga, PhD

GLOBAL PERSPECTIVES

New Regulatory Framework for Medical Devices in Japan: Current Regulatory Considerations Regarding Clinical Studies

Akihide Konishi, MD, PhD, Soichiro Isobe, PhD, and Daisaku Sato, PhD

COMMENTARY

The MIHARI project: establishing a new framework for pharmacoepidemiological drug safety assessments by the Pharmaceuticals and Medical Devices Agency of Japan†

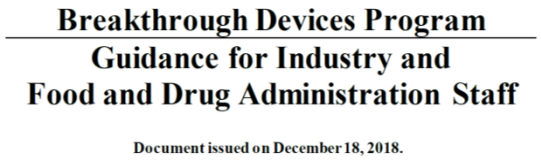
Chieko Ishiguro*, Yoshinori Takeuchi, Yoshiaki Uyama and Tomiko Tawaragi
Office of Medical Informatics and Epidemiology, Pharmaceuticals and Medical Devices Agency, Tokyo, Japan

What additional steps can be taken to promote US-Japanese clinical collaboration?

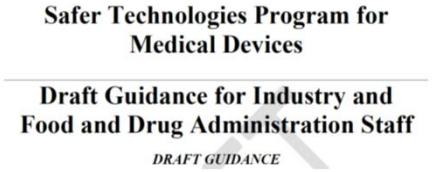
Are there non-regulatory issues to consider, such as international collaborations between medical societies?

Breakthrough Devices / Safer Technologies (STEP) Programs

- Intended to facilitate access to devices that:
  - Offer advantages compared to existing treatments for a debilitating or life-threatening disease (BD)
  - Treat less serious disease and offer an improved safety profile (STEP)
- Incorporate more frequent discussions, novel clinical and non-clinical approaches, pre/post-market data shifts, …


Breakthrough Devices Program
Guidance for Industry and
Food and Drug Administration Staff

Document issued on December 18, 2018.


Safer Technologies Program for
Medical Devices

Draft Guidance for Industry and
Food and Drug Administration Staff

DRAFT GUIDANCE

Breakthrough Devices / Safer Technologies (STEP) Programs

In Japan, similar “Sakigake” program exists

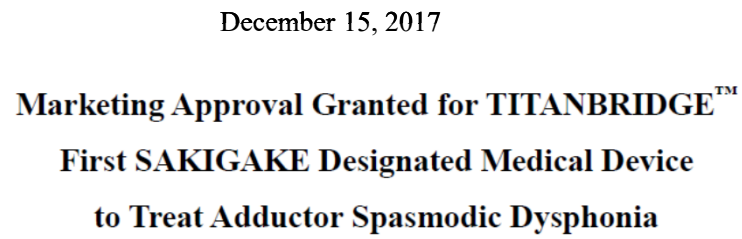
Strategy of SAKIGAKE by MHLW

On June 17th, 2014, the Ministry of Health, Labour and Welfare (MHLW) announced the "Strategy of SAKIGAKE" to lead the world in the practical application of innovative medical products.

The "Strategy of SAKIGAKE" covers from basic research to clinical research/trials, approval reviews, safety measures, insurance coverage, improvement of infrastructure and the environment for corporate activities, and global expansion.

One of the major policies of the "Strategy of SAKIGAKE" is the "SAKIGAKE Designation System," which promoting R&D and early clinical research/trials in Japan aiming at early practical application for innovative medical products with prospective significant efficacy by conducting priority consultations, prior assessment, and priority reviews.

Together with MHLW, PMDA will work towards implementation of the strategy.



December 15, 2017

Marketing Approval Granted for TITANBRIDGE™

First SAKIGAKE Designated Medical Device

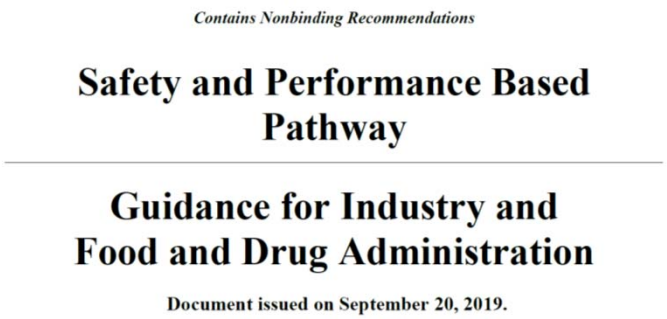
to Treat Adductor Spasmodic Dysphonia

Can these programs be complementary for companies seeking both U.S. and Japanese approval?

Can lessons learned from one program be applied to the other?

Regulatory Decision-Making

- 510(k): Alternative pathway for clearance based not on substantial equivalence, but on:
  - Intended use/technology equivalent to predicate
  - Performance testing following FDA-specified methods/criteria
    - Based on recognized standards or historical performance of comparable products



Contains Nonbinding Recommendations

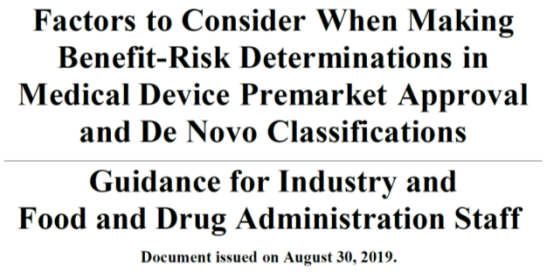
Safety and Performance Based Pathway

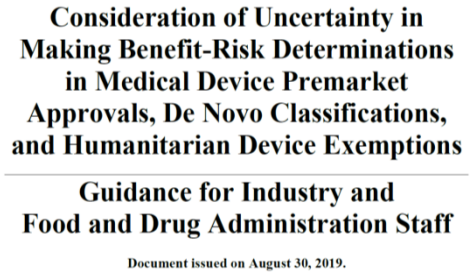
Guidance for Industry and Food and Drug Administration

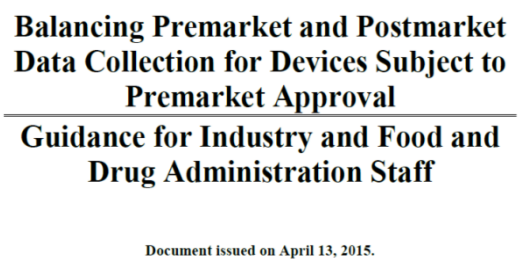
Document issued on September 20, 2019.

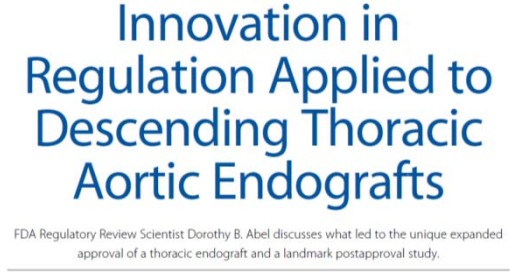
Regulatory Decision-Making

- Least Burdensome principle: the minimum amount of information necessary to address a regulatory issue through the most efficient manner, at the right time
  - Benefit-risk considerations
  - Acceptable of uncertainty
  - Pre-market/post-market balance









Regulatory Decision-Making

- Very similar principles developed and implemented in Japan

- IMDRF developing a process for recognition of third-party marketing decisions

Circ J 2018; **82:** 1487–1490
doi:10.1253/circj.CJ-17-1425

REVIEW

First Approval of Improved Medical Device Conditional on Use-Result Survey in Japan
— Regulatory Review of Polymer-Free Drug-Coated BioFreedom Coronary Stent —

Akihide Konishi, MD, PhD; Mami Ho, MD, PhD; Yuko Shirai, BSc; Haruki Shirato, PhD

IMDRF International Medical Device Regulators Forum

Title: Requirements for Regulatory Authority Recognition of Conformity Assessment Bodies Conducting Medical Device Regulatory Reviews

Authoring Group: IMDRF GRRP Working Group

Can we exploit the synergies between U.S./Japanese review approaches? Are there additional opportunities for bilateral collaboration and reviews?

Points to Consider/Discuss

- Are there opportunities to optimize EFS use in each country?
- Can we develop best practices for collecting/analyzing RWE?
- Is there value in post-market collaboration/information-sharing?
- What infrastructure/non-regulatory issues can we address?
- Are HBD and other collaborations practical for small businesses?

- ??

Conclusions

- In recent years, both U.S. and Japan have taken steps to facilitate patient access throughout the product life cycle
- Further US-Japanese collaborations make particular sense now
- Consider opportunities to use previous learnings and initiate new projects as part of your regulatory and clinical strategies

- How can HBD build on its successes and enter new areas?

Thank You!

ご清聴ありがとうございます！