CTX

Delivery new medicine to the patient faster

Japan Clinical Trial Transformation Research Society

- For Delivering New Medicines To Patients Faster -

Introduction of the First Period of our activities

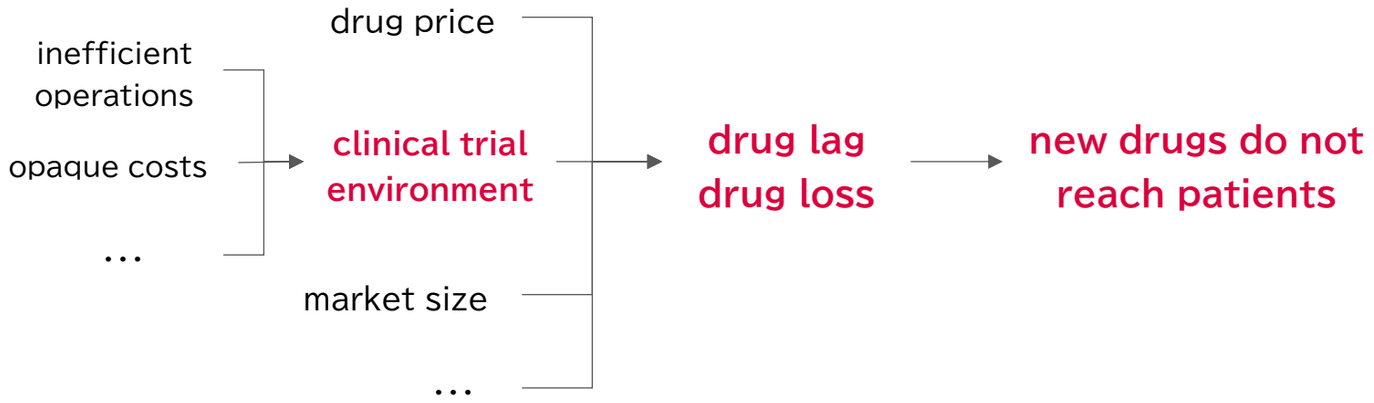
Mitsubishi Research Institute

Introduction

Concern about a future in which Japan “is no longer chosen for global clinical trials”

Japan’s rate of participation in global clinical trials is low and is becoming one cause of drug loss

- If drug loss occurs, new drugs do not reach patients in Japan
- For that reason, it is necessary for Japan to put in place a clinical trial environment in Japan in order to be “chosen for global clinical trials”



The rate of participation in global clinical trials (2021)	
US	64.9%
Germany	33.5%
France	28.5%
UK	26.5%
Japan	19.6%
China	10.2%

Source) Prepared based on OPIR Views and Actions No. 66, July 2022, Hiroshi Azuma , “Survey on Trends in Global Clinical Trials in Recent Years ”

*1:According to OPIR Views and Actions No. 72, July 2024, Yoshiura, Azuma, Morimoto, “The Latest Trends in Unapproved Medications in Japan: Based on the Status of New Drug Approval in Japan and the United States in 2023 ,” in a determination made as of the end of December 2023, 67.5% of New Molecular Entities (NMEs) from the United States were unapproved medications in Japan.
*2:According to OPIR Views and Actions No. 66, July 2022, Azuma, “Survey on Trends in Global Clinical Trials in Recent Years,” the number of global clinical trials has increased 3.6 times in ten years, and there were 450 such trials in FY2020.

Clinical Trials Transformation

Clinical Trial Transformation (CTX) is required in Japan as one of the means for Japan to remain “chosen for global clinical trials.”

- It has been pointed out that clinical trials in Japan are slow and high cost due to their low potential for case accumulation.*
- For that reason, transformation of the conventional format of clinical trials in Japan in order to increase the international competitiveness of Japan in clinical trials is required.
- CTX does not refer to a specific method; it is a broad concept which refers to new mechanisms for conducting clinical trials more efficiently and effectively.

CTX

Clinical Trials Transformation

- Decentralized Clinical Trial(DCT)
- Quality by Design(QbD)
- Fair Market Value(FMV)
- Real World Data(RWD)
- Sigle IRB
- others

* In the presentation materials of the 20th Conference on CRC and Clinical Trials 2020 in Nagasaki , a seminar jointly hosted by PHRMA/EFPIA JAPAN with the title “How to Avoid being Excluded from Global Trials: Cost Awareness will Revitalize Clinical Trials in Japan ,” it was stated that based on a comparison of the number of registered cases per number of facilities in each country and a comparison of the number of facilities required for the registration of 100 cases in each country, many facilities are necessary in order to obtain the necessary number of cases in Japan.

What the Japan CTX Research Society is aiming to achieve

The Mitsubishi Research Institute, Inc. established the Japan CTX Research Society on October 1, 2023 with the aim of advancing CTX and eliminating drug loss in Japan with the participation of multiple stakeholders.

Purpose

Enhancing participation in global clinical trials by transforming the clinical trial environment in Japan through multi-stakeholder engagement.

Vision

Contributing to the advancement of pharmaceutical development in Japan through policy recommendations and initiatives that support the dissemination of CTX.

Mission

Advancing the efficiency of clinical trials through CTX, while enhancing participation in global clinical trials, to deliver new therapeutic options to patients more quickly on a world level.

The Composition of the Research Society

Japan CTX Research Society
(Mitsubishi Research Institute, Inc.)

Members				Observers	Secretariat
Leading companies (product manufacturers including pharmaceuticals/medical devices/regenerative medicine, etc.), startups (biotech/medtech)	CRO SMO	IT vendors	Medical institutions, healthcare professionals, academia	Government agencies, public institutions	Mitsubishi Research Institute, Inc.

Preparation of results (written recommendations, etc.)

Promotion of CTX in Japan

Prospects

In the First Period (October 2023 to September 2024) the society focused on decentralized clinical trials (DCTs) but in the Second Period (October 2024 to September 2025) we will expand the scope of discussion to promote CTX.

- In the First Period we focused on the recent topic of DCTs and generated concrete achievements.
- Going forward, we will gradually expand our research focus regarding the areas where we should promote CTX in line with the objectives of our society, taking into account our priorities and the need for this Research Society to handle them.

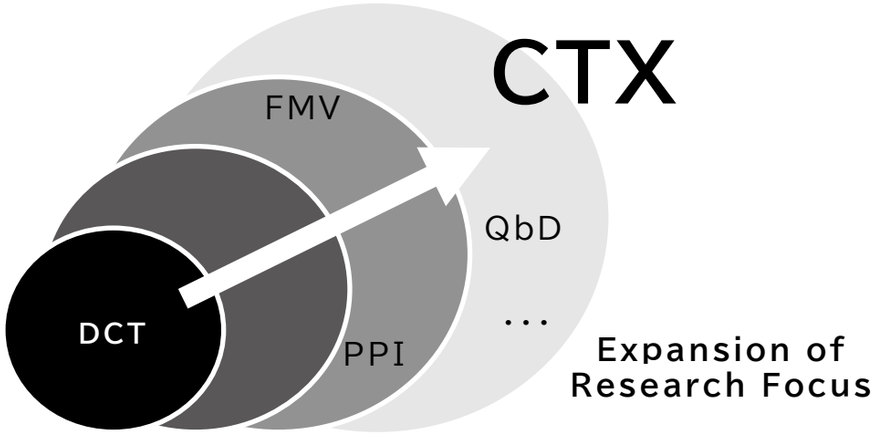
Issues in Japan's clinical trial environment

Transformation to make clinical trials more efficient and effective

Improving Japan's participation in global clinical trials

Providing new drugs to Japanese patients as early as possible

Discussion on Advancing CTX in Japan from the Perspectives of Industry, Government, Academia, and Patients



Content of the activities in the First Period and the recommendations

Content of the activities in the First Period of the Japan CTX Research Society

The Japan CTX Research Society launched two sectional committees, commenced its First Period activities in October 2023, and compiled its recommendations.

- **In the First Period we put the focus on the “encouragement of mutual understanding” and “building an environment which encourages the creation of results and evidence” and discussed these issues in the two sectional committees.**

Sectional Committee 1 **Encouragement of mutual understanding**	• The purpose of this committee was to align the perceptions of companies, medical institutions, doctors, and patients regarding the sense of crisis over Japan Passing in clinical trials and the introduction of DCTs, to enable them to understand each other’ s situations.
Sectional Committee 2 **Building an environment which encourages the creation of results and evidence**	• The purpose of this committee was to delve into the issues that are actually arising in the sponsors, CROs, and medical institutions, respectively, extract the issues which are obstructing the dissemination of DCTs, and recommend the efforts necessary to resolve those issues.

List of members in the First Period

In the First Period, 18 companies, five medical institutions (including universities), and 11 researchers from academia participated.

Companies/Startups

- EPS Corporation
- A2 Healthcare Corporation
- Otsuka Pharmaceutical Co., Ltd.
- SUSMED, Inc.
- Cmic Co., Ltd.
- TechDoctor, Inc.
- Eli Lilly Japan K.K.
- Pfizer R&D Japan G.K.
- Falma Co., Ltd.
- Mediford Corporation
- Merck Biopharma Co., Ltd.
- Janssen Pharmaceutical K.K.
- Linical Co., Ltd.
- Buzzreach Inc.
- IQVIA Site Solutions Japan G.K
- Medical Research Network Japan K.K
- MEDICOLAB Co., Ltd.
- MICIN.Inc.

Medical institutions

- Aichi Cancer Center
- Okayama University Hospital
- KINDAI University Hospital
- Tokyo Center Clinic
- Nippon Medical School

Non-member participant

(Academic researchers who has participated in this research society, similar to members.)

- 11 researchers

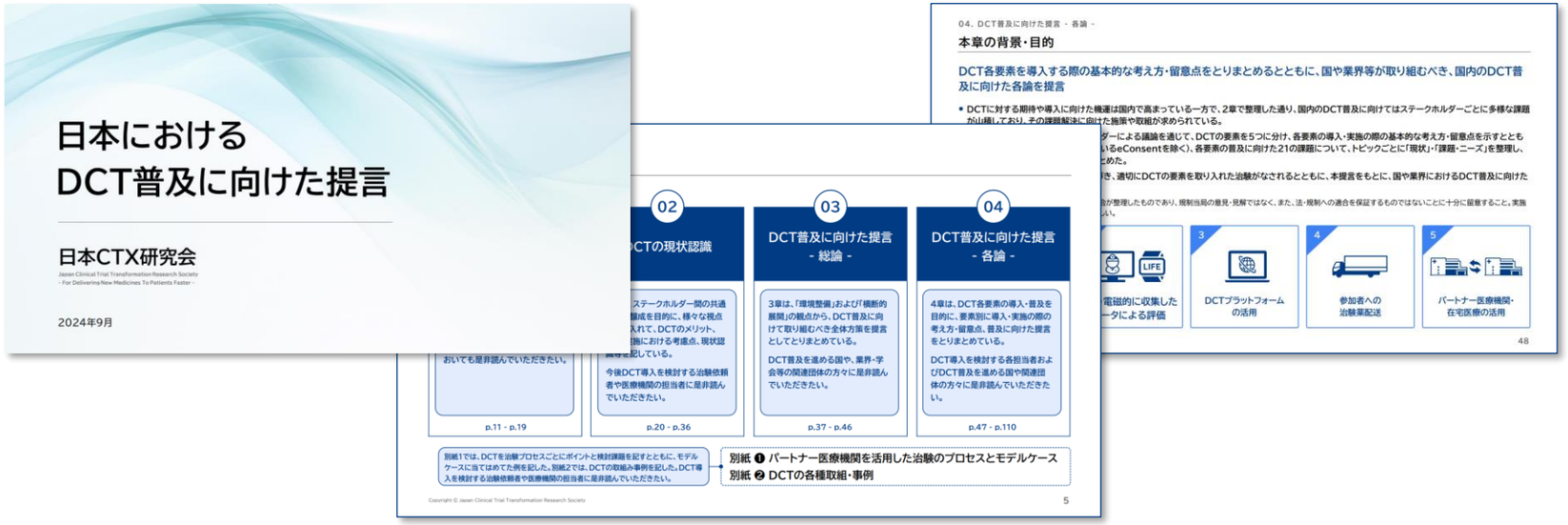
Secretariat

- Mitsubishi Research Institute, Inc.

Release of recommendations for the dissemination of DCTs in Japan

We compiled the results of discussions for two hours every month over ten months in each of the two sectional committees and published the “Recommendations for Dissemination of DCTs in Japan ” in September 2024.

- In summary, we recommended six overall measures which the national government and industry, etc. should tackle for the dissemination of DCTs in Japan from the perspectives of “promotion of environmental development” and “promotion of cross-sectional rollout.”
- In detail, we presented the basic approach and points to note when introducing and implementing each of the five elements of DCTs, and made recommendations regarding the “current situation,” “issues and needs,” and specific “directions of solutions” for each of the 21 topics pertaining to each of the elements.



The composition of the recommendations

01 Background to the recommendations

- About the clinical trial environment of Japan
- About DCTs

02 Perceptions of the current situation of DCTs

- Advantages brought about by DCTs
- Points to consider when implementing DCTs
- Perceptions of the current situation with respect to DCTs

03 Recommendations for the dissemination of DCTs -summary-

- Promotion of environmental development
- Promotion of cross-sectional rollout

04 Recommendations for the dissemination of DCTs -detail-

- Utilization of eConsent
- Evaluation using remotely and electromagnetically collected data
- Utilization of a DCT platform
- Delivery of the investigational drugs to the participants
- Utilization of partner medical institutions and home medical care

＋

Appendix ❶ Processes and model cases for clinical trials utilizing partner medical institutions

Appendix ❷ Various DCT efforts and examples

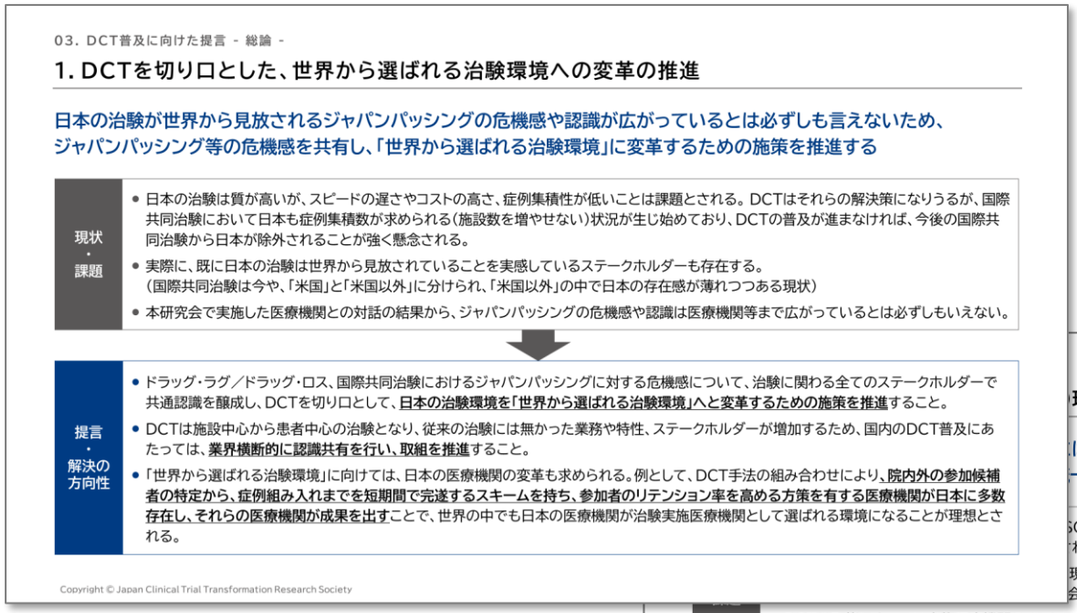
Summary | Recommendations and directions for dissemination of DCTs in Japan

In summary, we recommended six overall measures which the national government and industry, etc. should tackle for the dissemination of DCTs in Japan from the perspectives of “promotion of environmental development” and “promotion of cross-sectional rollout.”

Promotion of environmental development	❶ Transformation into a clinical trial environment chosen by the world
	❷ “Hard” aspects of environmental development
	❸ “Soft” aspects of environmental development
	❹ The establishment of evidence concerning the effect of DCTs
Promotion of cross-sectional rollout	❺ The horizonal rollout of examples of DCT efforts and DCT know-how
	❻ Network formation involving diverse stakeholders

Summary | Recommendations and directions for dissemination of DCTs in Japan

We made recommendations regarding the current situation and issues and the direction of solutions for each of the six overall measures.



03. DCT普及に向けた提言 - 総論 -

1. DCTを切り口とした、世界から選ばれる治験環境への変革の推進

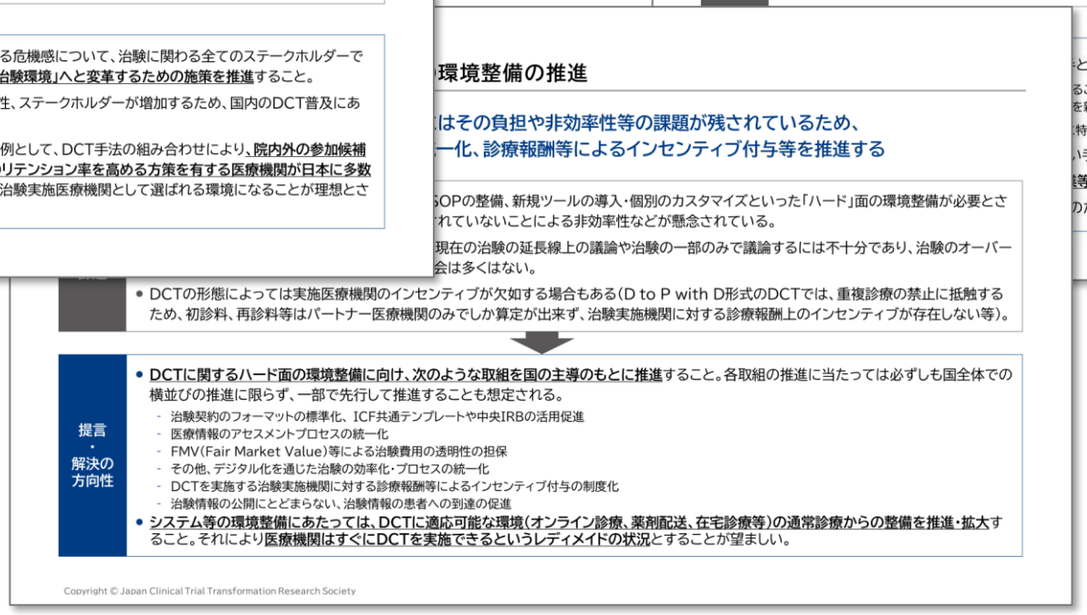
日本の治験が世界から見放されるジャパンパッシングの危機感や認識が広がっているとは必ずしも言えないため、
ジャパンパッシング等の危機感を共有し、「世界から選ばれる治験環境」に変革するための施策を推進する

現状・課題

- 日本の治験は質が高いが、スピードの遅さやコストの高さ、症例集積性が低いことは課題とされる。DCTはそれらの解決策になりうるが、国際共同治験において日本も症例集積数が求められる（施設数を増やせない）状況が生じ始めており、DCTの普及が進まなければ、今後の国際共同治験から日本が除外されることが強く懸念される。
- 実際に、既に日本の治験は世界から見放されていることを実感しているステークホルダーも存在する。
（国際共同治験は今や、「米国」と「米国以外」に分けられ、「米国以外」の中で日本の存在感が薄れつつある現状）
- 本研究会で実施した医療機関との対話の結果から、ジャパンパッシングの危機感や認識は医療機関等まで広がっているとは必ずしもいえない。

提言・解決の方向性

- ドラッグ・ラグ／ドラッグ・ロス、国際共同治験におけるジャパンパッシングに対する危機感について、治験に関わる全てのステークホルダーで共通認識を醸成し、DCTを切り口として、**日本の治験環境を「世界から選ばれる治験環境」へと変革するための施策を推進**すること。
- DCTは施設中心から患者中心の治験となり、従来の治験には無かった業務や特性、ステークホルダーが増加するため、国内のDCT普及にあたっては、**業界横断的に認識共有を行い、取組を推進**すること。
- 「世界から選ばれる治験環境」に向けては、日本の医療機関の変革も求められる。例として、DCT手法の組み合わせにより、**院内外の参加候補者の特定から、症例組み入れまでを短期間で完遂するスキームを持ち、参加者のリテンション率を高める方策を有する医療機関が日本に多数存在し、それらの医療機関が成果を出す**ことで、世界の中でも日本の医療機関が治験実施医療機関として選ばれる環境になることが理想とされる。



環境整備の推進

はその負担や非効率性等の課題が残されているため、
一化、診療報酬等によるインセンティブ付与等を推進する

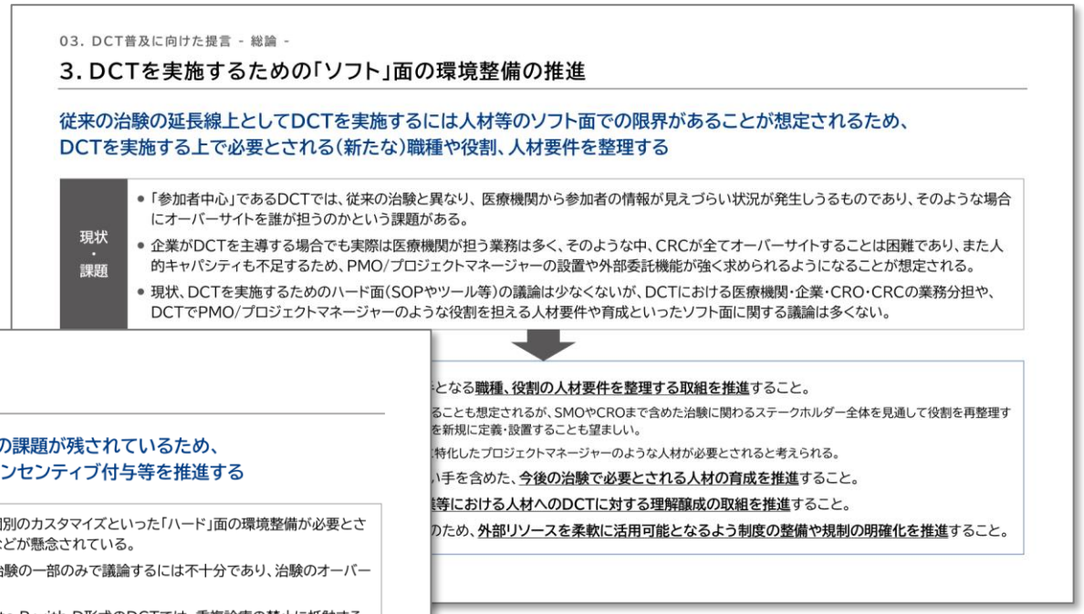
SOPの整備、新規ツールの導入・個別のカスタマイズといった「ハード」面の環境整備が必要とされていないことによる非効率性などが懸念されている。

現在の治験の延長線上の議論や治験の一部のみで議論するには不十分であり、治験のオーバー会は多くはない。

- DCTの形態によっては実施医療機関のインセンティブが欠如する場合もある（D to P with D形式のDCTでは、重複診療の禁止に抵触するため、初診料、再診料等はパートナー医療機関のみでしか算定が出来ず、治験実施機関に対する診療報酬上のインセンティブが存在しない等）。

提言・解決の方向性

- **DCTに関するハード面の環境整備に向け、次のような取組を国の主導のもとに推進**すること。各取組の推進に当たっては必ずしも国全体での横並びの推進に限らず、一部で先行して推進することも想定される。
  - 治験契約のフォーマットの標準化、ICF共通テンプレートや中央IRBの活用促進
  - 医療情報のアセスメントプロセスの統一化
  - FMV（Fair Market Value）等による治験費用の透明性の担保
  - その他、デジタル化を通じた治験の効率化・プロセスの統一化
  - DCTを実施する治験実施機関に対する診療報酬等によるインセンティブ付与の制度化
  - 治験情報の公開にとどまらない、治験情報の患者への到達の促進
- **システム等の環境整備にあたっては、DCTに適応可能な環境（オンライン診療、薬剤配送、在宅診療等）の通常診療からの整備を推進・拡大**すること。それにより**医療機関はすぐにDCTを実施できるというレディメイドの状況**とすることが望ましい。



03. DCT普及に向けた提言 - 総論 -

3. DCTを実施するための「ソフト」面の環境整備の推進

従来の治験の延長線上としてDCTを実施するには人材等のソフト面での限界があることが想定されるため、
DCTを実施する上で必要とされる（新たな）職種や役割、人材要件を整理する

現状・課題

- 「参加者中心」であるDCTでは、従来の治験と異なり、医療機関から参加者の情報が見えづらい状況が発生しうるものであり、そのような場合にオーバーサイトを誰が担うのかという課題がある。
- 企業がDCTを主導する場合でも実際は医療機関が担う業務は多く、そのような中、CRCが全てオーバーサイトすることは困難であり、また人的キャパシティも不足するため、PMO/プロジェクトマネージャーの設置や外部委託機能が強く求められるようになることが想定される。
- 現状、DCTを実施するためのハード面（SOPやツール等）の議論は少なくないが、DCTにおける医療機関・企業・CRO・CRCの業務分担や、DCTでPMO/プロジェクトマネージャーのような役割を担える人材要件や育成といったソフト面に関する議論は多くない。

となる**職種、役割の人材要件を整理する取組を推進**すること。

ることも想定されるが、SMOやCROまで含めた治験に関わるステークホルダー全体を見通して役割を再整理すを新規に定義・設置することも望ましい。

特化したプロジェクトマネージャーのような人材が必要とされると考えられる。

い手を含めた、**今後の治験で必要とされる人材の育成を推進**すること。

等における人材へのDCTに対する理解醸成の取組を推進すること。

のため、**外部リソースを柔軟に活用可能となるよう制度の整備や規制の明確化を推進**すること。

Detail | The five elements of DCTs and recommendations for their dissemination

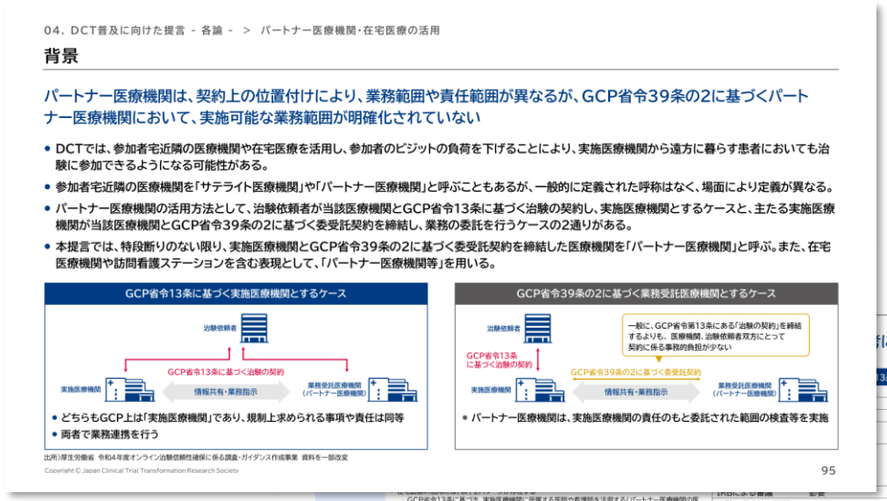
In detail, we presented the basic approach and points to note when introducing and implementing each of the five elements of DCTs, and considered the “current situation,” “issues and needs” and specific “directions of solutions” for each of the 21 topics pertaining to each of the elements.

1 eConsent	Identity authentication using multifactor authentication				
2 Data collected remotely and electronically	Construction of evaluation techniques using collected data	Dissemination of online medical examinations and requirements for calculating the re-examination fee in clinical trials	Approach of utilizing BYOD	An environment in which it is easy to use a copyrighted scale	Meeting the requirements of Japan’s unique regulations when using products from overseas vendors
3 DCT platform	The burden of healthcare professionals when utilizing systems	Use of site-owned systems and tools	Clarification of the suitability of using general-purpose services and tools	Saving of medical records in the case that the records concerning the clinical trials are only saved in sponsor-owned systems	
4 Delivery of the investigational drugs	Direct delivery to the homes from outside the implementing medical institutions	Pickup outside the participants’ homes of the drugs used in the clinical trials			
5 Partner medical institutions and home medical care	Verification of the effect due to the utilization of partner medical institutions , etc.	Sharing information which could become partner medical institutions and construction of a clinical trial network	Payment of clinical trial expenses in partner medical institutions, etc.	Methods of calculating the clinical trial expenses	Basic medical fees in the case of D to P with D format
	Administration of medication in partner medical institutions, etc.	Approach concerning reports on serious adverse events	Handling of testing samples collected outside medical institutions	Utilization of pharmacies, etc. in sample collection and recovery	

Detail | The five elements of DCTs and recommendations for their dissemination

Concerning the four elements for which there is no guidance, we presented the “basic approach and points to note” and then organized the current situation and issues regarding the 21 topics of the five elements and recommended directions of solutions.

Examples of Basic Concepts and Considerations


04．DCT普及に向けた提言 - 各論 - ＞ パートナー医療機関・在宅医療の活用

背景

パートナー医療機関は、契約上の位置付けにより、業務範囲や責任範囲が異なるが、GCP省令39条の2に基づくパートナー医療機関において、実施可能な業務範囲が明確化されていない

- DCTでは、参加者宅近隣の医療機関や在宅医療を活用し、参加者のビジットの負荷を下げることにより、実施医療機関から遠方に暮らす患者においても治験に参加できるようになる可能性がある。
- 参加者宅近隣の医療機関を「サテライト医療機関」や「パートナー医療機関」と呼ぶこともあるが、一般的に定義された呼称はなく、場面により定義が異なる。
- パートナー医療機関の活用方法として、治験依頼者が当該医療機関とGCP省令13条に基づく治験の契約し、実施医療機関とするケースと、主たる実施医療機関が当該医療機関とGCP省令39条の2に基づく委受託契約を締結し、業務の委託を行うケースの2通りがある。
- 本提言では、特段断りのない限り、実施医療機関とGCP省令39条の2に基づく委受託契約を締結した医療機関を「パートナー医療機関」と呼ぶ。また、在宅医療機関や訪問看護ステーションを含む表現として、「パートナー医療機関等」を用いる。

GCP省令13条に基づく実施医療機関とするケース

治験依頼者

GCP省令13条に基づく治験の契約

実施医療機関

情報共有・業務指示

業務受託医療機関（パートナー医療機関）

- どちらもGCP上は「実施医療機関」であり、規制上求められる事項や責任は同等
- 両者で業務連携を行う

GCP省令39条の2に基づく業務受託医療機関とするケース

治験依頼者

GCP省令13条に基づく治験の契約

一般に、GCP省令第13条にある「治験の契約」を締結するよりも、医療機関、治験依頼者双方にとって契約に係る事務的負担が少ない

GCP省令39条の2に基づく委受託契約

実施医療機関

情報共有・業務指示

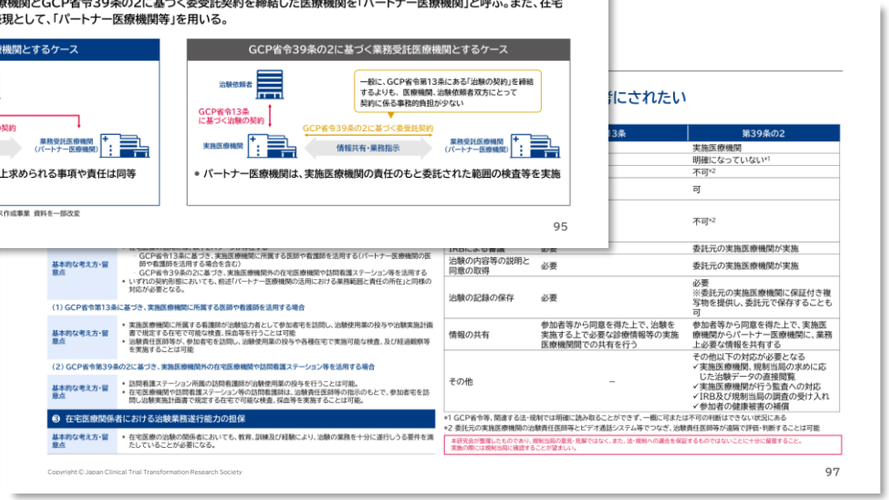
業務受託医療機関（パートナー医療機関）

- パートナー医療機関は、実施医療機関の責任のもと委託された範囲の検査等を実施

出所）厚生労働省 令和4年度オンライン治験信頼性確保に係る調査・ガイダンス作成事業 資料を一部改変

Copyright © Japan Clinical Trial Transformation Research Society

95


にされたい

		第39条の2
		実施医療機関
		明確になっていない[1]
		不可[2]
		可
		不可[2]
		委託元の実施医療機関が実施
治験の内容等の説明と同意の取得	必要	委託元の実施医療機関が実施
治験の記録の保存	必要	必要 ※委託元の実施医療機関に保証付き複写物を提供し、委託元で保存することも可
情報の共有	参加者等から同意を得た上で、治験を実施する上で必要な診療情報等の実施医療機関間での共有を行う	参加者等から同意を得た上で、実施医療機関からパートナー医療機関に、業務上必要な情報を共有する
その他	–	その他以下の対応が必要となる ✓実施医療機関、規制当局の求めに応じた治験データの直接閲覧 ✓実施医療機関が行う監査への対応 ✓IRB及び規制当局の調査の受け入れ ✓参加者の健康被害の補償

（1）GCP省令第13条に基づき、実施医療機関に所属する医師や看護師を活用する場合

（2）GCP省令第39条の2に基づき、実施医療機関外の在宅医療機関や訪問看護ステーション等を活用する場合

❸ 在宅医療関係者における治験業務遂行能力の担保

基本的な考え方・留意点
- 在宅医療の治験の関係者においても、教育、訓練及び経験により、治験の業務を十分に遂行しうる要件を満たしていることが必要になる。

*1）GCP省令等、関連する法・規制では明確に読み取ることができず、一概に可または不可の判断はできない状況にある
*2 委託元の実施医療機関の治験責任医師等とビデオ通話システム等でつなぎ、治験責任医師等が遠隔で評価・判断することは可能

本研究会が整理したものであり、規制当局の意見・見解ではなく、また、法規制への適合を保証するものではないことに十分に留意すること。
実施の際には規制当局に確認することが望ましい。

Copyright © Japan Clinical Trial Transformation Research Society

97

Examples of the Current Situation, Challenges, and Possible Solutions for Each Topic


04．DCT普及に向けた提言 - 各論 - ＞ 参加者への治験薬配送 ＞ 4.4-1

実施医療機関以外から参加者宅への直接配送

D to Pの実現に向け、実施医療機関が果たすべき治験使用薬管理の考え方を明確化した上で、現行GCP省令において実施医療機関以外から参加者宅への直接配送の可否を示し、不可であればGCP省令改正の検討を進める

現状
- GCP省令において、治験依頼者は実施医療機関へ治験薬を交付すること（第17条）、実施医療機関は治験使用薬管理に責任を持つこと（第39条）が規定されており、参加者への治験使用薬の交付は実施医療機関が実施する必要がある。
- 上記を遵守しつつ、治験使用薬を治験依頼者の保管庫で保管し、実施医療機関の治験薬管理者がIWRS等のシステムを用いて遠隔で治験使用薬を管理・払出することが考えられるが、現行の法・規制で対応可能であるかは不明瞭である。
- また、遠隔で治験使用薬を管理・払出することが難しい場合、実施医療機関から委託を受けた薬剤師が保管庫において管理・払出を行うことが考えられるが、医療法の観点から当該業務を委託できるか不明瞭である。なお、派遣による実施は、労働者派遣法で禁止されている）*1,*2。

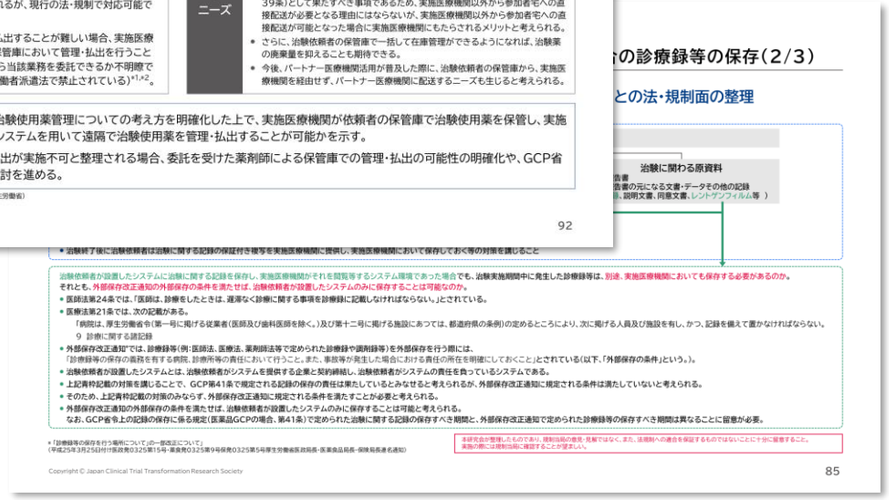
課題・ニーズ
- 高額な治験薬や製造・供給量が限られる治験薬の場合、症例集積が進んでおらず、かつ実施医療機関ごとに治験薬を供給する必要のある日本よりも、症例集積が進んでいる他国が治験実施国として優先される。
- また、治験依頼者の保管庫からの直送は、治験薬の使用期限・温度管理・大きさ・用量等の観点から実施医療機関の管理負担が大きい場合の負担軽減や、治験薬不足時の施設間輸送に係る手続き等の手間を減らすことが期待できる。これらは現行のGCP省令における実施医療機関の要件（第35条）、治験使用薬の管理（第39条）として果たすべき事項であるため、実施医療機関以外から参加者宅への直接配送が必要となる理由にはならないが、実施医療機関以外から参加者宅への直接配送が可能となった場合に実施医療機関にもたらされるメリットと考えられる。
- さらに、治験依頼者の保管庫で一括して在庫管理ができるようになれば、治験薬の廃棄量を抑えることも期待できる。
- 今後、パートナー医療機関活用が普及した際に、治験依頼者の保管庫から、実施医療機関を経由せず、パートナー医療機関に配送するニーズも生じると考えられる。

解決の方向性
- 実施医療機関が果たすべき治験使用薬管理についての考え方を明確化した上で、実施医療機関が依頼者の保管庫で治験使用薬を保管し、実施医療機関の治験薬管理者がシステムを用いて遠隔で治験使用薬を管理・払出することが可能かを示す。
- 遠隔で治験使用薬の管理・払出が実施不可と整理される場合、委託を受けた薬剤師による保管庫での管理・払出の可能性の明確化や、GCP省令等関連法・規制の改正の検討を進める。

*1 「SMOの利用に関する標準指針策定検討会報告書」（平成14年11月、厚生労働省）
*2 「労働者派遣事業を行うことができない業務は…」（厚生労働省）

Copyright © Japan Clinical Trial Transformation Research Society

92


の診療録等の保存（2/3）

との法・規制面の整理

治験に関わる原資料

治験依頼者が設置したシステムに治験に関する記録を保存し、実施医療機関がそれを閲覧等するシステム環境であった場合でも、治験実施期間中に発生した診療録等は、別途、実施医療機関においても保存する必要があるのか。

それとも、外部保存改正通知の外部保存の条件を満たせば、治験依頼者が設置したシステムのみに保存することは可能なのか。

- 医師法第24条では、「医師は、診療をしたときは、遅滞なく診療に関する事項を診療録に記載しなければならない」とされている。
- 医療法第21条では、次の記載がある。

「病院は、厚生労働省令（第一号に掲げる従業者（医師及び歯科医師を除く。）及び第十二号に掲げる施設におつては、都道府県の条例）の定めるところにより、次に掲げる人員及び施設を有し、かつ、記録を備えて置かなければならない。

9 診療に関する諸記録

- 外部保存改正通知では、診療録等（例：医師法、医療法、薬剤師法等で定められた診療録や調剤録等）を外部保存を行う際には、「診療録等の保存の責務を有する病院、診療所等の責任において行うこと。また、事故等が発生した場合における責任の所在を明確にしておくこと」とされている（以下、「外部保存の条件」という。）。
- 治験依頼者が設置したシステムとは、治験依頼者がシステムを提供する企業と契約締結し、治験依頼者がシステムの責任を負っているシステムである。
- 上記青枠記載の対策を講じることで、GCP第41条で規定される記録の保存の責任は果たしているとみなせると考えられるが、外部保存改正通知に規定される条件は満たしていないと考えられる。
- そのため、上記青枠記載の対策のみならず、外部保存改正通知に規定される条件を満たすことが必要と考えられる。
- 外部保存改正通知の外部保存の条件を満たせば、治験依頼者が設置したシステムのみに保存することは可能と考えられる。

なお、GCP省令上の記録の保存に係る規定（医薬品GCPの場合、第41条）で定められた治験に関する記録の保存すべき期間と、外部保存改正通知で定められた診療録等の保存すべき期間は異なることに留意が必要。

*「診療録等の保存を行う場所について」の一部改正について」
（平成25年3月26日付医政発0326第15号・薬食発0326第9号保発0326第5号厚生労働省医政局長・医薬食品局長・保険局長連名通知）

本研究会が整理したものであり、規制当局の意見・見解ではなく、また、法規制への適合を保証するものではないことに十分に留意すること。
実施の際には規制当局に確認することが望ましい。

Copyright © Japan Clinical Trial Transformation Research Society

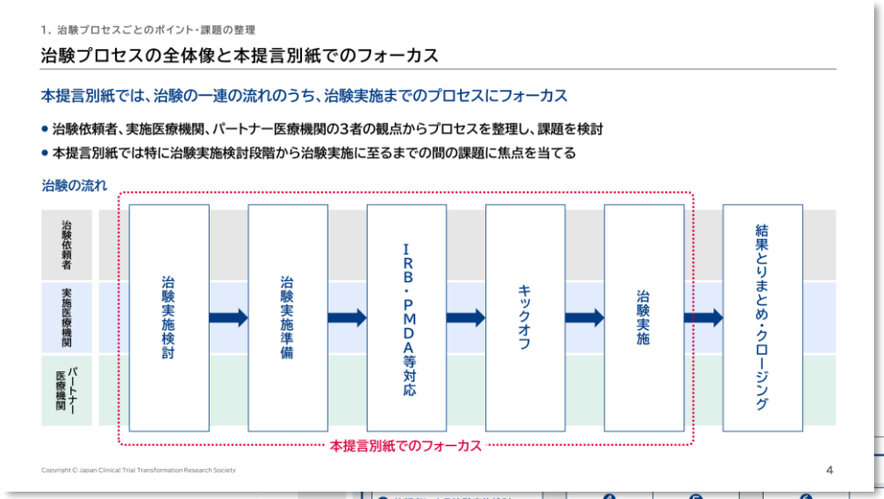
85

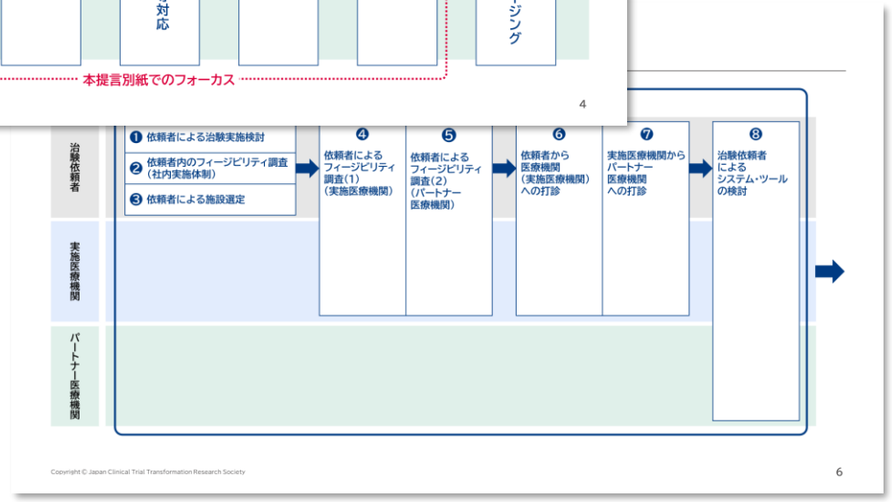
Appendix 1

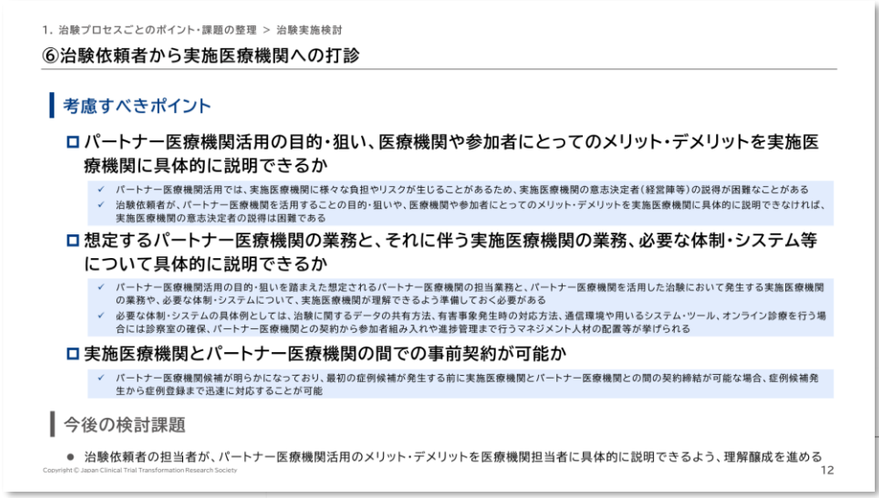
Processes and model cases for clinical trials utilizing partner medical institutions

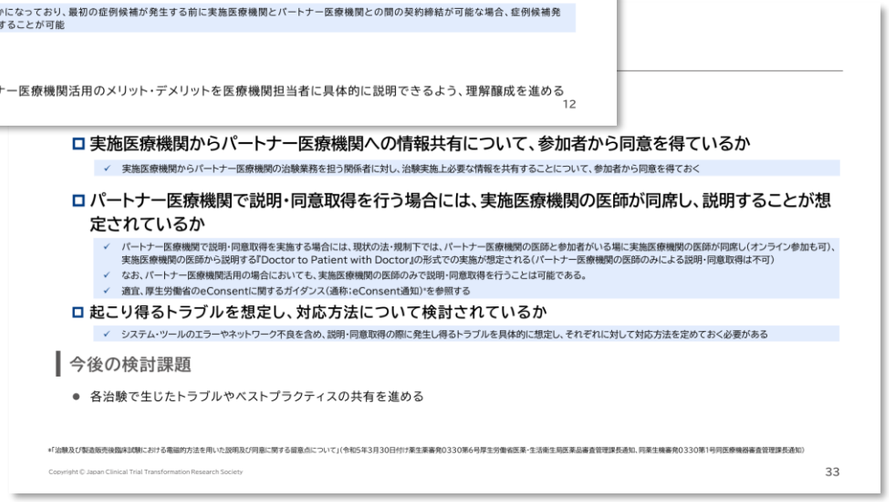
In Appendix 1, we have organized the points which should be taken into account in each process from the stage of considering a clinical trial to implementation of the trial.

- We organized the processes and considered the issues from the perspectives of three parties: the clinical trial sponsors, implementing medical institutions, and partner medical institutions.



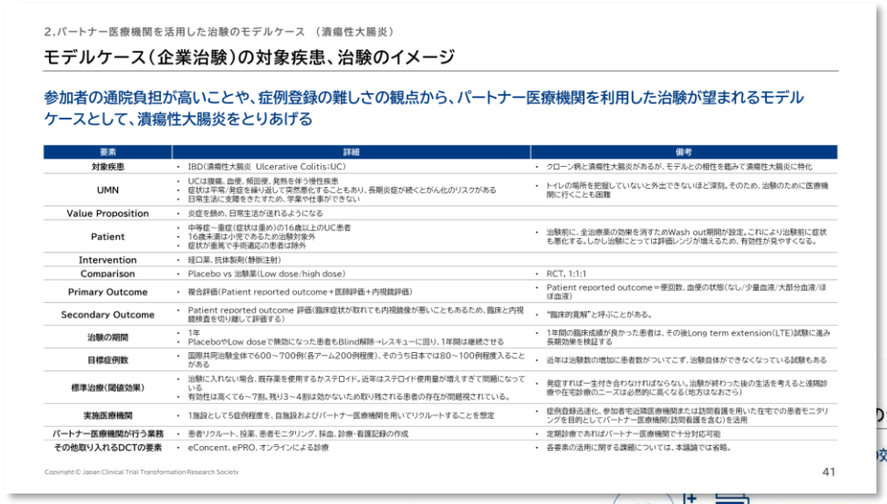






Processes and model cases for clinical trials utilizing partner medical institutions

In the second half of Appendix 1, in order to enable clinical trials which utilize partner medical institutions to be visualized in a concrete way, we used a hypothetical clinical trial on ulcerative colitis as a model case to extract the key points when considering the use of partner medical institutions.



2.パートナー医療機関を活用した治験のモデルケース （潰瘍性大腸炎）

モデルケース（企業治験）の対象疾患、治験のイメージ

参加者の通院負担が高いことや、症例登録の難しさの観点から、パートナー医療機関を利用した治験が望まれるモデルケースとして、潰瘍性大腸炎をとりあげる

要素	詳細	備考
対象疾患	IBD（潰瘍性大腸炎 Ulcerative Colitis:UC）	クローン病と潰瘍性大腸炎があるが、モデルとの相性を鑑みて潰瘍性大腸炎に特化
UMN	UCは腹痛、血便、頻回便、発熱を伴う慢性疾患 症状は平常/発症を繰り返して突然悪化することもあり、長期炎症が続くとがん化のリスクがある 日常生活に支障をきたすため、学業や仕事ができない	トイレの場所を把握していないと外出できないほど深刻。そのため、治験のために医療機関に行くことも困難
Value Proposition	炎症を鎮め、日常生活が送れるようになる	
Patient	中等症～重症（症状は重め）の16歳以上のUC患者 16歳未満は小児であるため治験対象外 症状が重篤で手術適応の患者は除外	治験前に、全治療薬の効果を消すためWash out期間が設定。これにより治験前に症状も悪化する。しかし治験にとっては評価レンジが増えるため、有効性が見やすくなる。
Intervention	経口薬、抗体製剤（静脈注射）	
Comparison	Placebo vs 治験薬（Low dose/high dose）	RCT, 1:1:1
Primary Outcome	複合評価（Patient reported outcome＋医師評価＋内視鏡評価）	Patient reported outcome＝便回数、血便の状態（なし/少量血液/大部分血液/ほぼ血液）
Secondary Outcome	Patient reported outcome 評価（臨床症状が取れても内視鏡後が悪いこともあるため、臨床と内視鏡検査を切り離して評価する）	"臨床的寛解"と呼ぶことがある。
治験の期間	1年 PlaceboやLow doseで無効になった患者もBlind解除→レスキューに回り、1年間は継続させる	1年間の臨床成績が良かった患者は、その後Long term extension(LTE)試験に進み長期効果を検証する
目標症例数	国際共同治験全体で600～700例（各アーム200例程度）、そのうち日本では80～100例程度入ることがある	近年は治験数の増加に患者数がついてこず、治験自体ができなくなっている試験もある
標準治療（間値効果）	治験に入れない場合、既存薬を使用するカステロイド。近年はステロイド使用量が増えすぎて問題になっている 有効性は高くても～7割。残り3～4割は効かないため取り残される患者の存在が問題視されている。	発症すれば一生付き合わなければならない、治験が終わった後の生活を考えると遠隔診療や在宅診療のニーズは必然的に高くなる（地方はなおごら）
実施医療機関	1施設として5症例程度を、自施設およびパートナー医療機関を用いてリクルートすることを想定	症例登録迅速化。参加者宅近隣医療機関または訪問看護を用いた在宅での患者モニタリングを目的としてパートナー医療機関（訪問看護を含む）を活用
パートナー医療機関が行う業務	患者リクルート、投薬、患者モニタリング、採血、診療・看護記録の作成	定期診療であればパートナー医療機関で十分対応可能
その他取り入れるDCTの要素	eConcent. ePRO、オンラインによる診療	各要素の活用に関する課題については、本論旨では省略。

Copyright © Japan Clinical Trial Transformation Research Society 41

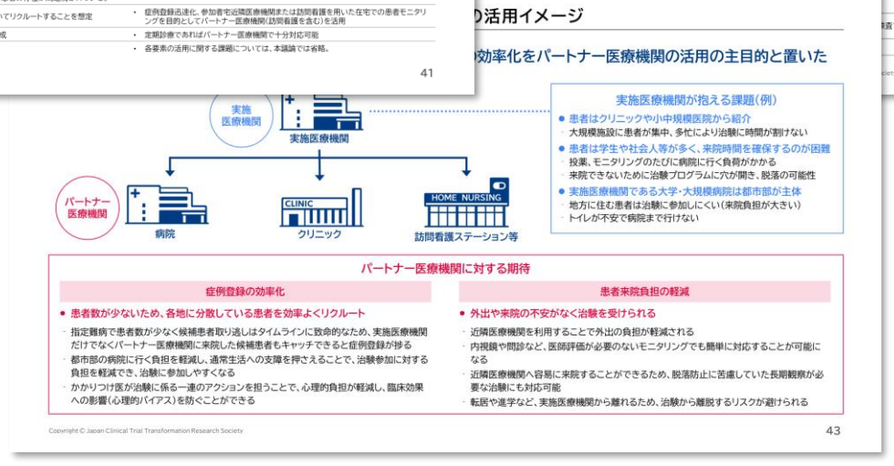
2.パートナー医療機関を活用した治験のモデルケース （潰瘍性大腸炎）

ケース❶（点滴薬）を想定した臨床試験の枠組み

パートナー医療機関への治験薬配送（項目⑥）や、患者モニタリングの頻度・内容（項目⑦～⑪）について特に検討が必要

DCT要素	パートナー医療機関利用時に付随するDCTアイテム	項目	パートナー医療機関利用時に想定される懸念・リスク	対策
患者募集	ウェブサイトでの募集	①	患者選択の偏り(情報リテラシー、年齢分布)、代理登録	多様な年齢設定、複数経路での募集
患者同意	eConcent(モバイル)	①②	内容理解不足のままの登録、患者選択の偏り	紙媒体の併用、医療従事者によるフォロー
	への配送	③～⑥	誤配送、温度管理の逸脱、不慮の事故	配送業者連携、配送後の到着確認、自宅管理方法の徹底
		⑦～⑨	内容の理解不足、モバイル機器の不備、プロトコル逸脱	ビデオ会議フォロー、代替機用意、コールセンター等の対応
		⑦～⑨	過小報告、誤った情報収集、有害事象発生時の対応	ビデオ会議フォロー、パートナー医療機関利用
	施で必ず来院)	⑨⑪	DCTでは対応できない投薬や検査等への対応	ハイブリッドDCT (投薬は実施医療機関、モニタリングはパートナー医療機関、等)
		⑨⑩⑪	パートナー医療機関を利用できないと頻繁に実施医療機関に行く必要が生じる	パートナー医療機関利用

Copyright © Japan Clinical Trial Transformation Research Society 45



り活用イメージ

効率化をパートナー医療機関の活用の主目的と置いた

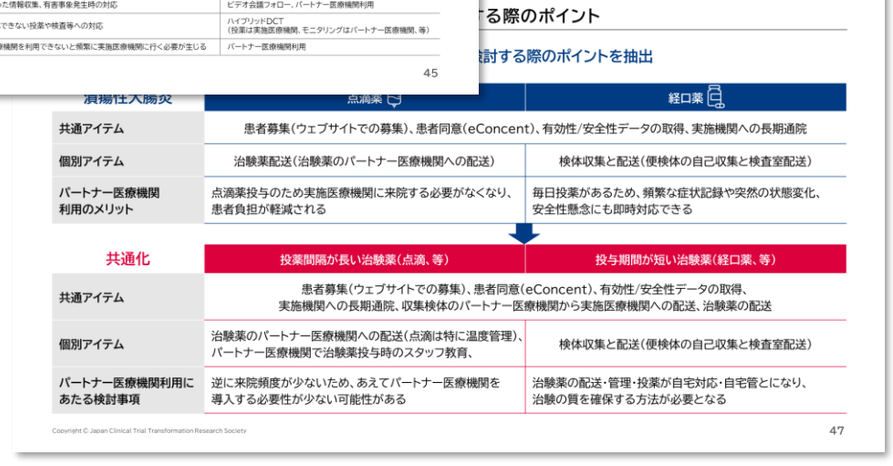
実施医療機関が抱える課題(例)

- 患者はクリニックや小中規模医院から紹介
  - 大規模施設に患者が集中、多忙により治験に時間が割けない
- 患者は学生や社会人等が多く、来院時間を確保するのが困難
  - 投薬、モニタリングのたびに病院に行く負荷がかかる
  - 来院できないために治験プログラムに穴が開き、脱落の可能性
- 実施医療機関である大学・大規模病院は都市部が主体
  - 地方に住む患者は治験に参加しにくい(来院負担が大きい)
  - トイレが不安で病院まで行けない

パートナー医療機関に対する期待

症例登録の効率化	患者来院負担の軽減
● 患者数が少ないため、各地に分散している患者を効率よくリクルート - 指定難病で患者数が少なく候補患者取り逃しはタイムラインに致命的なため、実施医療機関だけでなくパートナー医療機関に来院した候補患者もキャッチできると症例登録が捗る - 都市部の病院に行く負担を軽減し、通常生活への支障を押さえることで、治験参加に対する負担を軽減でき、治験に参加しやすくなる - かかりつけ医が治験に係る一連のアクションを担うことで、心理的負担が軽減し、臨床効果への影響(心理的バイアス)を防ぐことができる	● 外出や来院の不安がなく治験を受けられる - 近隣医療機関を利用することで外出の負担が軽減される - 内視鏡や問診など、医師評価が必要のないモニタリングでも簡単に対応することが可能になる - 近隣医療機関へ容易に来院することができるため、脱落防止に苦慮していた長期観察が必要な治験にも対応可能 - 転居や進学など、実施医療機関から離れるため、治験から離脱するリスクが避けられる

Copyright © Japan Clinical Trial Transformation Research Society 43



る際のポイント

討する際のポイントを抽出

	点滴薬	経口薬
共通アイテム	患者募集(ウェブサイトでの募集)、患者同意(eConcent)、有効性/安全性データの取得、実施機関への長期通院	
個別アイテム	治験薬配送(治験薬のパートナー医療機関への配送)	検体収集と配送(便検体の自己収集と検査室配送)
パートナー医療機関利用のメリット	点滴薬投与のため実施医療機関に来院する必要がなくなり、患者負担が軽減される	毎日投薬があるため、頻繁な症状記録や突然の状態変化、安全性懸念にも即時対応できる

共通化	投薬間隔が長い治験薬(点滴、等)	投与期間が短い治験薬(経口薬、等)
共通アイテム	患者募集(ウェブサイトでの募集)、患者同意(eConcent)、有効性/安全性データの取得、実施機関への長期通院、収集検体のパートナー医療機関から実施医療機関への配送、治験薬の配送	
個別アイテム	治験薬のパートナー医療機関への配送(点滴は特に温度管理)、パートナー医療機関で治験薬投与時のスタッフ教育、	検体収集と配送(便検体の自己収集と検査室配送)
パートナー医療機関利用にあたる検討事項	逆に来院頻度が少ないため、あえてパートナー医療機関を導入する必要性が少ない可能性がある	治験薬の配送・管理・投薬が自宅対応・自宅管とになり、治験の質を確保する方法が必要となる

Copyright © Japan Clinical Trial Transformation Research Society 47

The Second Period

Second Period sectional committees

In the Second Period, we set themes for two directions : a sectional committee which holds discussions from a larger perspective and a sectional committee which holds more detailed discussions.

Sectional Committee 1 **Identification and elimination of bottlenecks to clinical trial streamlining and acceleration**	• The purpose of this committee is **to consider "transformations necessary to accelerate clinical trials" from a large perspective which anticipates** not only DCTs but also the appearance of new technologies.
Sectional Committee 2 **Environmental development of the soft aspects necessary for the implementation of DCTs**	• The purpose of this committee is **to organize the environmental development of the soft aspects (functions, roles) necessary in medical institutions, including the perspectives which pharmaceutical companies, CROs, etc.** require for the implementation of DCTs.

Second Period activities policies

In the Second Period, we will deepen collaboration and advance discussions with a variety of stakeholders (patients, job types, industry groups) and aim to strengthen our ability to communicate our results.

Activities policy 1

Establishment of opportunities for exchanges of opinions between our stakeholders

- Deepen collaboration, including exchanges of opinions with patients' associations, etc.
- Exchanges of opinions with stakeholders responsible for the practical work, such as nurses and pharmacists.
- Construct and strengthen a network with groups carrying out similar activities in Japan and overseas.

Activities policy 2

Strengthening our ability to communicate our results

- Exchanges of opinions with government agencies aimed at the execution of the content of the recommendations.
- Disseminate the results of the Research Society and publicize the status of our considerations externally.

List of members in the Second Period

2025/02/01

Companies/Startups

- Accelight Inc.
- EPS Corporation
- A2 Healthcare Corporation
- NTT DATA Inc.
- Cmic Co., Ltd.
- PPD-SNBL K.K.
- Sophiamedi Corporation
- TechDoctor, Inc.
- Eli Lilly Japan K.K.
- Nippon Boehringer Ingelheim Co., Ltd.
- Pfizer R&D Japan G.K.
- Falma Co., Ltd.
- Janssen Pharmaceutical K.K.
- Linical Co., Ltd.
- Buzzreach Inc.
- IQVIA Site Solutions Japan G.K
- Medical Research Network Japan K.K
- MICIN.Inc.

Medical institutions

- Aichi Cancer Center
- Okayama University Hospital
- KINDAI University Hospital
- Tokyo Center Clinic
- Nippon Medical School

Non-member participant

(Academic researchers who has participated in this research society, similar to members.)

- 11 researchers

References

- Recommendations for the dissemination of DCTs -summary-
- Recommendations for the dissemination of DCTs -detail-　　※outline

Summary | Recommendations and directions for dissemination of DCTs in Japan

In summary, we recommended six overall measures which the national government and industry, etc. should tackle for the dissemination of DCTs in Japan from the perspectives of “promotion of environmental development” and “promotion of cross-sectional rollout.”

Promotion of environmental development	❶ Transformation into a clinical trial environment chosen by the world
	❷ “Hard” aspects of environmental development
	❸ “Soft” aspects of environmental development
	❹ The establishment of evidence concerning the effect of DCTs
Promotion of cross-sectional rollout	❺ The horizonal rollout of examples of DCT efforts and DCT know-how
	❻ Network formation involving diverse stakeholders

Summary | Recommendations and directions for dissemination of DCTs in Japan

Element	Topic	Current situation and issues	Recommendations
Environmental development	① Transformation into a clinical trial environment chosen by the world	The concern that Japan's clinical trials will be excluded from global clinical trials (Japan Passing)	• Share the sense of crisis over Japan Passing, etc. and promote measures for transforming Japan's clinical trial environment into a "clinical trial environment chosen by the world," using DCTs as the entry point.
	② "Hard" aspects of environmental development	A high burden is incurred in the environmental development of hard aspects such as SOPs, and there is a lack of incentive	• Promote the standardization of contracts and introduction of FMV to clinical trials, the streamlining and unification of the processes of clinical trials using DX, the provision of incentives for conducting DCTs using medical fees, etc., the development of systems in daily medical examinations which can be adapted to clinical trials and DCTs, and other measures.
	③ "Soft" aspects of environmental development	There is a lack of discussions on soft aspects such as the division of labor and human resource requirements, etc.	• Organize the (new) job types and roles and the human resource requirements deemed to be necessary when conducting DCTs.
	④ The establishment of evidence concerning the effect of DCTs	There is a lack of evaluation of effect using DCTs, making investment decisions on DCTs difficult	• Through the establishment of a special research group led by the national government and research and development support by the Japan Agency for Medical Research and Development (AMED), etc., establish evidence concerning the actual enhancement of the clinical trial environment through the introduction of DCTs and its cost-effectiveness, etc.

Summary | Recommendations and directions for dissemination of DCTs in Japan

Element	Topic	Current situation and issues	Recommendations
Cross-sectional rollout	⑤ The horizonal rollout of examples of DCT efforts and DCT know-how	Interest in and momentum toward DCTs is growing, but examples of the introduction of DCTs and sharing of their findings remain limited	• Establish a consultation counter concerning DCTs or construct a “forum” where the issues and know-how can be shared, and develop a foundation for widely providing the FAQs concerning DCTs and know-how on the procedures unique to DCTs
	⑥ Network formation involving diverse stakeholders	Discussions concerning DCTs are fragmented, so perceptions with respect to DCTs also differ depending on the stakeholder	• Construct a “forum” where diverse stakeholders, including regulatory authorities, academic societies, etc., can discuss DCTs candidly

1. Promotion of transformation into a clinical trial environment chosen by the world

Issues remain for the environmental development of the hard aspects required for the introduction of DCTs, including the burden and inefficiency of such development, so we will promote clinical trial streamlining and process unification through DX and standardization, and provide incentives using medical fees, etc.

Current situation and issues

- Japan's clinical trials are high quality, but their slow speed, high cost, and low potential for case accumulation are considered to be issues. DCTs could become the solution to these issues, but in global clinical trials a situation is starting to occur in which the accumulation of a number of cases is required for Japan too (Japan cannot increase its number of facilities), and there are strong concerns that if the dissemination of DCTs does not progress then Japan will be excluded from global clinical trials going forward.
- There are already stakeholders who are strongly aware of the fact that Japan's clinical trials are being overlooked by the world.
- Based on the results of dialogues with medical institutions which were implemented in this Research Society, it cannot necessarily be concluded that there a sense of crisis or that the perception of Japan Passing has spread to medical institutions, etc.

Direction of recommendations and solutions

- Foster a common perception among all of the stakeholders involved in clinical trials regarding the sense of crisis with respect to drug lag/drug loss and Japan Passing in global clinical trials, and promote measures to transform Japan's clinical trial environment into a "clinical trial environment chosen by the world," using DCTs as the entry point.
- DCTs are clinical trials which are centered on the patients rather than facilities, and operations, characteristics, and stakeholders not present in conventional clinical trials are increased, so when disseminating DCTs in Japan, share perceptions across industries to promote the efforts.
- Transformation of Japan's medical institutions is required for a "clinical trial environment chosen by the world." As an example, there are many medical institutions in Japan which have a scheme that combines DCT techniques to complete the process from identifying participation candidates inside and outside the institution to enrolling cases in a short period of time and which have measures to increase participant retention rates. It would be ideal for those medical institutions to produce results, creating an environment in which Japan's medical institutions are chosen throughout the world as clinical trial implementing medical institutions.

2. Promotion of “hard” aspects of environmental development for conducting DCTs

Issues remain for the environmental development of the hard aspects required for the introduction of DCTs, including the burden and inefficiency of such development, so we will promote clinical trial streamlining and process unification through DX and standardization, and provide incentives using medical fees, etc.

Current situation and issues

- Environmental development of “hard” aspects at medical institutions, such as the development of SOPs, is considered to be necessary for the introduction of DCTs, but there are concerns about the burden and cost of that development, and inefficiency due to the lack of unification.
- It is considered that discussions of extensions to current clinical trials and discussions of only some of the clinical trials are insufficient for reform of the clinical trial environment in Japan, and that discussions of an overhaul of the clinical trials are necessary, but there are not many opportunities to hold those discussions.
- Depending on the format of the DCTs, there are cases in which the implementing medical institutions lack incentives. (DCTs in the D to P with D format infringe on the prohibition on duplicated medical examinations, so the initial examination fee etc. can only be calculated at the partner medical institutions, and medical fee incentives do not exist with respect to the institutions implementing the clinical trials, etc.)

Direction of recommendations and solutions

- For environmental development of the hard aspects concerning DCTs, promote the following kinds of efforts under the leadership of the national government. Promotion of each effort is not necessarily limited to parallel promotion nationwide; promotion of some areas in advance is also anticipated.
    - Standardization of the format of clinical trial contracts and encouragement of the utilization of ICF common templates and central IRBs
    - Unification of the assessment process for medical information
    - Guaranteeing the transparency of clinical trial expenses using fair market value (FMV), etc.
    - Other streamlining and process unification of clinical trials through digitalization
    - Institutionalization of the provision of incentives through medical fees, etc. for the institutions implementing the clinical trials which are conducting the DCTs
    - Encouragement of going beyond the publication of clinical trial information to the delivery of clinical trial information to patients
- When engaging in the environmental development of systems, etc., we will promote and expand development of an environment which can be adapted to DCTs from usual medical examinations. It is desirable to use this approach to create a ready-made situation in which medical institutions can conduct DCTs immediately.

3. Promotion of “soft” aspects of environmental development for conducting DCTs

It is anticipated that there will be limitations to the soft aspects such as human resources, etc. for conducting DCTs as an extension of conventional clinical trials, so we will organize the (new) job types and roles and human resource requirements considered to be necessary for conducting DCTs.

Current situation and issues

- In “participant-centered” DCTs, unlike conventional clinical trials, situations can arise in which it is difficult for the medical institutions to see the information of the participants, raising the issue of who should be responsible for the oversight in those kinds of cases.
- The medical institution is responsible for many operations even in the case that a company leads a DCT, and in that context it is difficult for the clinical research coordinator (CRC) to carry out all of the oversight, and there is a shortage of human capacity, so it is anticipated that the establishment of a project manager and external outsourcing functions will be strongly required.
- The current situation is that there are quite a lot of discussions of the hard aspects needed for conducting DCTs (SOPs and tools, etc.), but not many discussions concerning soft aspects, namely, the division of operations between the medical institutions, companies, CROs, and CRCs in DCTs, and the requirements for and training of the human resources who can take on roles such as PMO/project manager in DCTs.

Direction of recommendations and solutions

- When conducting DCTs, promote efforts to organize the human resource requirements such as job type, role, etc. of the person responsible for oversight.
  - The role of oversight responsibility may be applied to existing job types, but it is also desirable to redefine and establish the job type and role of the oversight person by reorganizing the roles of all stakeholders in clinical trials, including SMOs and CROs.
  - It is thought that in the case that oversight is difficult as in DCTs, human resources such as project managers specializing in DCTs will be considered to be necessary.
- Promote training of the human resources considered to be necessary for future clinical trials, including human resources who can handle DCTs and the person responsible for oversight.
- Furthermore, promote efforts to foster understanding of DCTs among human resources not only in medical institutions but also in the companies, etc. involved in the DCTs.
- In order to respond to the human capacity shortage in DCTs, promote the development of systems and clarification of regulations so that external resources can be utilized flexibly.

4. Promotion of the establishment of evidence concerning the effect of the introduction of DCTs

The lack of evaluation in Japan of enhancement of the clinical trial environment using DCTs and its cost-effectiveness, etc. has become a barrier to the introduction of DCTs, so we will establish evidence concerning enhancement of the clinical trial environment and its cost-effectiveness, etc. that can be obtained by introducing DCTs.

Current situation and issues

- Examples of the introduction of DCTs are increasing, but there is a lack of evaluation of actual clinical trial environment enhancement, cost-effectiveness, etc. in Japan, so evaluation of enhancement of the clinical trial environment and its cost-effectiveness, etc. is required.
- From the perspective of medical institutions, etc. which are newly introducing DCTs, initial investment is difficult as they are medical institutions in a situation in which the advantages/incentives from the introduction of DCTs are not clear. (These advantages/incentives are also important for coordination inside the institution and persuasion inside the institution.)

Direction of recommendations and solutions

- Through the establishment of a special research group led by the national government and research and development support by AMED, etc., establish evidence concerning the actual enhancement of the clinical trial environment through the introduction of DCTs and its cost-effectiveness, etc.
- It is important to encourage not only clinical trials led by doctors but also efforts by company clinical trials, so even in the case of research and development support it is desirable to establish support projects, etc. predicated on a structure under which medical institutions and companies, etc. collaborate.
- In addition to promoting DCTs centered on rare diseases, orphan cancers, etc. from the perspective of drug lag/drug loss, it is also desirable to promote the implementation of DCTs targeting general diseases in company clinical trials in order to disseminate DCTs in Japan.

5. Promotion of the horizonal rollout of examples of DCT efforts and DCT know-how

There are situations where DCTs cannot be conducted due to limited opportunities to obtain the information necessary for the introduction of the DCTs, so we will construct a consultation counter for DCTs and a “forum” where issues and know-how can be shared, and share information widely across industries.

Current situation and issues

- Interest in and momentum toward DCTs is growing. For example, DCTs are being raised as a theme in a range of academic societies. However, examples of the introduction of DCTs and their findings are in the accumulation stage, so information sharing remains limited.
- In particular, medical institutions, etc. where there is interest in DCT efforts but specific considerations have not progressed face issues such as “explanations to coordinators/management within the institution pertaining to conducting DCTs are difficult,” etc., so building up efforts and achievements in previous examples is an important element in the dissemination of DCTs.
- An increase in the burden of medical institutions (the CRCs and the people in charge of the medical affairs division, etc.) when introducing DCTs can be easily imagined, and the fact that the sharing of know-how at the practical level and sources of consultations are limited is a factor behind the fact that medical institutions with an interest in DCTs cannot take a step forward.

Direction of recommendations and solutions

- Promote the establishment of a counter for consultations from medical institutions, etc. concerning DCTs or the construction of a “forum” where issues and know-how can be shared, and develop a foundation for providing the FAQs concerning DCTs and know-how unique to DCTs across patient groups and medical institutions.
- By accumulating and sharing examples and know-how across industries, establish a de facto standard regarding matters that have not been clarified and carry out push-up from the field with respect to regulations and responses.
- Furthermore, it is expected that the dissemination of DCTs in Japan will progress further if we list the examples of DCTs in Japan and list and map the medical institutions which are able to conduct (or are interested in conducting) DCTs.

6. Promotion of network formation involving diverse stakeholders

Each stakeholder has a different perception and situation with respect to DCTs, and there has not been sufficient fostering of a common perception and mutual understanding, so we will construct a “forum” where diverse stakeholders including the regulatory authorities and academic societies can discuss DCTs candidly.

Current situation and issues

- The situation is that momentum concerning DCTs is growing, but the discussions are fragmented.
- The content imagined when the term “DCT” is heard differs depending on the stakeholder, and the stakeholders’ moves toward its introduction and the visions they are aiming for are also different, so a shared perception across industries regarding the form of DCTs which Japan should aim for has not been fostered sufficiently.
- Actually, each of the stakeholders sometimes misunderstands the perceptions of the other stakeholders regarding DCTs, such as when the medical institutions, etc. assume the patients do not want DCTs despite the fact that there are patients who do want DCTs. However, there are not many opportunities for the stakeholders to align each other’s perceptions and understand each other’s situations.
- Furthermore, information concerning DCTs has not been disseminated to the patients, trial subjects, or patient groups, so the realization of patient-centered DCTs is only half completed.

Direction of recommendations and solutions

- Promote the construction of a “forum” where each stakeholder, including the regulatory authorities and academic societies, can hold candid discussions face-to-face.
- More stakeholders are involved in DCTs than in conventional clinical trials, and the nature of their involvement is more complex, so it is desirable for diverse stakeholders including the clinical trial participants to be allowed to participate in the “forum.”
- Furthermore, there are expectations of DCTs from the perspective of encouraging the participation of Japan in global clinical trials as well, so international relations are also important, and it is desirable for groups working on the promotion of DCTs overseas (CTTI in the United States, among others) is also be included in the network.

Recommendations for dissemination of DCTs from Individual Perspectives(1/10)

Element	Topic	Issue	Recommendations
Utilization of eConsent	4.1-1 Identity authentication using multifactor authentication	The cases in which identity authentication using multifactor authentication is required/cases in which it is not are unclear, for example in the case of using an electronic signature, etc. to obtain consent face-to-face.	• In the regulatory authorities, use QA, etc. to clarify the cases in which identity authentication using multifactor authentication is required. • In academic societies, industry groups, etc., share information about the cases in which identity authentication using multifactor authentication is required or unnecessary. Furthermore, advance the sharing of information about techniques which are alternatives to multifactor authentication.
Evaluation using remotely and electromagnetically collected data	4.2-1 Construction of evaluation techniques using remotely and electromagnetically collected data	There has been little progress in the construction of established techniques for remote clinical evaluation using video call systems or new clinical evaluation using devices.	• Through clinical research, etc., create evidence concerning clinical evaluation using video call systems and clinical evaluation using a range of devices, and advance information sharing in academic societies, industry groups, etc., thereby aiming to encourage the utilization of these approaches in clinical trials. • In regulatory authorities, separate superiority verification trials and non-inferiority trials, as described in the FDA guidance, in order to present the approach regarding equivalence. • In the regulatory authorities, clarify the approach in the case that evaluation techniques for which evidence already exists overseas or which are being used in overseas clinical trials are to be used in Japan.

Recommendations for dissemination of DCTs from Individual Perspectives(2/10)

Element	Topic	Issue	Recommendations
Evaluation using remotely and electromagnetically collected data	4.2-2 Dissemination of online medical examinations and requirements for calculating the re-examination fee in clinical trials	There are high barriers to providing online medical examinations in clinical trials at medical institutions which have not given notification of online medical examinations.	• Make industry groups, etc. well aware of the fact that even in the case of carrying out online visits in clinical trials, in the case that basic medical fees, etc. are not calculated, submission of the “documents attached to the notification form pertaining to medical examinations using information and communications devices” is unnecessary. • In regulatory authorities, consider more flexible responses, for example narrowing down the required items in the online medical examination guidelines limited to the case in which the basic medical fees, etc. are calculated when online medical examinations are implemented only for clinical trial actions. • The national government should further advance the dissemination of online medical examinations in daily medical examinations, which would then lead to the dissemination of online visits in clinical trials.
	4.2-3 Approach of utilizing BYOD	There are no guidelines or guidance concerning the utilization of BYOD, so the points to note, etc. when utilizing it are unknown, and its utilization has not progressed.	• In regulatory authorities, present the basic approach regarding the utilization of BYOD in clinical trials. For example, the approach to cases in which a single device has to be used within the same trial, the approach regarding the necessity of user acceptance testing (UAT) in the case that the screen sizes or aspect ratios of the devices differ, the approach to the communication fees burden, etc. • Share examples of utilization of BYOD in academic societies, industry groups, etc. • In academia, advance the construction of new device-independent evaluation indicators regarding scales which are affected by the screen sizes and aspect ratios, etc. of the devices. When doing so, construct the indicators anticipating that they will also be utilized in global clinical trials.

Recommendations for dissemination of DCTs from Individual Perspectives(3/10)

Element	Topic	Issue	Recommendations
Evaluation using remotely and electromagnetically collected data	4.2-4 An environment in which it is easy to use a copyrighted scale	Negotiations with copyright owners are prolonged due to the move to electronic media.	• In clinical trials led by doctors , further promote the centralized management and handling of copyrighted scales by academic societies, so that doctors do not need to negotiate individually with copyright owners. • Share examples of ePRO (electronic Patient-Reported Outcomes) development within academic societies and industry groups. • In academia, advance the development of new evaluation metrics that are independent of devices for scales that are affected by screen size or aspect ratio. When constructing the metrics, anticipate their use in global clinical trials.
	4.2-5 Meeting the requirements of Japan’s unique regulations when using products from overseas vendors	The commencement of trials is delayed due to the need to comply with Japan’s unique regulations such as the Technical Conformity Mark and the PSE Mark.	• The regulatory authorities, industry groups, etc. should fully inform the overseas sponsors, vendors, etc. about all of the laws and regulations related to the devices used in clinical trials. • The regulatory authorities should consider Technical Conformity Mark exemption provisions when using products for clinical trials or research purposes. • Aim for mutual recognition with international standards and harmonization with international laws and regulations.

Recommendations for dissemination of DCTs from Individual Perspectives(4/10)

Element	Topic	Issue	Recommendations
Utilization of a DCT platform	4.3-1 The burden of healthcare professionals when utilizing systems and tools	It is a burden for healthcare professionals to receive education and training on different systems and tools for each clinical trial.	• In regulatory authorities, industry groups, etc., consider innovations such as establishing a certification system for training so that retraining in basic operations, etc. is unnecessary if the systems and tools are being used in other identical trials or during a fixed period after such use. • The industry should encourage utilization of site-owned systems and tools and advance the integration of systems. • IT vendors should develop systems and tools with high-quality UIs which incorporate the views of the healthcare professionals from the development stage, enhance the help desks, and provide remote support. • Note that utilization of a DCT platform is not essential for conducting clinical trials that incorporate elements of DCTs; it is possible to incorporate elements of DCTs by combining individual tools, and the suitability of introducing a DCT platform should be considered for each clinical trial and each site.
	4.3-2 Use of site-owned systems and tools	It is a burden for the clinical trial sponsors and the implementing medical institutions to confirm compliance with all of the laws and regulations of the systems and tools for each clinical trial.	• In industry, in order to save the trouble of clinical trial sponsors individually confirming compliance of the systems and tools with all of the laws and regulations for each clinical trial, work on streamlining by constructing an environment for sharing regulation compliance information. For example, establish a third party authentication system and publish the regulation compliance status of each of the systems and tools. • In clinical trial sponsors, consider active utilization of site-owned systems and tools with a high tolerance, such as systems and tools, etc. for which interoperability between systems is unnecessary. • The regulatory authorities should prepare guidelines regarding the utilization of site-owned systems and tools.

Recommendations for dissemination of DCTs from Individual Perspectives(5/10)

Element	Topic	Issue	Recommendations
Utilization of a DCT platform	4.3-3 Clarification of the suitability of using general-purpose services and tools	It is unclear whether general-purpose services can be used from the perspective of ensuring trustworthiness.	• The regulatory authorities should present the approach regarding the usability of general-purpose services and the required trustworthiness in the guidance concerning DCTs.
	4.3-4 Saving of medical records, etc. in the case that the records concerning the clinical trials are only saved in sponsor-owned systems	In the case that the records concerning the clinical trials are only saved in the systems and devices prepared and installed by the clinical trial sponsors, common perceptions on how the medical institutions save the medical records, etc. are not fostered.	• Carry out the considerations after aligning perceptions between the medical institutions and industry regarding the input and saving of medical records, etc. in the case that the records concerning the clinical trials are only saved in sponsor-owned systems, and regarding other issues and required requirements, etc. concerning the systems and operation taking into account the impact on operations inside a variety of medical institutions.

Recommendations for dissemination of DCTs from Individual Perspectives(6/10)

Element	Topic	Issue	Recommendations
Delivery of the investigational drugs to the participants	4.4-1 Direct delivery to the participants' homes from outside the implementing medical institutions	It is unknown whether or not D to P can be implemented under current laws and regulations (it is perceived to be extremely difficult).	• Clarify the approach regarding the management of drugs used in the clinical trials which should be carried out by the implementing medical institutions, and then show whether it is possible for the implementing medical institutions to store the drugs used in the clinical trials in the sponsors' storerooms, and for the investigational drugs managers at the implementing medical institutions to use the systems to remotely manage and dispense the drugs used in the clinical trials. • n the case that it is determined that remote management and dispensing of drugs used in the clinical trials cannot be implemented, clarify the potential for management and dispensing in storerooms by pharmacists who have received commissions and advance consideration of amendment of the related laws and regulations such as the Good Clinical Practice (GCP) Ministerial Order , etc.
	4.4-2 Pickup outside the participants' homes of the drugs used in the clinical trials	It is unknown whether pickup is possible at facilities which allow face-to-face pickup confirmation such as nursing care facilities, post offices, convenience stores, etc. which are not listed in the Q&As.	• In industry groups, etc. and academic societies, share examples of picking up the drugs used in the clinical trials at places not listed in the "Questions and Answers (Q&As) of the Ministerial Order on Good Clinical Practice for Pharmaceuticals ."

Recommendations for dissemination of DCTs from Individual Perspectives(7/10)

Element	Topic	Issue	Recommendations
Utilization of partner medical institutions and home medical care	4.5-1 Verification of the effect due to the utilization of partner medical institutions , etc.	The effect of utilizing partner medical institutions, etc. has not been measured and the issues have not been verified, so the benefits of utilizing partner medical institutions cannot be evaluated appropriately.	• The industry should organize the effects caused by utilization of partner medical institutions, etc. and the issues in the case that they are utilized, and then carry out the effect measurements and issue verifications which back these up, and share the examples.
	4.5-2 Sharing information on medical institutions which could become partner medical institutions, etc. and construction of a clinical trial network	It is unknown which medical institutions can be utilized as partner medical institutions, etc., so it will take time to build a structure.	• Industry groups, etc. should gather and share information about the clinical trial networks which can be utilized and the medical institutions which can act as their partner medical institutions, etc. ➢ Introduce clinical trial networks which have already been constructed and can be utilized, and share examples of clinical trials which have been conducted utilizing said clinical trial networks. ➢ Prepare and share a list of medical institutions which have experience and achievements in clinical trials as partner medical institutions, etc. and can participate in clinical trials promptly. • Medical institutions should advance the construction of a clinical trial network at ordinary times to build a structure which enables them to commence clinical trials promptly in the case that specific projects arise (concluding basic contracts in advance, etc.). • Clinical trial networks should engage in activities to publicize information about the network (the participating medical institutions, the status of the implementation of education and training pertaining to clinical trials, clinical trial achievements, etc.) in order to attract clinical trials.

Recommendations for dissemination of DCTs from Individual Perspectives(8/10)

Element	Topic	Issue	Recommendations
Utilization of partner medical institutions and home medical care	4.5-3 Payment of clinical trial expenses in partner medical institutions, etc.	Although the partner medical institutions, etc. have outsourcing contracts with the implementing medical institutions, there are no contracts between the clinical trial sponsors and the partner medical institutions, etc., so it is unknown how the sponsors' share of the uninsured combined medical treatment expenses system will be paid.	• In industry groups, etc., opinions should be expressed on the payment method for clinical trial expenses in partner medical institutions, etc.
	4.5-4 Methods of calculating the clinical trial expenses in the implementing medical institutions and partner medical institutions, etc.	With the conventional points table, it is difficult to appropriately estimate the workloads of each of the medical institutions in clinical trials utilizing partner medical institutions, etc.	• For the introduction and dissemination of benchmark-type cost calculations based on FMV, the national government should present and strongly back specific policies and measures, and stakeholders such as industry groups, etc., academic societies, and medical institutions, etc. should work together to draw up a roadmap for their introduction and dissemination, and advance preparations for their introduction in each company and each medical institution based on the roadmap.
	4.5-5 Basic medical fees in the case of D to P with D format	There are no medical fee incentives in implementing medical institutions when carrying out medical examinations in the D to P with D format.	• The regulatory authorities should consider incentives for the implementing medical institutions in the case that medical examinations are carried out in the D to P with D format in clinical trials. • In industry groups, etc., academic societies, and medical institutions, advance the introduction and dissemination of benchmark-type cost calculations based on FMV and consider incentives other than medical fees.

Recommendations for dissemination of DCTs from Individual Perspectives(9/10)

Element	Topic	Issue	Recommendations
Utilization of partner medical institutions and home medical care	4.5-6 Administration of medication in partner medical institutions, etc.	It is unclear whether or not administration of the drugs used in the clinical trials is possible in the partner medical institutions, etc. based on the GCP Ministerial Order, Article 39-2.	• The regulatory authorities should clarify whether or not the administration of medication is possible in partner medical institutions, etc. using outsourcing contracts based on the GCP Ministerial Order, Article 39-2. • If it is the case that the administration of medication in partner medical institutions, etc. is not possible under current laws and regulations, they should amend the laws and regulations so that the administration of medication becomes possible. • Furthermore, they should give clarification, including about harmonization with the ICH-GCP, regarding the positioning of partner medical institutions in the GCP Ministerial Order, including matters other than the administration of medication.
	4.5-7 Approach concerning reports on serious adverse events occurring in partner medical institutions, etc.	The approach regarding the beginning date for the calculation of the deadline for reporting to the head of the implementing medical institution when serious adverse events occur at partner medical institutions, etc. is unknown.	• In industry groups, etc., share examples of the handling of serious adverse events which have occurred in partner medical institutions, etc. and foster common perceptions within the industry.
	4.5-8 Handling of testing samples collected outside medical institutions	The approach regarding the storage, processing, and recovery of samples collected in participants' homes, etc. is unclear.	• In regulatory authorities, use QA, etc. to clarify the approach concerning the handling (collection, storage, processing, and recovery) of samples outside medical institutions at participants' homes, etc.

Recommendations for dissemination of DCTs from Individual Perspectives(10/10)

Element	Topic	Issue	Recommendations
Utilization of partner medical institutions and home medical care	4.5-9 Utilization of pharmacies, etc. in sample collection and recovery	Utilization of pharmacies, etc. is not anticipated when the samples are collected by the participants themselves.	• Industry groups, etc. and regulatory authorities should consider whether there is any room for utilization of pharmacies, etc. in sample collection and recovery in clinical trials. • Note that when considering the utilization of pharmacies, etc. it is necessary to sufficiently keep in mind the fact that the measurement of samples in sample measurement laboratories is not provided for use in medical examinations and its purpose is completely different from that of clinical trials.

Japan Clinical Trial Transformation Research Society

- For Delivering New Medicines To Patients Faster -