

White Paper

# Seizing Opportunities: Overcoming the Challenges of Decentralized Clinical Trials in Asia Pacific

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## **Executive summary**

Decentralized Clinical Trials (DCT) have gained significant attention in recent years as it brings a new paradigm enriching the clinical trial landscape with a suite of options that transcend the traditional fully on-site demanding participants to be on site for every aspect of the trial.

Advances in digital technology coupled with the COVID-19 pandemic acted as a catalyst, encouraging the widespread adoption of hybrid modes of conducting clinical trials to ensure the continuity of clinical research.<sup>1</sup> In the aftermath of the pandemic, remote approaches are now an integral part of the clinical trial landscape.

This whitepaper explores the benefits and trends of DCTs, spotlighting the Asia Pacific (APAC) Region. Its diverse patient pool, robust healthcare infrastructure, favorable regulations, cost-effectiveness, and technological advancements contribute to the region's prominence in clinical research.<sup>2</sup>

### A comprehensive exploration of DCTs

DCTs are broadly defined as clinical trials where some trial-related activities occur outside the conventional clinical trial sites. This transformative approach to clinical research takes shape as hybrid models, blending remote, digital, and on-site elements, or as fully remote studies. The benefit of DCTs lies not only in expanding the horizons of clinical research but also in championing accessibility, fostering greater participant diversity, and enhancing patient retention. Importantly, it can alleviate the burden for both patients and traditional trial sites.

Enabled by technology and specialized services, this innovative approach plays a pivotal role in enabling these remote trial-related activities. These options include telemedicine, electronic data capture, e-consent, electronic Patient-Reported Outcome, and electronic clinical outcome assessment (ePRO/ eCOA), connected devices, wearables, Direct-to-Patient Investigational Medicinal Product (DtP IMP) shipments, local laboratory services near the patient, and even home nursing care, creating a participant-centric and efficient trial process.

DCTs improve recruitment and diversity by increasing accessibility for patients who may face challenges with frequent site visits. The reduction in travel frequency, time, and associated costs is particularly beneficial for patients residing outside major urban centers. This phenomenon, often referred to as distance decay association, is applicable not only to low-income countries where healthcare infrastructure is concentrated and limited but also to developed countries where large geographic areas can pose logistical challenges despite well-established healthcare infrastructure. To illustrate,

- In the **US**, up to 70% of potential participants live more than two hours away from the nearest study center.
- In Australia, a similar challenge arises due to the fact that 30% of the population resides in rural and remote areas. These regions often have higher concentrations of indigenous populations, who already experience poorer health outcomes compared to non-indigenous Australians. This includes lower life expectancies, a higher burden of disease, poorer self-reported health, and a greater likelihood of hospitalization. In such areas, travel times to reach study centers can range from 75 minutes to a staggering 600 minutes.<sup>3</sup>
- Likewise in South Korea, the centralization of healthcare resources in urban areas means that 60% of cancer treatments are covered in the hospitals located in metropolitan areas.<sup>4</sup>

Distance decay association in healthcare is a phenomenon where the effectiveness or relevance of a medical intervention decreases as distance increases. This phenomenon affects any country with large geographic areas.

Beyond improving access, DCTs can reduce the burden on traditional trial sites where all activities traditionally happen on site. It allows specific site activities, such as drug administration and/or certain assessments, to be conducted remotely by participants or healthcare professionals (HCPs). Furthermore, DCTs foster enhanced patient retention throughout the trial and contributes to improved protocol adherence.<sup>5</sup>

By utilizing eCOA, connected devices, and wearables for real-time data collection, the need for manual data input is reduced, leading to enhanced data quality and integrity with fewer opportunities for errors. Electronic data capture gives sites and sponsors real-time access to data, which has multiple benefits. Issues can be quickly identified and addressed. In essence, decentralized trial activities not only enhances accessibility and diversity but also significantly improves the overall quality of clinical research.<sup>5</sup>

In addition to these advantages, DCTs encourage a more diverse, collaborative and supportive approach within patient communities and families. Caregivers can assist patients in scheduling their participation, leading to fewer disruptions due to simplified trial logistics. This approach is particularly beneficial for individuals with caregiving responsibilities, elderly, those with disabilities, those who require assistance with clinical trial appointments, or those who need to balance trial participation with paid work.<sup>3</sup>

### **Trends and Adoption of DCTs**

While decentralized approaches to clinical trials have been discussed for a decade, Covid-19 accelerated DCTs adoption in the global clinical research landscape where remote approaches were a necessary contingency plan to ensure continuous clinical research even during challenging times. The use of decentralized components in clinical trials peaked in 2021. Despite riding the wave of global adoption, the use of DCTs slowed down in 2022 though it remained significantly higher than in pre-pandemic.





Figure 1: Remote, virtual or decentralized trials (RVD) sees a larger growth over the years as compared to total clinical trials conducted from 2010-2022.<sup>6</sup>

Beyond crisis management, hybrid trial models are now undeniably fully part of the landscape. A 2021 survey consulting contract research organizations, pharmaceuticals and biotechnology companies, trials sites and service providers, revealed that overall, 70% of respondents had been involved in trials with any decentralized trial element.<sup>7</sup> Telemedicine is one of the most leveraged services, with over 1000 studies referring to telemedicines since 2021 and over 500 new trials using it in 2022. Digital data capture, ePROs, eCOAs and eConsent have also seen a sharp surge in the last few years, possibly driven by the widespread adoption among contract research organizations.<sup>8</sup>





Source: Trialtrove, February 2023

Across the globe, like in APAC, hybrid is the preferred implementation model for DCT as it can be tailored to each study need and adapt to participants with different preferences.<sup>10</sup> However, the adoption of DCTs is disparate in this region due a combination of factors, including cultural norms (such as, attitudes toward home-based care, home safety and suitability, patient and doctors' perceptions of better care in hospitals), local infrastructure, technology literacy, local regulations, and the general consensus that for successful interventional trials, on-site interactions with face-to-face connection with a medical team is needed, albeit at a reduced frequency.

Figure 3: The figure illustrates the various steps in a generalized DCT involving various modes of interaction with participants. DCT elements should be flexible, adapting to the preferences and requirements of each participant and trial facility.<sup>10</sup>



\*This image shows a more generalized version of a decentralized trial model. DCTs are not one-size-fits-all and trial elements may vary based on participant choice and need.

In IQVIA's 2020 study with 995 members of IQVIA's patient and site communities, investigators overwhelmingly supported the adoption of the hybrid DCTs approach, with a remarkable 94% of US respondents expressing a willingness to implement it.<sup>11</sup> Interestingly, in APAC, 62% of respondents showed interest, while the remaining respondents were uncertain.<sup>11</sup> This underscores the need for early engagement, better education about the array of available options, and comprehensive on-site training to best align with the study design. IQVIA has deployed hybrid solutions to over 500 active DCTs underway across more than 75 countries and spanning 30 indications. IQVIA has the experience, capabilities and reach to meet any sponsor's needs.<sup>12</sup> Approximately 10% of these trials are in APAC, utilizing the integrated IQVIA Decentralized Clinical Trial platform to support DCTs.

The IQVIA Decentralized Clinical Trial platform helps sponsors deploy adaptable, patient-centric DCT technology for trials of all sizes, customized to fit any study and any indication — anywhere on the globe.<sup>12</sup>

# Navigating challenges: DCTs in the APAC context

The APAC region is a prime location for clinical trials, offering a large and ethnically diverse patient pool, along with both emerging and developed robust healthcare systems and infrastructure, favorable regulations, costeffectiveness, and technological advancements.

### Deploying DCTs in the APAC region presents its own set of unique challenges.

# Decoding the regulatory landscape for DCTs in APAC

Navigating DCT on a global scale presents a complex regulatory landscape. Regulatory bodies grapple with the issue of fragmented implementation, where the feasibility and permissibility of specific DCT options vary among participating countries, resulting in diverse approaches for multi-country and single-country trials. Simultaneously, these regulatory bodies rigorously assess DCT through an ethical lens, encompassing critical aspects of patient well-being, physical safety, privacy, informed consent, scientific validity, and data integrity in the context of decentralized clinical research.

Nevertheless, it's evident that regulatory agencies worldwide are adapting to the evolving landscape of clinical trials.

The **European Medicines Agency (EMA)** and the **U.S. Food and Drug Administration (FDA)** actively released or drafted DCTs recommendations papers, guidelines and frameworks. This regulatory evolution aims to support and facilitate the global implementation of DCTs, reflecting their growing importance in advancing medical product development and research.

### The new ICH E6(R3) Good Clinical Practice

(GCP) guidelines by the International Council for Harmonization (ICH) aim to reduce unnecessary complexity, promote innovation, emphasize quality, and establish risk-based approaches for conducting DCTs. The draft guidance is intended to provide a flexible, modern, and clear framework, with part 2, due to release within 2024 to provide further guidance.<sup>13</sup>

In the APAC region, several regulatory bodies, including those in Taiwan, Malaysia, and China, have already issued guidelines for DCTs.

While the Australian regulatory authorities, particularly the Therapeutic Goods Administration (TGA), have not published their own guidelines, the Australian government has long been a proponent of decentralization, driven by the fact that 32% of Australians reside outside major cities, while 95% of medical specialists primarily practice in urban areas. This commitment to addressing geographical disparities and advancing health equity in clinical trials led to the funding of a specific decentralization model known as the Australian teletrial model, formally established in 2021.<sup>14</sup> It operates with a primary site featuring a dedicated Principal Investigator responsible for overseeing trial activities at multiple satellite sites, which can be located in regional, rural, or smaller metropolitan centers. This setup significantly widens the spectrum of care options available to participants.<sup>15</sup>

**Trial Cluster** 

Figure 4: Components of the Australian Teletrial Model's network of primary and satellite sites that use telehealth to connect regional and rural clinical trial site clusters.

#### **Australasian Teletrial Model**

#### Primary and satellite sites are connected through tele-health models of care. Satellite site **Primary site** (Satellite sites can be regional, rural or larger metropolitan centres) **Tele-health** Patients and families Patients are Clinical trial coordinators Medical officers consented. recruited and Nursing, pharmacy and allied Т managed at and allied health clinicians satellite sites in Primary partnership With/without trial site between clinicians from satellite and atellite primary sites. 2 3

The **Association of Regulatory and Clinical Scientists (ARCS)** has taken an important step by publishing a glossary with definitions, aiming to standardize the understanding of DCTs.<sup>16</sup> In addition to that, Australian National SOPs for Clinical Trials cover teletrials and will be updated to align with the FDA DCT guidelines in the future.<sup>17</sup>

### Regulatory agencies worldwide are adapting to the evolving landscape of clinical trials by continuously developing guidelines and frameworks regarding DCTs.

Overall, these initiatives demonstrate the willingness to establish robust patient-centric foundations, paving the way for further fit for purpose decentralization in clinical trials.

Despite these progresses, in Asia, some regulatory authorities tend to lean toward the more conservative practices, primarily emphasizing compliance with existing regulations, thus delaying their adoption of decentralized approaches.

The absence of recommendations or guidelines for DCT regulatory framework in **South Korea** has hindered the adoption of DCTs and digital tools. Positively, there is promising progress as a regulatory advancement working group in Korea is actively working to develop specific guidelines for DCT.<sup>18</sup> **Japan** regulations currently require all service providers including but not limited to home health nurse, remote Clinical Research Centre (CRC) services and Direct-to-Patient IMP delivery to have contracts with clinical trial sites.

In **China**, the current nurse registration system restricts the home health nurse model, requiring nurses to be registered and governed by a hospital.

While regulatory endorsement remains vital, the most important consideration is the feasibility, fit for purpose and relevance of decentralization for each trial, regardless of the specific regulatory landscape.

# Ethical compass: Navigating data privacy and security considerations

Confidentiality, data privacy and security play a critical role in DCTs and it is vital to comply with the varying data protection laws across countries. A comprehensive assessment of data privacy and security regulations, following that, crafting robust data handling protocols ensures compliance with regional privacy laws. Both the DCT technology itself and its operational configuration should be meticulously considered to align with International Council for Harmonization-Good Clinical Practice (ICH-GCP) guidelines, privacy laws, including General Data Protection Regulation (GDPR) confidentially requirements, and clinical trial regulations.



To effectively address data privacy and security challenges, sponsors and CRO should do appropriate due diligence. This involves thorough evaluations of technology models and external service providers, including training, qualifications, assurance of privacy and confidentiality protection and meticulous maintenance of documentation.

Forging partnerships with trusted collaborators who prioritize data protection and transparency in DCT implementation is instrumental in building trust among participants and stakeholders in the clinical research process.<sup>19</sup>

Some countries have instituted stringent data regulations. For instance, China has enacted rigorous data privacy laws, including the Personal Information Protection Law (PIPL) and Personal Data Security Specification (PDSS), specifically concerning the use of Artificial Intelligence/Machine Learning (AI/ ML) when targeting and engaging patients. These regulations can present challenges when data cannot be transferred outside of the country, hindering the adoption of integrated platforms where certain patient identifiers may be stored on offshore clouds. Additionally, China mandates a Multi-level Protection Scheme (MLPS) for systems, websites, and online platforms hosted within its borders. Furthermore, some healthcare organizations are also required to store Protected Health Information (PHI) on hospital's servers rather than the public cloud servers even though those cloud servers are hosted within China.

Strong protocols need to be in place to the implementation of DCT for protect patient data, ensure security, and uphold the trust of all stakeholders involved.

For the implementation of decentralization in the APAC, the region can leverage existing guidelines in place in the US and EU to align where possible and appropriate, which will facilitate execution on multi-country trials. The latest development of the ICH-GCP R3 is expected to provide further guidance on the conduct of DCT and help harmonize FDA and EMA guidance.

In a homegrown DCT technology model, it is useful to have a onestop-shop platform, like the IQVIA proprietary Study Hub platform, which integrates all the different moving parts for collecting trial data and enabling the management of various clinical trial activities within one application with a single sign on.<sup>22</sup>

The IQVIA DCT Platform is built based on the "Privacy-by-design" principle to ensure that privacy is embedded into technology specifications, business practices and physical infrastructure. A data minimization approach is applied, ensuring that only the essential data required for conducting the clinical trial is collected.

The platform adheres to full compliance with GCP, Code of Federal Regulations Title 21 Part 11 (CFR 21 Part 11), the Health Insurance Portability and Accountability Act (HIPAA), and the GDPR.

Additionally, it has undergone independent GDPR compliance validation, showcasing IQVIA's dedication to upholding the highest standards in delivering decentralized studies. To fortify data protection, the platform incorporates various technical and organizational measures, including encryption and robust role-based access controls.

These measures collectively contribute to safeguarding personal data throughout the decentralized study process.

### **Infrastructure and technology** LEVERAGING INFRASTRUCTURE AND TECHNOLOGY FOR DCT SUCCESS

Assessing a country's digital infrastructure readiness and addressing issues like, access and connectivity challenges is indispensable for the successful implementation of DCTs. This knowledge helps us to find solutions to meet the unique challenges for each country in the APAC region, where there are varying degrees of technological advancement.

For instance,

In countries with lower access to technology, sponsors can **offer devices and mobile internet packages** to patients in order to facilitate their participation in trial activities.

In regions where internet access is unreliable, sponsors can **leverage technology partners** to synchronize online and offline participation data.

**Technology education and quality customer care services should start from site initiation** and throughout the study, enabling sites to guide patients and troubleshoot potential issues throughout the study.

**Flexible programming** and **round-the-clock customer support** is instrumental for smooth patient experience and maintaining data integrity.

Additionally, **caregiver access** can be facilitated, particularly for patients with lower digital literacy or accessibility concerns.

Collaboration among reputable partners with efficient and customer friendly support is paramount to providing a positive patient and site experience in DCTs.

It is crucial to appoint a suitable technology partner adept at identifying gaps in multi-country trial studies to drive the success of DCTs in APAC. It's crucial to recognize that a one-size-fits-all approach may not be suitable for diverse regions, underscoring the need for hybrid and flexible approaches in the world of DCTs. Simultaneously, fostering accessibility to digital platforms for patients with varying levels of digital literacy will promote inclusivity and optimize participant recruitment.

### ADDRESSING CULTURAL, LANGUAGE AND ACCESSIBILITY BARRIERS

Within APAC's expansive region resides nearly 60% of the global population, spanning over 15 countries and encompassing more than 2,000 languages. The patient pool within this diverse landscape is not only one of the most ethnically varied but also presents a wide range of demographics, from Japan's aging population to India's large youngest population.<sup>21-22</sup>

The varying levels of urbanization, associated infrastructure maturity, access, and adult literacy further diversify the region's landscape. Urbanization rates range from around 30% to 70%, impacting access to clinical trial infrastructure significantly.<sup>23</sup>

Amidst an overall technological spread, it's essential to carefully consider the challenges posed by digital literacy among participants and internet connectivity in rural areas, also known as the "digital divide".

To illustrate, Australia, being the sixth-largest country, faces challenges in its rural areas, where mobile data speeds are 90% slower than in urban areas. With only one in three Australian land areas having mobile connectivity, and 30% of indigenous communities, who are more likely to live in rural regions, lacking household internet or phone access, these disparities create substantial gaps in Australians' access to clinical trial infrastructure or the adoption of technological solutions.<sup>24-26</sup>

Furthermore, digital literacy issues may exclude participants who are not confident with technology, including those with lower education levels, individuals over 65 years old, those not in the labor force, and people with disabilities — groups at risk of digital exclusion.<sup>24-26</sup>



These challenges, if not addressed thoughtfully, could potentially hinder the deployment of DCT and inadvertently exclude the very patients we aim to include.

Deploying DCT with the patient in mind requires a critical assessment to determine if the solution will genuinely facilitate or potentially exacerbate challenges for the very patients we aim to assist. The digital and literacy divide serves as an example of this challenge.

Language and cultural nuances in the APAC region should not be underestimated. English-speaking nations, such as Australia, hold a linguistic advantage that makes them an appealing destination for expanding trials, particularly after a successful pilot program has been implemented in the US and may be reproduced.<sup>27</sup> However, the rest of the APAC countries might require tailoring of study materials and communication to different cultural contexts and languages to enhance participant engagement and comprehension. Partnering with an organization that has a local presence, cultural and language knowledge, an understanding of the healthcare system structure is instrumental in DCT implementation within the region.

# Stakeholder engagement: Collaboration for DCT success

Collaboration among stakeholders is a crucial aspect of DCT, yet sponsors may encounter resistance to change from key site stakeholders. The apprehension stems from the perceived unknowns and technological overwhelm, coupled with a longstanding reliance on site-based, in-person trials with established processes and infrastructure. Shifting from traditional approaches to hybrid modes pose a challenge for stakeholders accustomed to the conventional model. To navigate these challenges, fostering early engagement and embracing an inclusive process design among sponsors, CROs, researchers, technology providers, healthcare providers, and patients can pave the way for fruitful collaboration and ultimately, the successful implementation of DCTs.<sup>5</sup>

A proactive approach to stakeholder alignment will be instrumental in driving successful and efficient DCT execution.<sup>28</sup> The results of an IQVIA site survey with 363 investigators across 12 counties in APAC conducted in 2022, indicated a positive outlook on DCT adoption by investigators. Investigators in the region expressed optimism and recognized benefits, including reduced patient burden, improved trial continuity, and enhanced inclusivity in hybrid trial designs. However, the survey also brought to light potential barriers to DCT adoption, with 48% of investigators citing challenges in areas such as patient acceptability, technology, and infrastructure.

Prioritizing stakeholder engagement and education, adopting best practices, and addressing regionspecific challenges are essential steps to foster successful DCTs in the APAC region. Recognizing the imperative for DCT training based on insights gained from the site survey, IQVIA successfully introduced a DCT e-Certification training program for IQVIA's prime and partner site network in the APAC. This initiative aims to prepare and support sites in their active participation in DCTs. However, challenges arise as trial sites are often engaged in multiple trials with various sponsors, CROs, and vendors, each proposing their distinct training and platforms. This diversity can impose an additional burden, potentially offsetting the benefits designed to alleviate their tasks. This points toward the pressing need for greater interoperability, integration, and standardization of platforms and training, along with fair compensation for the time site staff dedicate to these activities.

#### HOME NURSING SERVICES

When addressing sponsor, patient, and site concerns about decentralization, one intriguing and decentralized solution that can effectively tackle various concerns is home nursing services.

Figure 5: The IQVIA site survey with 363 investigators across 12 countries in APAC revealed a favorable attitude towards DCT adoption.



**Unsure category** highlighting the need for early engagement and better education about the array of options available to best fit the study design

Data from a survey of 363 Asia Pacific respondents who are members of IQVIA's site communities across 12 countries, Oct 2022.

Fully catering to patients in mind, home nursing services include investigational medicinal product (IMP) administration, blood sample collection, patient assessments, oversight, patient reviews, examinations and more; which overcomes a great proportion of the challenges previously discussed for patient participation in DCTs.

### HOME NURSING SERVICES CAN HELP TO OVERCOME CHALLENGES OF DCT STUDIES:

- Reduce patient and caregivers' travel burden
- Less waiting time and operations from the comfort of the home, increasing quality of life and compatibility with caregiver responsibilities.
- Close the gap of the digital divide
- Mitigate compliance risk
- Build patients' confidence in quality care outside of the hospital
- Ease site readiness and workload management
- Ensure a culturally appropriate environment for patients

In the context of home nursing services for DCT, the pivotal factor for DCT adoption is trust in a reputable and experienced nurse network. This trust is essential for both patients and principal investigators to have confidence in the level of care provided.

## IQVIA has deployed a large network of 1,600 registered nurses and 250 Allied Health professionals in over 70 trials across APAC, Australia and New Zealand.

### MAINTAINING EFFECTIVE SITE OVERSIGHT

Good clinical practice and the close monitoring of guidelines remain essential for DCT stakeholders. However, given the involvement of multiple vendors and platforms, and the collection of data in various modalities and locations, there is a heightened need for regular and thorough oversight. The discussion around this matter is ongoing, and the FDA is actively working to provide further guidance on the best practices for addressing oversight.<sup>29</sup>

It is important to ensure that DCT stakeholder responsibilities are clearly outlined, establishing transparent communication lines and efficient response turnover. Ultimately, investigators bear the responsibility for patient safety, prioritizing patient comfort, with the network of technology and services. Therefore, early consultation with investigators for vendor and technology selection is a priority.

Furthermore, there is a strong need for additional quality and integrity data checks, with real-time monitoring as the primary approach. Contingency plans must also be in place to address potential technology failures.

By incorporating these key considerations and options, a robust foundation can be laid for the successful execution of DCTs in the APAC region.

# Conclusion

The success of DCT hinges on the early engagement of stakeholders, including sponsors, investigators, patients, vendors, CROs, and regulators. The first and most important step is to critically assess the adequacy of implementing DCT for a particular trial. Placing the patient at the forefront of considerations, along with the sites, is absolutely necessary. The solution deployed should effectively alleviate burdens on both patients and sites.

When the DCT solution facilitate the patient and site's experience and it holds promise for a greater and more inclusive recruitment of the targeted patient population, then the protocol design and trial needs can be assessed again the suite of decentralization pieces to build a bespoke, fit-for-purpose solution.

The APAC region is well-positioned for DCT, and when the advantages are clearly demonstrated, and the challenges are carefully addressed, it holds one of the widest and most diverse patient pools, a factor that should not be overlooked in hybrid trial implementations. Looking ahead, the future promises continual advancements in technology, anchoring of trusted partners, vendors, and networks, greater interoperability of platforms within trial operations, clear regulatory guidelines globally, and increased awareness of DCTs among all parties involved.

Embracing DCTs will be instrumental in driving advancements for the betterment of patients, sponsors, investigators, and the healthcare industry.

To learn more about IQVIA's DCT platform and services, please visit <u>https://www.iqvia.com/solutions/</u> <u>research-and-development/decentralized-trials</u>.

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# About the authors



### **JÉRÔME ARMELLINI** Asia Head of Clinical Development & Operations Strategy, IQVIA

Jérôme is currently leading the Asia Clinical Development &

Operations Strategy group. In this role, he has under his leadership the Patient and Site Centered solutions (Decentralized trials & Patient Recruitment, and Clinical Trial Educators), the Therapeutic Strategy Leads and Feasibility groups, the Asia Cell and Gene Therapy COE and the Asia Phase 1 oncology Academy.

These teams contribute to the development of tailored strategic and operational solutions to help sites and customers achieve their clinical trials goals, optimizing the delivery and operational model, the country and site identification as well as patient recruitment innovative solutions, at a regional and global level.

Jérôme has also had under his remit in Asia, the IQVIA CORE-Powered clinical development approaches, combining the Domain Expertise, the Data, the Analytics and the Technologies.

Prior to his current role at IQVIA, Jérôme held various positions in legacy Quintiles both in the France and Singapore offices, InVentiv Health, in PAREXEL, and as a freelancer, spanning from Operations to Program management and through Strategy and driving growth. Across his 25 years' experience in the Clinical Trials industry and various roles, he gained an in-depth understanding of running clinical trials and its associated challenges, from the site level to the compound development strategy, including the use of real-world data for designing, planning and executing trials.

Jérôme holds a Master Degree in Molecular Biology and Applied Genetic from University of Toulouse III, France.



### **LI FERN YONG** Asia Decentralized Clinical Trial Deployment Lead, IQVIA

Li Fern is currently leading the strategic adoption and

implementation of decentralized clinical trials (DCTs) in Asia. Passionate about clinical trials as a care option for patients, she is dedicated to implement strategic approaches and drive the advancement of DCT adoption in Asia, by utilizing innovative technology to streamline processes as well as to improve patient and site experience. In her current role, she has worked collaboratively with key stakeholders including sites, industries, regulatory bodies to increase the adoption of DCTs.

Li Fern has close to 18 years of experience in the clinical research industry, including trial monitoring, strategic site relationships and decentralized clinical trials, as well as in the primary and tertiary healthcare settings.

Li Fern holds a Master Degree in Pharmacy from the University of Strathclyde, United Kingdom.

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### ANGÉLIQUE GRECO APAC Clinical Project Manager, Project leadership, IQVIA

Angélique Greco currently leads a portfolio of clinical trials in APAC,

as a clinical project manager, building on over 13 years expertise across the drug development lifecycle, from bench side to bedside, and experience in pre-clinical research, clinical trials, life science consulting and real world evidence healthcare analytics.

Angélique brings a holistic perspective, with clinical trials being a key piece to bringing life changing treatment to patients and is a passionate advocate for the use of technological advances to transform our current practices.

Angélique holds a dual Master degrees in medicinal chemistry and drug development form the University of Montpellier, France and has completed innovative programs in Corporate innovation, from the University of Queensland and The Bridge Program, from the Queensland University of Technology, Australia, a national initiative to accelerate and improve the commercialisation of research discoveries.

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