

Ideation

Alice Lee V Innovation Centre of Excellence

SingHealth DukeNUS

Preface

Welcome to our world of healthcare commercial partnerships, where collaboration meets innovation. At A.L.I.C.E, we believe in forging strong alliances with like-minded partners to revolutionise the healthcare landscape. The innovation journey resembles that of a seed to fruit process. It is a long and arduous process where large amounts of patience and effort are required in order to succeed.

Besides serving our internal community, we also support the wider innovation ecosystem in furthering their solutions, leveraging on our strength as the largest healthcare cluster in Singapore. A.L.I.C.E is well-positioned to enable meaningful partnerships and advance healthcare innovations that are beneficial to the Singapore healthcare ecosystem and beyond.

This Commercial Naviguide is produced to assist partners like yourself in navigating the healthcare innovation landscape within SingHealth. This simple and interactive Naviguide contains different roadmaps that cover a comprehensive set of topics that may arise in your innovation journey from **Ideation, Co-Development and Test-bedding** towards **Impact Creation.** We hope that this Naviguide will encourage the formation of many more symbiotic collaborations.

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Icons Glossary





I represent A.L.I.C.E @ SGH Campus and you'll see me throughout this guidebook, together with the icons to the right!





SingHealth Company

Glossary



Alice Lee Innovation Centre of Excellence

Introducing the Alice Lee Innovation Centre of Excellence (A.L.I.C.E) - a healthcare innovation hub nestled within the heart of Singapore's largest healthcare cluster at the Singapore General Hospital (SGH) Campus. As part of the SingHealth Duke-NUS Academic Medicine Innovation Institute (AMII) and SingHealth Division of Innovation and Transformation (Do-IT), A.L.I.C.E serves as your gateway to impactful healthcare innovations.

Imagine a place where world-class experts from diverse clinical specialties unite to reimagine the entire care continuum, from primary to quaternary care. A.L.I.C.E is the hub that sparks collaboration between commercial partners and healthcare clinicians, thereby securing a pipeline of co-developed and validated high-impact healthcare innovations.

A.L.I.C.E will be the key platform in SingHealth Duke-NUS Academic Medical Centre (AMC) to deepen innovations, forge comprehensive partnerships, and empower innovators to propel the future of healthcare. Join us on this transformative journey, where innovation meets compassion, and together, we can create an impactful healthcare system for tomorrow.

Purpose

To provide a platform that facilitates collaborations between healthcare professionals and commercial partners to transform the healthcare industry. We partner with various companies, by supporting the curation of new insights, creation of impactful technologies, solutions and development of advanced workflow and expertise.

This Commercial Naviguide is produced to assist partners in navigating the healthcare innovation landscape within SingHealth. Together, let's create a lasting impact on our patients and communities we serve.

Vision

To be the leading translation platform in transforming healthcare delivery through impactful innovations.

Values

A.L.I.C.E is the hub that sparks collaboration between commercial partners and healthcare clinicians, in securing a pipeline of co-developed and validated high-impact healthcare innovations. We aspire to be a catalyst for positive change in healthcare through the alignment of your needs with our value propositions. Your partnership journey begins here, and A.L.I.C.E is here to help.

Click on any of the topics below to begin.



I would like to showcase/advance awareness of my product





I would like to co-develop new healthcare solutions



I would like to consult healthcare experts



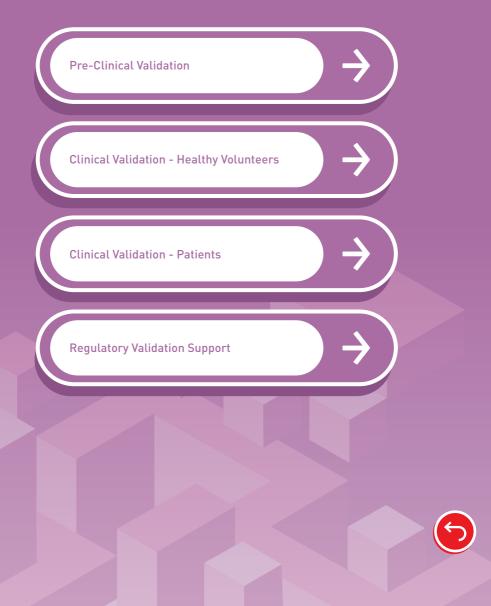


I would like to commercialise SingHealth Technologies

Licensing of SingHealth's Technologies



Solution Validation



PRODUCT EVALUATION OR TEST-BEDDING

Plans to increase product awareness via product evaluation or test-bedding in SingHealth's institutions

Seek company's confirmation on products for evaluation

First contact

Signing of mutual NDAWorking Discussions

with 🔰

Identify/link up internal experts and form up investigation team



Assist investigators to develop customised plans in accordance to company's needs

NOPLA

Assist investigators to confirm their plans and align internally with relevant offices

Support putting the relevant agreements in place

Support investigators during product evaluation or test-bedding Follow up with company after conclusion of product evaluation



PRODUCT SHOWCASE OR END-USER ENGAGEMENT

NO PLANS

Plans a product showcase and gathers domain feedback to generate greater awareness

Assist company to develop targeted engagement survey forms

First contact

Signing of mutual NDAWorking Discussions

with 🔰

Guide company in the submission of Risk Assessment Form and support them during the approval process

> Review engagement survey forms submitted by the company and, where necessary, enhance the context of the survey forms and advice accordingly

Publicise the showcase and engage targeted internal stakeholders

Support company during the on-site engagement

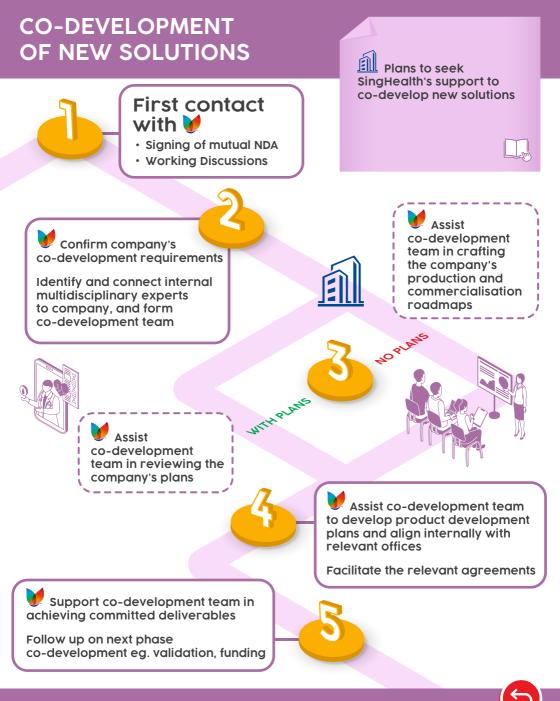
Follow up with company after conclusion of on-site engagement

WITH PLANS



USEFUL SUPPLEMENTARY INFORMATION

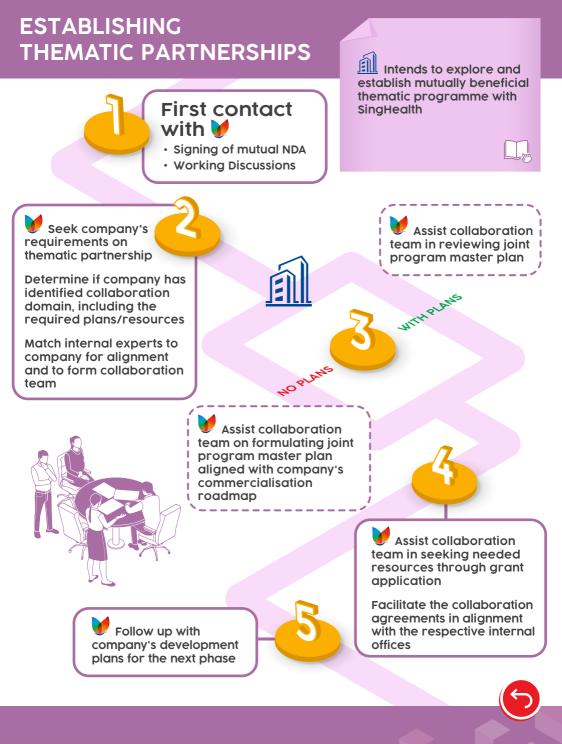
Workplace Safety Cuideline



USEFUL SUPPLEMENTARY INFORMATION

- Emergency Care Research Institute (ECRI) Device Evaluation
 Program
- European Standards
- Food and Drug Administration (FDA)

- Health Science Authority (HSA)
- · International Electrotechnical Commission (IEC)
- International Organization for Standardization (ISO)
 standards
- SingHealth Duke-NUS Medical Technology Office (MTO)



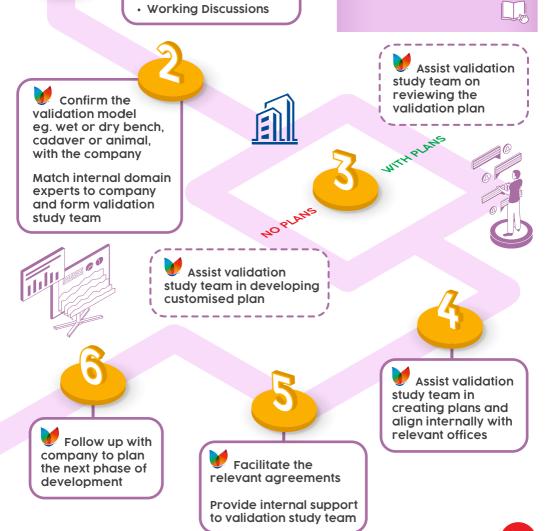
PRE-CLINICAL VALIDATION

First contact

Signing of mutual NDA

with 🔰

Has developed a novel technology and plans to conduct a pre-clinical validation study to evaluate the safety and/or performance of the newly developed technology



USEFUL SUPPLEMENTARY INFORMATION

- SingHealth Experimental Medicine Centre For animal studies
- SingHealth Office of Research Integrity, Compliance and Ethics (RICE)

CLINICAL VALIDATION - HEALTHY VOLUNTEERS

First contact with 🔰

Signing of mutual NDA

Working Discussions

Has developed a novel technology and plans to conduct a first-in-man clinical validation study on healthy volunteers to evaluate the safety of the newly developed technology

> Assist validation study team in developing clinical validation plan

Seek company's confirmation on clinical validation for healthy volunteers

Match internal domain experts to company and form validation study team

> Assist validation study team to review clinical validation plan

THPLA

Assist validation study team in finalising plans and align internally with relevant offices

Provide support to put the relevant agreements in place

Follow up with company on the development of next phase plans



USEFUL SUPPLEMENTARY INFORMATION

- · <u>CE Mark</u>
- Food and Drug Administration (FDA)

Facilitate the

relevant aareements

development of next

Follow up on the

phase plans

- Health Science Authority (HSA)
- Integrated System in Healthcare for Research (iSHaRe)
- SingHealth Duke-NUS Medical Technology Office (MTO)
- · SingHealth Office of Research Integrity, Compliance

CLINICAL VALIDATION PATIENTS

First contact

Signing of mutual NDA

Working Discussions

Seek company's

Match internal domain

experts to company and form validation

with 🔰

confirmation on clinical validation plan

study team

Has developed a novel technology and plans to conduct a first-in-man clinical validation study on patients to evaluate the performance and safety of the newly developed technology



ATHP

Assist validation study team in developing clinical validation plan

> Facilitate the relevant agreements

Provide internal support to validation study team

Assist validation study team in finalising plans and align internally with relevant offices



Follow up with company on the development of next phase plans

USEFUL SUPPLEMENTARY INFORMATION

- Health Science Authority (HSA)
- Integrated System in Healthcare for Research (iSHaRe)

SingHealth Duke-NUS Medical Technology Office (MTO) SingHealth Office of Research Integrity, Compliance

REGULATORY VALIDATION SUPPORT

Has developed a product and plans to seek SingHealth support to conduct a regulatory validation study



- Signing of mutual NDA
- Working Discussions

Seek company's confirmation on requested regulatory validation

Match internal domain experts to company and form validation study team with advice from company's appointed CRO

HITH PLANS

NOPLANS

Help validation study team to develop clinical validation plan with input from CRO

> Assist validation study team on reviewing clinical validation plan submitted by CRO

Assist validation study team in firming up plans and align internally with relevant offices

Facilitate the relevant agreements

Provide internal support to validation study team

Follow up with company after the conclusion of regulatory validation



USEFUL SUPPLEMENTARY INFORMATION

- Food and Drug Administration (FDA)
- Health Science Authority (HSA)
- Integrated System in Healthcare for Research (iSHaRe)
- SingHealth Duke-NUS Medical Technology Office (MTO) SingHealth Office of Research Integrity, Compliance
- and Ethics (RICE)

CONSULTATION WITH DOMAIN EXPERTS

Intends to consult SingHealth clinical and/or operation experts

First contact with 💓

Signing of mutual NDA

Working Discussions

L

Seek company confirmation on requested expert consultation

Identify and link up internal domain experts to company Firm up consultation format with company and finalise the relevant questionnaire

WITHP

Assist company to develop a targeted consultation questionnaire

Collate findings/results of the consultation questionnaire

Support appointed SingHealth experts to get internal approval and assist Company during the period of consultation

APPOINTING OF DOMAIN EXPERTS AS COMPANY ADVISORS

Plans to engage SingHealth clinical and/or operational experts as advisors to company



LICENSING OF SINGHEALTH TECHNOLOGIES

technologies **First contact** SingHealth Intellectual with 🔰 Property (SHIP) Working discussion and linking with SingHealth Intellectual Property Office (SHIP) Sharing of nonconfidential descriptions SingHealth IP to assess areas of interest and determine availability of suitable IP **IP SUITABLE** 🔟 keen to explore SingHealth Suitable IP is opportunities NOT identified Signing of mutual Explore future NDA for further opportunities information sharing SingHealth IP to confirm company's interest in licensing SingHealth Terms are negotiated and shared on a non-binding termsheet SingHealth IP will check in on progress of Definitive license agreement is commercialisation activities drafted upon agreement of terms and ensure that obligations are met License is executed when acceptable to all parties

Intends to explore licensing of SingHealth

USEFUL SUPPLEMENTARY INFORMATION

Intellectual Property Office of Singapore (IPOS)

EXPLORING EARLY INVOLVEMENT WITH SINGHEALTH'S PROJECTS

Seeking investment opportunities or highly promising R&D projects at SingHealth



Link up to Incubator Team

Signing of mutual NDA

singHealth Incubator team engages with companies /investors to share information on pipeline projects

3-

singHealth Incubator team to match and connect companies/investors with relevant projects of interest

Innovating Onward!

$\dot{\mathbb{Q}}$ Next step towards innovation

We hope that this Commercial NaviGuide will become a useful companion on your path towards innovation and excellence in healthcare.

This is but a sketch of what to expect when you partner with us do approach us so that we can meet your needs, and together, forge transformative solutions for healthcare. Innovation and healthcare are not solitary pursuits but collective endeavours that require collaboration, dedication, and an unyielding commitment to excellence. Our staff at A.L.I.C.E will work with you so that we can bring to bear top-notch healthcare professionals with market players, and **revolutionise healthcare for a healthier world.**

** Everyone has a role to play in innovation. **

- Assoc Prof Henry Ho, Director Alice Lee Innovation Centre of Excellence

Acknowledgements

We would like to thank the following people for making this guidebook possible.

Contributors



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