

STDR Singapore Therapeutics Development Review



STDR GRANT CALL LAUNCH & ATTRIBUTES OF STRONG APPLICATIONS

STDR Coordinating Office Sep 2023

In partnership with:









gapore-MIT Alliance for Research and Technology

STDR Grant Call Launch

STDR Pre-Pilot & Pilot (Sep) Launch Dates and Admin Notes



Call for Pre-Pilot & Pilot Applications

- **11 Sep 2023:** Launch of 2023 (Sep) grant call on iGrants
- **26 Oct 2023, 5pm:** Deadline for submissions of applications

All applications must be endorsed by the IEO office and Research Director.



Eligibility criteria

The Lead Principal Investigator (PI) should:

- a) Hold at least a 0.7 FTE primary appointment in a Singapore publicly funded research/ tertiary institution
- b) Have the relevant scientific/technical background and necessary experience to direct the project being supported by the grant.

<u>Post-doctoral researchers</u> should submit a letter from their supervisor declaring that:

- a) The supervisor supports the application
- b) The contract of the post-doc covers the entire STDR grant period
- c) The grant body funding the post-doc is agreeable to the STDR application (if relevant).

(Exceptions to the eligibility criteria will be considered on a case-by-case basis.)

Overview of STDR-Funded Projects

No.	Characteristics of Projects	Pre-Pilot Stream 1	Pre-Pilot Stream 2	Pilot
1	Grant Quantum & Duration	S\$100K, 1 year		S\$830K, 2 years
2	Maturity	Earlier stage, exploratory and proof-of- concept projects with some preliminary data		Mature projects validated to a certain degree
3	Type(s)	Single-asset	Platform technologies	Both single-asset & platform technologies
4	Stage(s)	Target validation	-	Target validation* to pre-clinical work
5	Examples	 Development and functional validation of a novel target gene for XXX Disease Novel Biomarker and therapeutic target in xyz indications Validating the tractability of XXX as a target for antibody therapeutics 	 Generalisable combinatorial screening platform for unbiased interaction discovery Microfluidics for High-throughput Antibody discovery against XXX XXX cell-derived cancer immunotherapy platform 	 Development of a first in class therapeutic compound for the treatment of xyz indications Development of a proprietary T cell platform for cancer immunotherapy Novel antibody against XXX cancer

* For Pilot projects, target validation could include projects which had the target already validated in a certain indication and are currently exploring the target validation for secondary indications.

Attributes of Strong Applications

General Attributes of Strong Applications

о С С	?	Why?	Give a compelling reason for why the proposed work is relevant
Strategic Positionin		What?	Clarity in the product's role in the disease indication
Sti Pos		TPP (Target Product Profile)	A framework of the product's properties, who will use it , and the competitive advantage
nc Br		Development Plan	Realistic plan with critical experiments , points of go/no-go decisions* , value inflection points that demonstrate progress or reduce uncertainty
Execution Planning		Who?	A multidisciplinary team with strong expertise in relevant areas
		Commercialisation Strategy*	Describe the business model with specifics and context

* More applicable for STDR Pilot Applications

Attributes of Strong Applications- Single Asset

Pre-Pilot Stream 1 (Target Validation)



Clear Target's Role in Disease

- Consistent and robust data
- Studies in **human** tissues/samples
- In vitro/ In vivo models
- Landmark studies **replicated** (if applicable)
- Potential **safety issues** identified/mitigated
- Potential **biomarker** is a plus



Strong Medical Need

- Understanding of current standard of care (SOC) and gaps
- Clear explanation on how to address unmet need and gaps

Competitive Analysis

 Description of competing therapies and competitive space

Pilot (Single Asset)



Research & Scientific Merit

- Efficacy against a **validated target** with strong hypothesis of **MoA**
- Peer-reviewed publications with scientific insight into prior work
- Acceptable **safety profile** or plan for toxicity study



Strong Medical Need & Market Evaluation

- Address an **unmet need**
- **Differentiated** and **significant** benefit to current standard of care
- A **global market** and many opportunities preferred

Clear Development Path

- Clarity of a **path** towards **first in-human use**
- Knowledge of regulatory path

Strong Commercialisation Plan

- Strong opportunities to create intellectual property
- Possibilities of **strategic partnerships**

Attributes of Strong Applications- Platform

Pre-Pilot Stream 2 (Platform Development)

Research and Scientific Merit

- Demonstrate **Proof-of-Principle** to show that the platform is capable of making multiple products/services.
 - Demonstrate the underlying scientific principle or concept
 - Theoretical/ basic experimental level
 - Address fundamental question of 'Can it work?'
 - > Validate the **theoretical basis**



Pilot (Platform)

Research and Scientific Merit

- Demonstrated **Proof-of-Concept** to show first product application of the platform.
 - Demonstrate practical feasibility and applicability
 - More advanced development and testing, often leading to prototype creation
 - Address the question of 'Can it work in the real world, and is it worth pursuing further?"
 - Validate practical implementation



Strong Medical Need & Market Evaluation

- Address **unmet medical need**
- Critical attributes of the platform
- Advantages and **differentiating factors** of the platform



Commercialisation Strategy

- Identification of the **risks**
- What is the value chain and who is the ultimate user or payer
- What is required to **scale** the platform

Available Resources

Target Product Profilehttps://learn.marsdd.com/article/defining-your-target-product-profile-therapeutics/

Competitive Analysis

https://founderledbio.com/ecosystem/biotech-industry/ http://drugmap.idrblab.net/

Book

Adaptive Innovation: An Entrepreneur's Guide to Technology Innovation



Uday Deshpande Krishna Kumar Nallur

World Scientific



Contact us

Email: <u>stdr_secretariat@hq.a-star.edu.sg</u>

Website:

https://www.a-star.edu.sg/Research/funding-opportunities/stdr









THANK YOU

www.a-star.edu.sg