



1. Content

1.1. The Registry will accept prospective registration of interventional clinical trials submitted by Responsible Registrants

1.1.1. Does the Registry register trials before the first participant has been recruited?	Yes	No
a) Does the Registry query submissions where registration is being sought after the first participant has been recruited?	Yes	No
b) Does the Registry make it clear to Responsible Registrants that	Yes	 No
prospective registration means that a trial must complete the registration process, <u>and</u> have a trial registration number issued, <u>before</u> the recruitment of the first participant.	×	
1.1.2. Does the Registry register trials that have already recruited the first participant? (Also referred to as retrospective registration)	Yes ×	No
1.1.3. Does the Registry register other types of studies, including observational studies	Yes	No
1.1.4. Does the Registry register all trials submitted by Responsible Registrants	Yes	No
a) Does the Registry accept trials submitted by Responsible Registrants?	Yes	No
b) Does the Registry ask the person submitting a trial for registration to verify that they meet the terms and conditions for being a Responsible Registrant before being able to proceed to trial registration.	Yes	No
c) Does the Registry use the contact details provided by the Responsible Registrant to verify that those details are correct?	Yes	No
d) As a minimum, Registries must send an email to the address given and receive a reply from that same address. When possible, the telephone number and/or surface mail address will also be verified in a similar fashion.	Yes ×	No
e) Does the Registry ensure that all Responsible Registrants are associated with an institution or organization?	Yes	No 🗵
f) Does the Registry obtain institutional contact details for the Responsible Registrant, including name and telephone number of the institution?	Yes	No
1.1.5. Does the Registry accept studies for registration when the data is submitted as an electronic data file (eg as an xml file) Note: This is not a requirement and is being asked for information only.	Yes	No ⊠





1.2. The registry will be open to all prospective registrants (either internationally or within one or more specific countries) (ICMJE requirement)

a)	Which types of study does the Registry accept for registration? (tick all ☑ Interventional studies ☑ Observational studies	that ap	pply)
b)	If registration is restricted in some way (eg only accepts trials from sponsor, or in a particular health care condition (eg cancer) or intervispecify how it is restricted:		
	N/A		
c)	From which countries does the Registry accept trials for registration: All countries		
	e Registry will be able to collect and publicly display the WHO Trial et (TRDS) (ICMJE requirement).	Regis	tration
a)	Does the Registry collect and display, on a publicly accessible web site, all of the items in the WHO Trial Registration Data Set	Yes	No
b)	Does the Registry have quality control procedures in place to ensure all items in the TRDS contain meaningful data?	Yes 🗵	No
c)	Does the Registry collect the optional TRDS data items? If yes, please specify:	Yes 🗵	No
1.4. Th	e Registry will make an effort to keep registered information up-to-c	date.	
a)	Does the Registry permit Responsible Registrants to update information about their trial?	Yes 🗵	No
b)	Does the Registry have a reminder system to facilitate the submission of updated information by the Responsible Registrant.	Yes	No
	please state how often the Registry reminds Responsible Registrants ate their data (eg once ever 6 months; once every year):		
Note: Th	Once every 6 months is is not a requirement and is being asked for information only.		
c)	Does the Registry display the date the trial record was last updated?	Yes	No
Note: Th	is is not a requirement and is being asked for information only.	X	
d)	Does the Registry request updates from Responsible Registrants at least annually until the Registrant has recorded meaningful information about the publication of the trial results (e.g. has listed a citation in a "Publications" field)	Yes	No

Note: This is not a requirement and is being asked for information only.





	e Registry will <u>never</u> remove a trial office it has been registered.		
a)	Does the Registry ever delete a trial record from their database, or remove it from public view, once a registration number has been issued?	Yes	No 区
If yes, deleted	please explain the circumstances under which a record would be l:		
b)	Does the Registry inform Responsible Registrants at the time of registration that a trial cannot be deleted once it has been registered?	Yes 🗵	No
c)	Does the Registry have clear and transparent processes for dealing with requests to remove a trial record from public view, and have these processes been documented in the SOPs?	Yes	No
2.1. Th	uality and Validity e Registry will have processes in place to make sure that registered ete and accurate.	l data i	is
a)	Do Registry staff routinely check all data submitted about a trial for completeness and meaningfulness to ensure that all TRDS fields are populated and comply with the minimum standards?	Yes	No
b)	If one or more items in the TRDS submitted for registration are incomplete or not meaningful, do Registry staff contact the Responsible Registrant and attempt to obtain complete and meaningful data?	Yes 区	No
c)	Does the Registry's database system apply automated checking procedures (e.g. range checks, logic rules) to data items to facilitate validity checking?	Yes ⊠	No
d)	Does the Registry have processes in place for deciding whether to register trials where the Responsible Registrant remains non-compliant with requests to provide complete and meaningful data?	Yes 🗵	No
e)	Does the Registry undertake regular internal quality control audits to assess the level of completeness and accuracy of the data collected?	Yes 🗵	No
	e Registry will have documented Standard Operating Procedures (Swill be aligned with the International Standards for Clinical Trial Reg		
a)	Does the Registry have written standards for all procedures and processes employed by the registry? o These written standards are known as Standard Operating Procedures (SOPs)	Yes X	No
b)	Does the Registry use these SOPs to train all staff processing trial registrations to ensure that common standards for ensuring data completeness and meaningfulness are adhered to?	Yes	No
c)	Are the internal registry-specific SOPs aligned with the WHO International Clinical Trial Registry Platform International Standards for Clinical Trial Registration?	Yes ⊠	No





2.3. The Registry will have processes in place to make sure that people and trials exist 2.3.1. Does the Registry make sure that the person registering the trial exists Yes No and that they are the appropriate Responsible Registrant? \times 2.3.2. Does the Registry make sure that the trial exists? Yes No X If yes, please briefly describe what the registry does to make sure that the trial exists. Does the Registry obtain written third-party confirmation that a trial Yes No exists? $|\mathsf{x}|$ If yes, please specify the method of confirmation: b) Does the Registry display in the trial record: Yes No a. if the registry has obtained written third party confirmation of X the trial's existence, and b. the name of the third party from whom confirmation was received (eg the name of the ethics committee) 2.4. The Registry will have a publicly accessible audit trail so that changes made to the WHO TRDS for an individual trial can be tracked. a) Does the Registry allow Responsible Registrants to update their Yes No registered trial records? X Does the Registry make available a publicly accessible audit trail of Yes No any changes to any TRDS items? X Does the have quality control procedures in place to ensure any Yes No updated information continues to fulfil the standards for each TRDS \times item. Does the Registry use the most up-to-date information as the default Yes No display? X e) Can the TRDS, as originally registered, be accessed at all times? Yes No \times 2.5. The Registry agrees to comply with the International Standards for Clinical Trial Registries (ISCTR). a) Does the Registry Administrator have a thorough working knowledge Yes No of the operational aspects of their registry? X Is the Registry Administrator committed to ensuring that all Registry Yes No staff are familiar with the standards described in the ISCTR? \times c) Are all Registry staff familiar with the contents of the ISCTR? Yes No X





3. Ac	ccessibility		
	e Registry will make the <u>WHO TRDS</u> for all registered trials accessil at no charge (ICMJE requirement).	ole to t	he
a)	Does the Registry make the WHO TRDS items for all studies in their	Yes	No
	register (ie the registry database) accessible online at no charge to the end user?	X	
	e Registry will make it possible for the <u>WHO TRDS</u> for all registered electronically (<i>ICMJE requirement</i>).	trials	to be
a)	Is it possible to search the Registry online using electronic searches of text words and phrases via a simple, single search box?	Yes 🗵	No
b)	Does the online search allow users to search in at least the condition field and the intervention field?	Yes	No
c)	When the results of a trial identified by a search are displayed, are all items in the WHO TRDS visible?	Yes 🗵	No
d)	Does the online search have an advanced search option?	Yes	No
Note: Th	is is not a requirement and is being asked for information only.	X	
	e Registry will allow Responsible Registrants to submit a trial for re ne of day on any day of the week (24 hours a day, seven days a wee		ion at
a)	Is it possible to submit a trial to the registry 24 hours a day, seven (7) days a week?	Yes	No
b)	If the Registry is planning downtime, does it publish advance notice of	Yes	No
	downtime at least one (1) week beforehand?	X	
	e Registry will allow their register database to be searched at any ti y of the week (24 hours a day, seven days a week).	me of o	day on
a)	Is it possible to search the register online 24 hours a day, 7 days a	Yes	No
	week?	X	





3.5. It is desirable that Registries in the WHO Registry Network also make the WHO TRDS available in the language(s) of the country or countries served by the registry.

a)	Does the Registry accept and/or display trial information in languages others than English? Dlease specify the languages used:	Yes	No X
11 900, 1	stodoo opooliy tiio langaagoo aboa.		
Only a	inswer the remaining questions in this section if the answer to the above qu	uestion	is yes.
b)	Does the Registry have quality control procedures in place to ensure that all translations are accurate?	Yes	No
c)	Are all TRDS items for all records also available in English?	Yes	No
d)	Are all trial records translated into English by the Responsible Registrant checked by registry staff against the non-English submission before being accepted for registration?	Yes	No
e)	Are all trial records translated by Registry staff checked by at least one other staff member?	Yes	No
f)	If there is a discrepancy in a translation, is the translation checked by a third person?	Yes	No
g)	Does the Registry make users of the Registry aware of who performed the translation (the Responsible Registrant or Registry staff) of a registered record?	Yes	No
h)	If a trial is registered in more than one language then will the Registry submit the "Scientific Title", and a language identifier, to the ICTRP Search Portal for each language used?	Yes	□ S





4. Unambiguous Identification

	e Registry will have in place processes to prevent the registration once on their database.	on of a	single
a)	Does the Registry make sure that a trial that has been submitted for registration is not already been included in their register by first searching and checking their own database?	Yes 🗵	No
b)	Does the Registry have policies and procedures in place to deal with inadvertent duplicate registration of the same trial within their own register?	Yes	No
Search second	e Registry will facilitate the retrospective linking (or bridging) Portal of a single trial registered with more than one registry dary identifiers. This includes the <u>UTN</u> , and the unique identifiers egistries in the WHO Registry Network.	/ by e	ntering
a)	Does the Registry require responsible Registrants to make an entry in the Secondary Identifiers field?	Yes	No
b)	If there are no known secondary identifiers, does the Registry require Responsible Registrants to enter 'Nil known' in the Secondary Identifiers field?	Yes	No
C)	Does the Registry require Responsible Registrants to enter a UTN? a. The UTN may be entered into either the Secondary Identifiers field or a field designated specifically for collection of the UTN	Yes ⊠	No
4.3. It attemp	s is not a requirement and is being asked for information only. is desirable that Primary Registries will search the ICTRP Search to determine if the trial has already been registered by andry in the WHO Registry Network or an ICMJE approved registry.		
a)	Does the Registry attempt to determine whether a submitted trial has been registered in another Primary Registry or an ICMJE approved registry before registration? s is not a requirement and is being asked for information only.	Yes	No ×
INOLE. IIII	s is not a requirement and is being asked for information only.	ı	





5. Technical Capacity

5.1. The Registry will submit the <u>WHO TRDS</u> for <u>all</u> records on their register, in English, to the WHO ICTRP Central Repository.

a)	Will (or does) the Registry submit the WHO TRDS items for all records on their register, in English, to the WHO ICTRP Central Repository? o Note: If a registry accepts study types other than interventional trials (i.e. observational studies) these must be provided as well.	Yes 区	No
b)	Will (or does) the Registry submit records in the format requested by the WHO ICTRP (e.g. xml file) at least once per month?	Yes 🗵	No
c)	Will (or does) the Registry, after the initial data transfer of all records, only submit new or updated records each time (rather than the entire data set every time)?	Yes 🗵	No

5.2. The Registry will have access to a database that is used to store and manage the submitted data.

	Does the Registry have access to a database that is used to store and manage the submitted data?	X	No
b)	Does the Registry use database software and hardware that guarantees reliable access to registered data and data safety at all times?	Yes 🗵	No

5.3. The Registry will have access to adequate information technology support.

a)		he Registry have access to reliable information technology	Yes	No
	suppor	t?	X	
b)	Does th	ne Registry have access to all of the following?	Yes	No
	a.	reliable application, database, backup and mail servers		
	b.	good internet connectivity speed	[X]	
	C.	sound operating systems		
	d.			
	e.	database and web development and maintenance personnel		
	f.	other skilled information technology personnel to support		
		these systems, as required		

c) Please briefly describe the Registry's information technology infrastructure. (A separate document may be submitted separately if necessary)

The TCTR was installed in an IBM application server. The backup server is a made-to-order computer server. Data backup was implemented as a full backup at a weekly basis. The full backup is also downloaded monthly from the server, then it was stored in a DVD and kept at the TCTR office.

We placed the server at a co-location service of the Communications Authority of Thailand (CAT) Telecom Public Company Limited, the state-owned company that runs Thailand's international telecommunications infrastructure, including its international gateways, satellite, and submarine cable networks connections. The room for the server has been maintained according to the CAT standard (details can be found at http://www.idc.cattelecom.com/colocation.php).

The server directly connected to the backbone internet data center (IDC). For the switch, we use DLink with gigabit connection and with 24 ports. The internet speed provided by the CAT is 1000 Gb/Sec. At CAT, the brand of the UPS is APC Smart-UPS 3000VA /2700 Watt USB & Serial 230V.

There are two IT personnel working part time for the TCTR, both are Bachelor of Computer Engineering graduates. Chaiwat Tawarungrueng is responsible in most of the software development and maintenance the TCTR system. Panuwat Pratumkham mainly maintains the server and the network. Both of them were employed as permanent staff of the Medical Research Foundation, the owner of the TCTR.

TCTR runs under Linux CentOS 5.0 with the Apache server environment. The TCTR was developed based on PHP script language and MySQL database server.



5.4. The Registry will have adequate security and other provisions against data corruption and loss.

a) Does the Registry have documented procedures for ensuring adequate data security and other provisions to prevent data corruption and loss?	Yes	No
b) Does the Registry issue alerts in advance of website downtime?	Yes	No
If yes, please briefly describe how these alerts are circulated and who is responsible for circulating them.	\boxtimes	





6. Administration and Governance

within	6.1. The Registry will have at least a national remit, and the support of government within the country (or region) to act as the Primary Registry for that country or region (defined as a group of countries and not a group of states within a country).			
a)	Does the Registry have at least a national remit?	Yes	No	
		X		
b)	Does the Registry have a letter of support, or other appropriate documentation, from the Ministry of Health or other relevant national or regional agencies?	Yes 🗵	No	
Note: Th	ne letters of support must be submitted to the ICTRP Secretariat as part of the application			
c)	national (or regional) clinical trial registry?	to act	as the	
-	Thailand			
d)	Registry: 1. Thailand Center of Excellence for Life Sciences (TCELS)	suppo	rt to the	
	2. Medical Research Foundation (MRF)			
profit	ne Registry will publicly disclose ownership, governance structure status.	e and	not-for-	
a)	Is the Registry managed by a not-for-profit agency?	Yes 区	No	
b)	Does the Registry publicly disclose its ownership, governance structures and not-for-profit status in a prominent place on the registry's website?	Yes 🗵	No	
c)				
	1. Thailand Center of Excellence for Life Sciences (TCELS)			
	2. Medical Research Foundation (MRF)			
	3. Clinical Research Collaboration Network(CRCN)			
	4. Medical Research Network of the Consortium of Thai Medical Schools :MedResNet(Thailand)			
d)	Will the Registry inform the ICTRP immediately if their ownership, governance structures or not-for-profit status change in any way?	Yes 🗵	No	
(origin	6.3. The Registry agrees that, should it cease to function, at least the <u>WHO TRDS</u> (original and updated) for all trial records will be transferred to a Primary Registry in the WHO Registry Network.			
a)	Will the Registry transfer at least the WHO TRDS (original and updated) for all trial records to another Primary Registry in the WHO Registry Network if it ceases to function?	Yes	No	
	region y rectwork in it ocases to function:	<u> </u>		



6.4. The Registry will have a strategy in place ensure the medium to long term sustainability of the registry

	in the stage of th		
a)	Does the Registry have a documented business plan?	Yes	No
		X	
b)	Does the Registry's business plan include strategies to ensure its	Yes	No
	medium to long term sustainability?	X	





7. The Trial Registration Data Set (TRDS)

7.1. The Registry will collect and publicly display all items in the WHO Trial Registration Data Set (TRDS)

	Item/Label	Does the registry collect this data item?	Does the registry publicly display this data item?
1	Primary Registry and Trial Identifying Number	Yes No ⊠ □	Yes No ⊠ □
2	Date of Registration in Primary Registry	Yes No ⊠ □	Yes No ⊠ □
3	Secondary Identifying Numbers	Yes No ⊠ □	Yes No ⊠ □
4	Source(s) of Monetary or Material Support	Yes No ⊠ □	Yes No ⊠ □
5	Primary Sponsor	Yes No ⊠ □	Yes No ⊠ □
6	Secondary Sponsor(s)	Yes No ⊠ □	Yes No ⊠ □
7	Contact for public queries	Yes No ⊠ □	Yes No ⊠ □
8	Contact for scientific queries	Yes No ⊠ □	Yes No ⊠ □
9	Public title	Yes No ⊠ □	Yes No ⊠ □
10	Scientific title	Yes No ⊠ □	Yes No ⊠ □
11	Countries of Recruitment	Yes No ⊠ □	Yes No ⊠ □
12	Health condition(s) or problem(s) studied	Yes No ⊠ □	Yes No ⊠ □
13	Interventions	Yes No ⊠ □	Yes No ⊠ □
14	Key Inclusion and Exclusion Criteria	Yes No ⊠ □	Yes No ⊠ □
15	Study type	Yes No ⊠ □	Yes No ⊠ □
16	Date of first enrolment	Yes No ⊠ □	Yes No ⊠ □
17	Target sample size	Yes No ⊠ □	Yes No ⊠ □
18	Recruitment status	Yes No ⊠ □	Yes No ⊠ □
19	Primary Outcome(s)	Yes No ⊠ □	Yes No ⊠ □
20	Key Secondary Outcome(s)	Yes No ⊠ □	Yes No ⊠ □





7.2. The Registry may choose to collect and publicly display other data items. It is recommended that registries consider the following optional, additional data items:

	Item/Label	Does the registry collect this data item?	Does the registry publicly display this data item?
21	Lay Summary / Synopsis	Yes No ⊠ □	Yes No ⊠ □
22	Approvals	Yes No ⊠ □	Yes No ⊠ □
23	Results links	Yes No ⊠ □	Yes No ⊠ □





8. Partner Registries

	imary Registries in the WHO Registry Network will have the capac ther Registries.	ity to	partner
a)	Is the Registry willing and able to form partnerships with other Registries that do not themselves fulfil the criteria for a Primary Registry in the WHO Registry Network?	Yes	No
b)	Does the Registry currently have any Partner Registries?	Yes	No
If yes, p	please provide the name(s) of these partners:		X
c)	If the registry has partners, are they listed on the proposed Primary Registry's web site? N/A	Yes	No
If yes,	please provide the address of this web page:		
	completed Registry Profile form is required for all Partner Registries. This profile will be d on the ICTRP's web site.		
	imary Registries in the WHO Registry Network will ensure that poteries meet WHO minimum standards requirements.	ntial Pa	artner
a)	Does the proposed Primary Registry agree that, before agreeing to accept a Partner Registry and their trial registration records, they will make sure that the Partner Registry meets all the WHO minimum standards listed in the International Standards for Clinical Trial Registries?	Yes X	No
b)	Has a Registry Profile form been completed and submitted for all of the Registry's Partner Registries?	Yes	No 区
	imary Registries will have procedures in place to enable exchange or Registries.	of data	with
a)	Is the Registry able to accept data (that is, as electronic data files) from Partner Registries or other appropriate data providers?	Yes	No
b)	Does the Registry agree to establish a Memorandum Of Understanding (MOU) or other such agreement with each Partner Registry or other data providers, as per the requirement described in the International Standards for Clinical Trial Registries?	Yes	No
c)	Does the Primary Registry agree the area of coverage/responsibility of their Partner Registries or other data providers (such as geographical location, health condition, intervention type, etc) and incorporate this into their SOPs and instructions to Registrants to avoid any confusion or unintentional duplicate registration?	Yes ⊠	No
d)	Does the Primary Registry record the identification number and date of registration in the Partner Registry within the trial record on the Primary Registry?	Yes	No
e)	Does the Primary Registry identify records that have been sourced from Partner Registries or other data providers so users are aware of the data source?	Yes 🗵	No
f)	Before announcing Partner Registries, Primary Registries must have successfully imported data into the Primary Registry?	Yes	No

X





Administrator

The Administrator is the person employed to manage the Registry and will be the primary point of contact between the Registry and the ICTRP Secretariat.

Title (Dr/Prof/Mr/Mrs/Ms/Miss)	Dr.
Given Name	Wasee
Family Name	Tulvatana
Telephone number	+66-2-2564142
Fax	+66-2-2528290
Email	waseetulvatana@gmail.com

Secondary Contact

The Secondary Contact must not be the same as the Administrator. Secondary contact details are requested for circumstances when the Administrator is unavailable.

Title (Dr/Prof/Mr/Mrs/Ms/Miss)	Professor Dr.
Given Name	Pyatat
Family Name	Tatsanavivat
Telephone number	+66-81-8721448, +66-2-9510873
Fax	+66-2-9510067
Email	pyatat@gmail.com

Information Technology Officer

The Information Technology Officer should be the person who will be responsible for submitting the data for inclusion on the ICTRP Central Repository. They should have a good understanding of all of the IT issues relevant to the registry.

Title (Dr/Prof/Mr/Mrs/Ms/Miss)	Associate Professor
Given Name	Bandit
Family Name	Thinkhamrop
Telephone number	+66-85-0011123
Fax	+66-43-362075
Email	karawa@gmail.com