



กรมวิทยาศาสตร์การแพทย์  
Department of Medical Sciences

## **PROFICIENCY TESTING PROGRAM 2023**

**Scheme Code D6614R1**

**Sterility Test**

## **PROFICIENCY TESTING PROTOCOL**

**No. D6614R1**

### **Organized by**

Bureau of Drug and Narcotic  
Department of Medical Sciences  
88/7 Soi Bumrasnaradura Hospital, Tiwanon Road, Nonthaburi, 11000  
THAILAND  
Tel. +66 2951 0000 ext. 99112  
Fax +66 2580 5733  
Email: pt\_bdn@hotmail.com; pts.bdn@gmail.com



## 1. ORGANIZER

### **Scheme Provider:**

Bureau of Drug and Narcotic (BDN)  
Department of Medical Sciences  
88/7 Soi Bumrasnaradura Hospital, Tiwanon Road, Nonthaburi,  
11000, THAILAND  
Tel. +66 2951 0000 ext. 99112  
Fax +66 2580 5733

### **Scheme Coordinator:**

Ms. Supawadee Surangkul  
Pharmacist, Senior professional level  
Email: pt\_bdn@hotmail.com; pts.bdn@gmail.com  
The scheme coordinator is responsible for all activities of the PT scheme.

### **Scientific advisory:**

Ms. Ladda Poolsawat  
Pharmacist, Senior professional level  
Email: pt\_bdn@hotmail.com; pts.bdn@gmail.com  
For any technical question, participants can contact scientific advisory.

## 2. OBJECTIVE

The objective of this Proficiency Testing (PT) scheme is to demonstrate that participants can correctly perform the test for sterility according to the method in the harmonized chapter for Sterility tests in USP, EP (BP) and JP.

## 3. SUBCONTRACT

BDN has no policy to subcontract in any activity of this proficiency testing scheme.

## 4. CRITERIA FOR PARTICIPATION

Participants should have competences and perform the test for sterility **by membrane filtration technique** in the routine work. Each participant is able to participate in the program for one set of PT sample.

## 5. NUMBER AND TYPE OF PARTICIPANTS

**Number of participants:** 20 – 30 laboratories  
**Type of participants:** Quality control laboratories in pharmaceutical manufacturers and other testing laboratories

## 6. SCHEDULE OF PT SCHEME

The frequency of this PT program is at least one round per 2 years. Schedule for the PT activities is as follows:

Activity	Schedule
Call for participation	December 2022
Deadline for registration	31 January 2023
Distribution of samples	1 March 2023
Deadline for submission of results	22 March 2023
Interim report for comments	May 2023
Final report	June 2023

*For the best efficiency of PT program, all activities will be operated according to this time frame. Participants are requested to feedback for registration and submission of result according to the schedule. Participants should note that results submitted are not allowed to change or amend in any case.*

## 7. REGISTRATION

**Registration Fee:** 5,000 Baht

### **Payment:**

The payment should be made by Teller payment system at any branches of Krung Thai Bank Public Company Limited.

### **Method and Deadline for Registration:**

Participants should register online via the website <https://www.bdn.go.th/pt> within **31 January 2023**. Registration by other means e.g. fax, Email will not be accepted.

### **Terms and Conditions:**

1. BDN reserves the right to occasionally delay the issue of PT program or use an appropriate substitute test material with prior warning to participants if the planned PT sample is not available according to the schedule of PT scheme.
2. The registration fees are nonrefundable.

More information can be viewed on the website <https://www.bdn.go.th/pt>.

***\*\* This scheme code is provided for local participants only. \*\****

## 8. PROFICIENCY TESTING SAMPLE

The PT samples of this scheme are 0.9% Sodium chloride injection which may be sterile or non-sterile.

## 9. HANDLING OF PT SAMPLE

Participants will receive (i) 20 vials containing 5 ml of sample A, (ii) 20 vials containing 5 ml of sample B and (iii) 20 vials containing 5 ml of sample C.

PT samples are packed in tightly closed containers and distributed in ambient condition. Upon receipt of samples, they should be stored at room temperature (below 30°C) and **commence testing as soon as possible** (no later than **8 March 2023**).

*PT samples are sent by logistics company. It is the responsibility of the participants to contact BDN within three days if they have not received the PT sample within the time schedule. Upon receipt of PT sample, participants are requested to check physical conditions of PT sample as well as other substances provided, complete a PT sample acknowledgement form via the website <https://www.bdn.go.th/pt>*

## 10. TEST METHOD

Participants should perform the test for sterility by using routine laboratory procedures; **membrane filtration technique**. Performance will not be evaluated if participants perform the test with other techniques.

*Details of the method are described in the testing protocol which can be downloaded via E-mail from website <https://www.bdn.go.th/pt> after sample distribution. PT sample as well as analytical procedure should be handled and operated in the same manner as performing routine work.*

## 11. ASSIGNED VALUE

Sterile samples shall be complied the test for sterility and inoculated samples shall be not complied. For inoculated samples, microbial growth in media shall be specified correctly. The assigned value will not be disclosed to participants until interim report is issued.

## 12. STANDARD DEVIATION FOR PROFICIENCY ASSESSMENT

N/A

### **13. PERFORMANCE EVALUATION**

Participants will be evaluated by comparison with the assigned value. Participant's result comply with the assigned value will be evaluated as satisfactory result.

### **14. POTENTIAL MAJOR SOURCES OF ERRORS**

1. Insufficient cleaning and monitoring test environment
2. Insufficient decontamination of test materials and samples before entry the test environment
3. Complexity of filter unit assembly
4. Procedures of transferring the samples to filtration apparatus
5. The length of time that samples was exposed to environment
6. Insufficient decontamination of drain connection
7. Cross contamination
8. Sterility checks and growth promotion capabilities of media
9. Volume of sample to be examined
10. Adherence of the microorganism to the filtration vessel walls

### **15. REPORT**

An interim report is issued to provide each participant with an early indication of performance. In general, the interim report is issued about two months after the deadline for submission of results via the website <https://www.bdn.go.th/pt>. Participants are requested to check and review for any corrections and/or comments. The final report is issued via the website <https://www.bdn.go.th/pt> after the corrections and/or comments of interim report have been completed.

The report includes the following information.

- Introduction: general description of PT scheme
- Name and contact details of proficiency testing provider and scheme coordinator
- Participation: information of participating laboratories
- PT samples: description, sample preparations
- Assigned values
- Results
- Discussion of results: conclusion of overall performances and comments on participant's performances
- Potential major sources of errors
- Homogeneity and stability assessment

## **16. CONFIDENTIALITY, COLLUSION AND FALSIFICATION OF RESULTS**

The identities of participants are protected by means of laboratory codes which are randomly assigned in each PT round. These codes are confidential and are not disclosed to other persons unless agreed by the participant for a regulatory or recognition purpose. Participants can access their personal information in the website <https://www.bdn.go.th/pt> by using username and password which can keep their information confidentially. For security purpose, participants are recommended to change username and password in case of changing the responsible person who can access the information in the website.

This PT scheme is conducted in the belief that participants will perform the analysis and report results with scientific professional. Where any collusion between participants or falsification of results is proven by BDN, the result of that participant for the PT round concerned will be cancelled for performance evaluation.

## **17. LOST OR DAMAGED OF PROFICIENCY TESTING SAMPLE**

Email will be sent to inform participants after sample distribution. In case of lost or damaged PT sample, participants should immediately inform BDN via <https://www.bdn.go.th/pt>. In some cases, the damaged PT sample should be returned to BDN. Replacement will be arranged within 1 week if the PT samples are proved to be lost or not suitable for analysis. The deadline of submitting result will be extended to appropriate date if necessary.