

## Prenatal Diagnostic Laboratory, Tsan Yuk Hospital

Address: 30, Hospital Road, Hong Kong Tel: (852) 2589-2218 Fax: (852) 2517-2373

### Pre-eclampsia Screening – Instructions (HA)

#### 1. Instructions to doctors (HA) prior to making test request

##### 1.1 Pre-test explanation

Screening during the first trimester can identify women at increased risk for preterm pre-eclampsia. Please note this is a **screening test** and not a diagnostic test. **A screen negative result does not exclude the possibility of pre-eclampsia because screening does not detect all affected pregnancies.**

According to Chaemsaitong et al, 2019\*, the use of Fetal Medicine Foundation (FMF) screening algorithm by a combination of maternal factors, uterine artery pulsatility index, mean arterial pressure and serum PIGF will identify approximately 64% of pregnancies which develop preterm pre-eclampsia in the first trimester.

\*Chaemsaitong P et al. Prospective evaluation of screening performance of first-trimester prediction models for preterm preeclampsia in an Asian population. Am J Obstet Gynecol. 2019 Dec;221(6):650.e1-650.e16.

##### 1.2 A trained and qualified sonographer shall obtain an operator code from PDL, TYH in order to request for PET screening test which involves uterine artery pulsatility index measurements.

*Please send a copy of the 'FMF Certificate of competence in Preeclampsia screening' to Scientific Officer (Tel: 2589-2328) who will assign an operator code for each operator.*

#### 2. Instructions to doctors on sending samples

##### 2.1 Complete Request form for 1st trimester DS and PET (HA) (TYH-REQ-1stDS-PET-HA).

Important notes:

- a) Please tick the appropriate box in 'Test Requested' section to indicate the desired test(s) to perform.
- b) Please fill out all fields in the form except 'Previous aneuploidy' and 'Nuchal Translucency' which are only required if Down Syndrome Screening is requested.
- c) For assisted reproduction with embryo transfer, please provide the date of egg collection, date of embryo transfer, and donor's date of birth or age (if applicable).
- d) It is assumed that dates of blood pressure measurement and ultrasound examination are the same. Please remark on the request form if the dates are different.
- e) It is assumed that consent of patient has been obtained by signing the request form.
- f) Women with multiple pregnancies or with a vanishing twin are NOT eligible for PET screening test.

##### 2.2 Specimen specification

- a) Collect 4 mL of peripheral blood into a serum tube (**with barrier gel**) labelled with at least two patient's identifiers. Cap and invert the tube 5 times gently.
- b) The collected blood sample shall reach the laboratory within 24 hours, counting from the time of blood collection. If the sample cannot be sent to the laboratory on the day of blood collection, please keep it at the door of refrigerator (2-8°C). Samples should be delivered in a courier box/bag on ice.

Summary of request form and specimen specification of PET screening test

Test	Gestational age (weeks)	CRL (mm)	Specimen (volume)	Container (provided upon request)	Request form	Turn-around time
PET Screening	11 - 13 <sup>+6</sup>	42 - 83	Peripheral blood (4 mL)	Serum tube with <b>barrier gel</b>	Request form for 1st trimester DS and PET (HA) (TYH-REQ-1stDS PET-HA)	5 working days

### 2.3 Sample delivery

Samples are sent to PDL via hospital portering service. Please arrange with portering service team of the referring hospital.

*Specimen Reception hours:* Monday to Friday: 8:45am - 4:30pm  
(excluding public holidays)

### 3. Rejection of sample

A specimen may be rejected when the following condition is observed:

- unlabelled or incorrectly labelled specimen container
- specimen container leaks
- not suitable for analysis (e.g. frozen or grossly haemolysed, lipaemic or icteric blood sample, using incorrect container, etc.)
- specimen cannot reach the laboratory within 24 hours after blood collection
- specimen unfit for the tests described in Section 2.1d and 2.2

In such events, you will be contacted for further actions.

### 4. Reporting

- All reports will be sent to your office by messengers. Screen positive reports will be faxed to your office.
- Turn-around-time (TAT): 5 working days

### 5. Address and contact information

*Address:* Prenatal Diagnostic Laboratory  
Room 2-10, Tsan Yuk Hospital  
30 Hospital Road  
Sai Ying Pun, Hong Kong

*Tel:* 2589-2208, 2589-2288

*Fax:* (lab) 2857-5407, (office) 2517-2373

*Website:* <https://obsgyn.med.hku.hk/en/Services/Obstetrics/Maternal-Fetal-Medicine/Prenatal-Diagnosis>

*Laboratory opening hours:*

Monday to Friday: 8:45am - 5:30pm

(closed on Saturdays, Sundays and public holidays)

*Contacts:* Medical Technologist

Senior Medical Technologist

Scientific Officer

Duty Officer / Laboratory Director

Tel: 2589-2212

Tel: 2589-2288

Tel: 2589-2327 / 2589-2328

Tel: 2589-2288 / 2589-2327

Fax: 2517-2373

Down syndrome  
& PET screening  
service

Other enquiry or  
complaint

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