

# VCGS Maternal Serum Screening

MEDICARE NUMBER

Victorian Clinical Genetics Services Murdoch Children's Research Institute The Royal Children's Hospital Flemington Road, Parkville VIC 3052 P +61 1300 118 247 F +61 3 8341 6366 W vcgs.org.au

1. PATIENT DETAILS						
LAST NAME	GIVEN NAMES	SEX		DATE OF BIRTH	YOUR REFERENCE	
ADDRESS POST CODE				PHONE (home)	MOBILE	
2. TESTS REQUESTED			3. CLINICAL INFORMATION			
Combined first trimester screening (CFTS) or second trimester maternal serum screening (2TMSS)			LMP:/			
☐ CFTS (sample @ <b>9-13W6D</b> ) ☐ 2TMSS (sample @ <b>14-20W6D</b> )						
☐ CFTS + PE (sample @11-13W6D) ☐ 2TMSS + NTD (sample @15-20W6D)			CLINICAL DUE DATE://			
family history of PE YES NO First pregnancy YES NO NO First pregnancy YES NO			GESTATIONAL AGE: ON///			
The requesting doctor should ensure both blood specimen & ultrasound reports are provided to the maternal serum screening lab for a complete combined first trimester screening result.			U/SOUND DUE DATE://			
4. CLINICAL NOTES			MATERNAL WEIGHT: kg			
IVFown egg _pick-up date// donor egg DOB// pick-up date//			MATERNAL BP: SP/DP mmHg			
□ Diabetes (IDDM only)     □ Smoker     □ Threatened miscarriage     □ Twins       Ethnic group:     □ European     □ Aboriginal     □ Asian     □ Afro-Caribbean     □ Other:				PREVIOUS: ☐ T21 ☐ NTD ☐ Pre-eclampsia		
5. ULTRASOUND  For first trimester screening a request form is required for nuchal translucency, 11-13W6D.  DOCTOR'S SIGNATURE AND REQUEST DATE						
Name of imaging practice:						
Date of ultrasound:/ SIGNATURE:					DATE:	
COPY REPORTS TO:			REQUESTING DOCTOR (provider #, initials, address):			
HOSPITAL STATUS OF PATIENT AT SPECIMEN COLLECTION DR DATE OF SERVICES  Private patient in a private hospital or approved day hospital			YES NO PSpital facility Hospital patient in a recognised hospital Dutpatient of a recognised hospital			
LABORATORY COPY				COLLECTION		
5-10mL clotted blood sample. Gel or plain tube - NO ANTICOAGULANT First trimester blood sample <b>9-13W6D</b> Second trimester blood sample <b>14-20W6D</b> First trimester plus pre-eclampsia blood sample <b>11-13W6D</b>			I CERTIFY THAT THE PATHOLOGY ACCOMPANYING THE REQUEST WAS COLLECTED FROM THE PATIENT STATED ABOVE AS ESTABLISHED BY DIRECT INQUIRY AND/OR INSPECTION OF WRIST BAND.			
			PHLEBOTOMIST SIGNATURE:			
VCGS requires personal information contained in this request form for the purpose of test assessment & program audits. VCGS may therefore request copies of ultrasound and cytogenetic reports from your doctor in order to complete testing & audits.			COLLECTION DATE:/ COLLECTION TIME (hrs):			
Pathology Request Form Victorian Clinical Genetics Services Flemington Road, Parkville VIC 3052 P +61 1300 118 247 F +61 3 8341 6366 W vcgs.org.au  MEDICARE I			NUMBER			
PATIENT DETAILS						
LAST NAME	GIVEN NAMES	SEX		DATE OF BIRTH	YOUR REFERENCE	
ADDRESS POST CODE			PHONE (b)	MODILE		
1 001 0002			PHONE (home)  REQUESTING DOCTOR (pro	MOBILE vider # initials address):		
TESTS REQUESTED  Maternal Serum Screening Test (MSST)  CFTS (sample @9-13W6D)				REQUESTING DOCTOR (pro	videi π, ilitidis, address).	
CFTS + PE (sample @11-13W6D)  pre-eclampsia  2TMSS + NTD (sample @15-20W6D)  neural tube defects						



# Patient Information

Genetic counselling with a VCGS genetic counsellor is available to anyone considering this screening test (1300 118 247). Genetic counsellors can also discuss other prenatal screening and testing options with you. More information about this test is available at vcgs.org.au/maternal-serum-screening

# Purpose of the test

VCGS offers screening for some conditions that can be identified during pregnancy. Maternal serum screening has two options: screening during the first trimester or screening during the second trimester.

- Combined first trimester screening (CFTS): provides an estimate of the chance that a pregnancy has a chromosome condition such as Down syndrome (trisomy 21), Edwards syndrome (trisomy 18) or Patau syndrome (trisomy 13). An optional extra with CFTS is screening for early-onset pre-eclampsia (EO-PE). Early detection and treatment can improve pregnancy outcomes.
- **Second trimester screening (2ndTMSS)**: provides an estimate of the chance that a pregnancy has Down syndrome (trisomy 21), Edwards syndrome (trisomy 18) or a neural tube defect, such as spina bifida.

### **Test process**

**CFTS** combines a blood test with an ultrasound.

- 1. A blood test between 9 weeks + 0 days and 13 weeks + 6 days (if having PE as well, blood must be collected between 11 weeks and 13 weeks + 6 days). This measures two proteins called PAPP-A and free beta hCG. These are found naturally in the blood during pregnancy. A change in the level of these proteins may indicate a greater chance of a chromosome condition
- 2. A nuchal translucency ultrasound (NT scan). This ultrasound is performed by a specialist ultrasonographer between 11 weeks + 1 day and 13 weeks + 6 days. The ultrasound measures the thickness of a fluid filled space at the back of baby's neck and also the presence or absence of the nasal bone. An enlarged space and/or absence of the nasal bone may indicate a greater chance of a chromosome condition.

The results of the blood test and the NT ultrasound are combined with the patient's age and weight to give a combined estimate of the chance the pregnancy may have a particular condition.

2ndTMSS is a blood test only.

Blood is collected between 14 and 20 weeks. Although if the sample is collected between 14 and 15 weeks, no estimate will be given for neural tube defects.

A list of blood collection sites can be found on our website: https://collection-sites.vcgs.org.au/

#### Limitations of the test

- Maternal serum screening is not a diagnostic test. Therefore, not all pregnancies with a chromosome condition will be identified. Screening only looks for a small number of particular chromosome conditions: no screening test can identify all possible conditions that may affect a pregnancy.
- A screen negative result means it is very unlikely the pregnancy has a chromosome condition. The majority of women will receive a screen negative result. As with all screening tests, there is always a small chance the result is incorrect (false negatives).
- A small number of women will receive a screen positive result. This does not mean the pregnancy definitely has a chromosome condition only that there is a higher chance. If you receive this result, you will be offered diagnostic testing to confirm the result. In most cases, the screen positive result turns out to be a 'false positive' and the pregnancy does not have the chromosome condition. If you receive a screen positive result, there are two options for further testing. You can have percept non-invasive prenatal test (NIPT), which is a more accurate screening test or you can have a diagnostic test. A diagnostic test requires an invasive procedure such as a CVS or amniocentesis.

# Privacy, confidentiality & use of information

- Your test results will be kept confidential. Results will only be released to your healthcare provider, other healthcare providers involved in your medical care, or to another healthcare provider as directed by you, or otherwise as required or authorised by applicable law.
- Collecting information on your pregnancy after testing is part of our laboratory's standard practice for quality purposes and test evaluation. VCGS may contact your healthcare provider to obtain this information.

#### Retention & use of samples

• In line with best practices and clinical laboratory standards, leftover de-identified specimens (unless prohibited by law), de-identified genetic material, as well as other information learned from your testing, may be used by VCGS for purposes of quality control, laboratory operations, laboratory test development, laboratory improvement, and generation of new scientific knowledge. All such uses will be in compliance with applicable law.

# Financial responsibility

•You are responsible for fees incurred with VCGS for services performed.