Report to **HAYNE, LISA**
Shop 7, 63-65 Maitland St
, Narrabri, NSW, 2390

Patient **GARBUTT, SONIA**
21 RIVERSIDE DR NARRABRI NSW 2390
Phone 67933155
D.O.B 15/06/1975 Age 48 years Sex F

Ref. by/copy to HAYNE, LISA

Collect date 11/03/2024 Lab ref 24-25952360
Collect time 08:41 AM Your ref
Reported 18/03/2024 02:02 PM

Tests requested RT3, STE, UTE, TFT, FE, I12, TAA, LIP, GLU, MBA, DVI

Clinical notes

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

Serum Reverse T3 (RT3)	363	pmol/L	(170-539)

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

PLASMA TRACE ELEMENTS

			(RI)
Zinc	12.3	umol/L	(10.0-18.0)
Selenium	**3.47**	umol/L	(0.80-1.90)

Excess selenium may cause toxicity with common symptoms including diarrhoea, fatigue, hair loss and nail discolouration. A recent Cochrane review (2018) found NO beneficial effect of selenium supplementation in reducing cancer risk in randomised controlled trials of more than 27,000 people.

RI = Reference Interval

Abnormal result/results reported above have been confirmed by repeat assay.

SURGERY USE

- Normal
- No Action/File
- Patient Notified
- Make Appoint.
- Further Tests
- Notes Required
- Speak with Dr.
- On Correct Treatment

Report to **HAYNE, LISA**
Shop 7, 63-65 Maitland St
, Narrabri, NSW, 2390

Patient **GARBUTT, SONIA**
21 RIVERSIDE DR NARRABRI NSW 2390
Phone 67933155
D.O.B 15/06/1975 Age 48 years Sex F

Ref. by/copy to HAYNE, LISA

Collect date 11/03/2024 Lab ref 24-25952360
Collect time 08:41 AM Your ref
Reported 18/03/2024 02:02 PM

Tests requested RT3, STE, UTE, TFT, FE, I12, TAA, LIP, GLU, MBA, DVI

Clinical notes

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

URINE TRACE METALS

			(RI)	BOEL
Total Volume	Random			
Urine Creatinine	10.5	mmol/L		N/A
Urine Iodine (ug/L)	242	ug/L		N/A
Urine Iodine (Crt corrected)	186	ug/L	(> 100)	

WHO Criteria for assessing iodine nutrition based on median urinary iodine concentrations in 6 years or older:

- Severe Iodine deficiency : < 20 ug/L
- Moderate Iodine deficiency : 20-49 ug/L
- Mild Iodine deficiency : 50-99 ug/L
- Adequate Iodine intake : 100-199 ug/L
- Iodine intake above requirement : 200-299 ug/L
- Excessive Iodine intake : >= 300 ug/L

Urine iodine (creatinine corrected) adjusts the measured result to account for changes in urine concentration. Please note: due to a high variability of an individual's urinary iodine concentration, spot urine iodine concentration is not useful for the diagnosis and treatment of individuals. For more detail refer to: "https://apps.who.int/iris/bitstream/handle/10665/85972/WHO_NMH_NHD_EPG_13.1_eng.pdf"

BOEL = Biological Occupational Exposure Limit
RI = Reference Interval

SURGERY USE

- Normal
- No Action/File
- Patient Notified
- Make Appoint.
- Further Tests
- Notes Required
- Speak with Dr.
- On Correct Treatment

Report to **HAYNE, LISA**
Shop 7, 63-65 Maitland St
, Narrabri, NSW, 2390

Patient **GARBUTT, SONIA**
21 RIVERSIDE DR NARRABRI NSW 2390
Phone 67933155
D.O.B 15/06/1975 Age 48 years Sex F

Ref. by/copy to HAYNE, LISA
Collect date 11/03/2024 Lab ref 24-25952360
Collect time 08:41 AM Your ref
Reported 18/03/2024 02:02 PM
Tests requested RT3, STE, UTE, TFT, FE, I12, TAA, LIP, GLU, MBA, DVI

Clinical notes

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

THYROID PROFILE

Specimen Type: Serum

TSH	1.5	mIU/L	(0.5-4.0)
FT4	14	pmol/L	(10-20)
FT3	4.6	pmol/L	(3.5-6.5)

Result(s) consistent with euthyroidism.

Please note the above reference intervals have been developed from a non-pregnant healthy general population study.

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

IRON STUDIES

Specimen Type: Serum

Serum Iron	17	umol/L	(10-30)
Transferrin	**30**	umol/L	(32-48)
Transferrin Saturation	29	%	(13-45)
Serum Ferritin	34	ug/L	(30-165)

Transferrin may be decreased by inflammation (acute or chronic) or protein deficiency or loss.

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

SERUM VITAMIN B12

Request Number			25952360
Date Collected			11 Mar 24
Time Collected			08:41
B12	(156-740)	pmol/L	418

SURGERY USE

- Normal
- No Action/File
- Patient Notified
- Make Appoint.
- Further Tests
- Notes Required
- Speak with Dr.
- On Correct Treatment

Report to **HAYNE, LISA**
Shop 7, 63-65 Maitland St
, Narrabri, NSW, 2390

Patient **GARBUTT, SONIA**
21 RIVERSIDE DR NARRABRI NSW 2390
Phone 67933155
D.O.B 15/06/1975 Age 48 years Sex F

Ref. by/copy to HAYNE, LISA
Collect date 11/03/2024 Lab ref 24-25952360
Collect time 08:41 AM Your ref
Reported 18/03/2024 02:02 PM
Tests requested RT3, STE, UTE, TFT, FE, I12, TAA, LIP, GLU, MBA, DVI

Clinical notes

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

THYROID AUTOANTIBODIES

Specimen Type: Serum

Anti-Thyroglobulin Abs (aTGII)	13	IU/mL	(< 4.5)
Anti-Thyroidal Peroxidase Abs	> 1300	IU/ml	(< 60)

Over 90% of patients with autoimmune thyroiditis show moderate to high levels of Anti-Thyroidal Peroxidase Abs (anti-TPO) with Anti-Thyroglobulin Abs (anti-Tg) also present in about 90% of such patients. Up to 75% of patients with Graves' hyperthyroidism show increased anti-TPO with anti-Tg present in 50-60%. Low levels of both anti-TPO and anti-Tg may be found in up to 10% of "normal" asymptomatic adults. In most cases of autoimmune thyroid disease increased anti-TPO is the predominant finding although a small proportion of patients show a predominant increase in anti-Tg.

Please note that as of 08/09/2021, Laverty Pathology changed to a reformulated Atellica anti-thyroglobulin antibody (aTGII) assay. The reference interval has been updated. Differences in individual patient results may be observed compared to the previous method. If further information is required please contact a Chemical Pathologist on 9005 7000.

SURGERY USE

- Normal
- No Action/File
- Patient Notified
- Make Appoint.
- Further Tests
- Notes Required
- Speak with Dr.
- On Correct Treatment

Report to **HAYNE, LISA**
Shop 7, 63-65 Maitland St
, Narrabri, NSW, 2390

Patient **GARBUTT, SONIA**
21 RIVERSIDE DR NARRABRI NSW 2390
Phone 67933155
D.O.B 15/06/1975 Age 48 years Sex F

Ref. by/copy to HAYNE, LISA

Collect date 11/03/2024 Lab ref 24-25952360
Collect time 08:41 AM Your ref
Reported 18/03/2024 02:02 PM

Tests requested RT3, STE, UTE, TFT, FE, I12, TAA, LIP, GLU, MBA, DVI

Clinical notes

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

LIPID STUDIES

Specimen Type: Serum

Reference intervals are included for reference only, and interpretation / treatment goals should be guided by patient-specific cardiovascular risk assessment (see Australian Cardiovascular Risk Charts. Alternatively, the web-site www.cvdcheck.org.au can be accessed in order to complete a risk assessment for individual patients.)

Haemolysis	Nil		
Icterus	Nil		
Lipaemia	Nil		
Fasting status	Random		
Total Cholesterol	4.9	mmol/L	(3.9-5.2)
Triglycerides	0.9	mmol/L	(0.5-1.7)

NVDPA TARGET LIPID RANGES (MMOL/L) FOR PATIENTS AT HIGH / MODERATE RISK OF CARDIOVASCULAR DISEASE:

TOTAL CHOLESTEROL	<4.0
TRIGS (FASTING)	<2.0
HDL-C	>= 1.0
LDL-C	<2.0
NON HDL-C	<2.5

SURGERY USE

- Normal
- No Action/File
- Patient Notified
- Make Appoint.
- Further Tests
- Notes Required
- Speak with Dr.
- On Correct Treatment

Report to **HAYNE, LISA**
Shop 7, 63-65 Maitland St
, Narrabri, NSW, 2390

Patient **GARBUTT, SONIA**
21 RIVERSIDE DR NARRABRI NSW 2390
Phone 67933155
D.O.B 15/06/1975 Age 48 years Sex F

Ref. by/copy to HAYNE, LISA

Collect date 11/03/2024 Lab ref 24-25952360
Collect time 08:41 AM Your ref
Reported 18/03/2024 02:02 PM

Tests requested RT3, STE, UTE, TFT, FE, I12, TAA, LIP, GLU, MBA, DVI

Clinical notes

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

SERUM/PLASMA GLUCOSE

Fasting status	Random		
Serum	4.9	mmol/L	(3.4-7.7)

Normal glucose concentration.

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

SERUM CHEMISTRY

Specimen Type: Serum			
Haemolysis	Nil		
Icterus	Nil		
Lipaemia	Nil		
Sodium	140	mmol/L	(135-145)
Potassium	4.1	mmol/L	(3.6-5.4)
Chloride	102	mmol/L	(95-110)
Bicarbonate	26	mmol/L	(22-32)
Anion Gap	16	mmol/L	(10-20)
Urea	3.2	mmol/L	(2.5-8.0)
Creatinine	55	umol/L	(45-90)
eGFR	> 90		mL/min/1.73m^2
Urate	0.34	mmol/L	(0.14-0.36)
Bilirubin	**19**	umol/L	(< 15)
AST	15	U/L	(< 30)
ALT	20	U/L	(< 30)
GGT	20	U/L	(< 35)
Alkaline Phosphatase	62	U/L	(20-105)
Protein	72	g/L	(60-82)
Albumin	46	g/L	(38-50)
Globulin	26	g/L	(20-39)
Calcium	2.38	mmol/L	(2.10-2.60)
Corrected Calcium	2.32	mmol/L	(2.10-2.60)
Phosphate	1.25	mmol/L	(0.75-1.50)

eGFR >=90 mL/min/1.73m2 usually indicates normal kidney function but does not exclude patients with early kidney damage (those with albuminuria, haematuria or abnormal kidney imaging).

SURGERY USE

- Normal
- No Action/File
- Patient Notified
- Make Appoint.
- Further Tests
- Notes Required
- Speak with Dr.
- On Correct Treatment

Report to **HAYNE, LISA**
Shop 7, 63-65 Maitland St
, Narrabri, NSW, 2390

Patient **GARBUTT, SONIA**
21 RIVERSIDE DR NARRABRI NSW 2390
Phone 67933155
D.O.B 15/06/1975 Age 48 years Sex F

Ref. by/copy to HAYNE, LISA

Collect date 11/03/2024 Lab ref 24-25952360
Collect time 08:41 AM Your ref
Reported 18/03/2024 02:02 PM

Tests requested RT3, STE, UTE, TFT, FE, I12, TAA, LIP, GLU, MBA, DVI

Clinical notes

Clinical Notes : On Thyroxine last taken 05:50am 11/3/24.

VITAMIN D

Haemolysis	Nil	
Serum 25(OH) Vitamin D	79	nmol/L

Suggested decision limits for Vitamin D status:

Sufficiency	51 -200	nmol/L
Mild deficiency	25 - 50	nmol/L
Marked deficiency	< 25	nmol/L
Toxicity	>250	nmol/L

References: Vitamin D and health in adults in Australia and New Zealand: Position Statement. MJA 2012 June 18; 196(11),686-687.

SURGERY USE

- Normal
- No Action/File
- Patient Notified
- Make Appoint.
- Further Tests
- Notes Required
- Speak with Dr.
- On Correct Treatment