

Dr Kalyani Muthurajah  
MBBS, Dip PH (Syd) FRACGP  
Provider No. 2777395K  
30 - 38 Short Street  
LEICHHARDT NSW 2040  
P: 02 9561 3333 F: 02 9561 3334

2nd December 2020

Start Patient : KIM, SARAH  
26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
Birthdate: 07/08/1992 Age: Y27 Sex: F  
Telephone: 89014888  
Your Reference : 743038405  
Lab Reference : 20-23164169  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. EVELIINA VINCHENZO  
Addressee : DR. EVELIINA VINCHENZO 0000000Y  
Lab. Reference: 20-23164169-AND-0  
Requested: 05/05/2020 00:00:00  
Performed: 08/05/2020 00:00:00  
Test name: ANDROGENS (AND-0)  
Provider name: Lavery Pathology

Clinical Notes : irregular periods, on thyroxine, monitoring...

| SERUM ANDROGENS              |      |        |                 |
|------------------------------|------|--------|-----------------|
| Total Testosterone (Siemens) | 0.7  | nmol/L | (0.5-2.2) ✓     |
| Sex Hormone Binding Globulin | 20   | nmol/L | (20-118) ✓ low. |
| DHEAS                        | 3.1  | umol/L | (2.2-7.9)       |
| Androstenedione              | 7.0  | nmol/L | (3.0-9.5) ✓     |
| Calculated Free Testosterone | 16.0 | pmol/L | (2.7-35.0)      |

Please note that as of 21/09/2019, Lavery Pathology changed to the Atellica analyser for DHEAS testing. Comparison studies have shown good agreement between the methods and the reference intervals have not changed. If further information is required, please contact a Chemical Pathologist on 9005 7000.

Requested Tests : TFT, PRL, MBA, HOR, FBE, AND

Start Patient : KIM, SARAH  
26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
Birthdate: 07/08/1992 Age: Y27 Sex: F  
Telephone: 89014888  
Your Reference : 743038405  
Lab Reference : 20-23164169  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. EVELIINA VINCHENZO  
Addressee : DR. EVELIINA VINCHENZO 0000000Y  
Lab. Reference: 20-23164169-MBA-0  
Requested: 05/05/2020 00:00:00  
Performed: 08/05/2020 00:00:00  
Test name: SERUM CHEMISTRY (MBA-0)  
Provider name: Lavery Pathology

Clinical Notes : irregular periods, on thyroxine, monitoring...

SERUM CHEMISTRY  
Request Number 12288383 23164169

Date Collected 16 Apr 18 8 May 20  
Time Collected 00:00 10:23  
Specimen Type: Serum

|            |     |     |
|------------|-----|-----|
| Haemolysis | Nil | Nil |
| Icterus    | Nil | Nil |
| Lipaemia   | Nil | Nil |

|                  |                           |        |      |
|------------------|---------------------------|--------|------|
| Na               | (135-145)                 | mmol/L | 140  |
| K                | (3.6-5.4)                 | mmol/L | 4.0  |
| Cl               | (95-110)                  | mmol/L | 106  |
| HCO <sub>3</sub> | (22-32)                   | mmol/L | 26   |
| An Gap           | (10-20)                   |        | 12   |
| Urea             | (2.5-6.7)                 | mmol/L | 4.9  |
| Creat            | (45-90)                   | umol/L | 50   |
| eGFR             | mL/min/1.73m <sup>2</sup> |        | > 90 |
| Bili             | (< 15)                    | umol/L | 6    |
| AST              | (< 30)                    | U/L    | 16   |
| ALT              | (< 30)                    | U/L    | 12   |
| GGT              | (< 30)                    | U/L    | 12   |
| Alk Phos         | (20-105)                  | U/L    | 47   |
| Protein          | (60-82)                   | g/L    | 70   |
| Albumin          | (38-50)                   | g/L    | 44   |
| Glob             | (20-39)                   |        | 26   |

Anion Gap = 12

Requested Tests : TFT\*, PRL\*, MBA, HOR\*, FBE\*, AND\*

Start Patient : KIM, SARAH  
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Your Reference : 743038405  
Lab Reference : 20-23164169  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. EVELIINA VINCHENZO  
Addressee : DR. EVELIINA VINCHENZO 0000000Y  
Lab. Reference: 20-23164169-PRL-0  
Requested: 05/05/2020 00:00:00  
Performed: 08/05/2020 00:00:00  
Test name: SERUM PROLACTIN (PRL-0)  
Provider name: Laverty Pathology

Clinical Notes : irregular periods, on thyroxine, monitoring...

PROLACTIN

Specimen Type: Serum

| Request Number | Date Collected | Prolactin mIU/L |
|----------------|----------------|-----------------|
|                | Ref Range      | (40-570)        |

|          |          |     |
|----------|----------|-----|
| 23164169 | 08/05/20 | 233 |
|----------|----------|-----|

Requested Tests : TFT\*, PRL, MBA, HOR\*, FBE\*, AND\*

Start Patient : KIM, SARAH  
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Your Reference : 743038405  
Lab Reference : 20-23164169  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. EVELIINA VINCHENZO  
Addressee : DR. EVELIINA VINCHENZO 0000000Y  
Lab. Reference: 20-23164169-HOR-0  
Requested: 05/05/2020 00:00:00  
Performed: 08/05/2020 00:00:00  
Test name: HORMONE PROFILE (HOR-0)  
Provider name: Laverty Pathology

Clinical Notes : irregular periods, on thyroxine, monitoring...

| SERUM HORMONE PROFILE |                |          |         |              |             |  |
|-----------------------|----------------|----------|---------|--------------|-------------|--|
| Specimen Type: Serum  |                |          |         |              |             |  |
| Request Number        | Date Collected | FSH IU/L | LH IU/L | OEST2 pmol/L | PROG nmol/L |  |
| 23164169              | 8 May 20       | 2        | 1.9     | 528          |             |  |
| Reference Ranges      |                |          |         |              |             |  |
| Follicular            |                | 2-12     | 2-12    | 100-530      | 0.5-4.5     |  |
| Midcycle              |                | 12-30    | >15     | 235-1300     |             |  |
| Luteal                |                | 2-12     | 2-15    | 205-790      | 10.6-89.1   |  |
| Menopausal            |                | >25      | >10     | <100         |             |  |
| Prepubertal           |                | <6       | <4      |              |             |  |

Requested Tests : TFT\*, PRL, MBA, HOR, FBE\*, AND\*

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Your Reference : 743038405  
Lab Reference : 20-23164169  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. EVELIINA VINCHENZO  
Addressee : DR. EVELIINA VINCHENZO 0000000Y  
Lab. Reference: 20-23164169-FBE-0  
Requested: 05/05/2020 00:00:00  
Performed: 08/05/2020 00:00:00  
Test name: HAEMATOLOGY (FBE-0)  
Provider name: Laverty Pathology

Clinical Notes : irregular periods, on thyroxine, monitoring...

| HAEMATOLOGY                       |           |          |  |
|-----------------------------------|-----------|----------|--|
| Request Number                    | 12288383  | 23164169 |  |
| Date Collected                    | 16 Apr 18 | 8 May 20 |  |
| Time Collected                    | 00:00     | 10:23    |  |
| Specimen Type: EDTA               |           |          |  |
| Hb (115-165) g/L                  | 131       | 133      |  |
| Hct (0.34-0.47)                   | 0.39      | 0.39     |  |
| RCC (3.9-5.8) $\times 10^{12}$ /L | 4.3       | 4.4      |  |
| MCV (79-99) fL                    | 90        | 89       |  |
| MCH (27-34) pg                    | 31        | 30       |  |
| MCHC (320-360) g/L                | 340       | 343      |  |
| RDW (10.0-17.0) %                 | 11.7      | 11.6     |  |
|                                   |           |          |  |
| WBC (4.0-11.0) $\times 10^9$ /L   | 7.1       | 7.4      |  |
| Neut (2.0-7.5) $\times 10^9$ /L   | 4.5       | 4.6      |  |
| Lymph (1.0-4.0) $\times 10^9$ /L  | 1.9       | 2.2      |  |
| Mono (0.2-1.0) $\times 10^9$ /L   | 0.6       | 0.5      |  |
| Eos (< 0.7) $\times 10^9$ /L      | 0.1       | 0.1      |  |
| Baso (< 0.2) $\times 10^9$ /L     | 0.0       | 0.0      |  |
|                                   |           |          |  |
| Plat (150-400) $\times 10^9$ /L   | 249       | 309      |  |

CURRENT FILM COMMENT

Red cells : Normal.  
White cells : Occasional Atypical (reactive) lymphocytes.  
Platelets : Normal.

HAEMATOLOGY: An occasional reactive lymphocyte noted.

Requested Tests : TFT\*, PRL, MBA, HOR, FBE, AND\*

Start Patient : KIM, SARAH  
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Birthdate: 07/08/1992 Age: Y27 Sex: F  
Telephone: 89014888  
Your Reference : 743038405  
Lab Reference : 20-23164169



Medicare Number: 2851319181  
 Phone Enquiries:  
 Referred By... : DR. EVELIINA VINCHENZO  
 Addressee : DR. EVELIINA VINCHENZO 0000000Y  
 Lab. Reference: 20-23164169-TFT-0  
 Requested: 05/05/2020 00:00:00  
 Performed: 08/05/2020 00:00:00  
 Test name: THYROID FUNCTION TEST (TFT-0)  
 Provider name: Laverty Pathology

Clinical Notes : irregular periods, on thyroxine, monitoring...

| THYROID PROFILE      |           |          |     |
|----------------------|-----------|----------|-----|
| Request Number       | 12288383  | 23164169 |     |
| Date Collected       | 16 Apr 18 | 8 May 20 |     |
| Time Collected       | 00:00     | 10:23    |     |
| Specimen Type: Serum |           |          |     |
| TSH (0.5-4.0)        | mIU/L     | 0.2      | 3.0 |
| FT4 (10-20)          | pmol/L    | 25       | 21  |
| FT3 (3.5-6.0)        | pmol/L    | 5.6      |     |

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

Thyroid hormone replacement therapy appears adequate.

Requested Tests : TFT, PRL, MBA, HOR, FBE, AND\*

Start Patient : KIM, SARAH  
 26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
 Birthdate: 07/08/1992 Age: Y27 Sex: F  
 Telephone: 89014888  
 Your Reference : 746767668  
 Lab Reference : 20-22524339  
 Medicare Number: 2851319181  
 Phone Enquiries:  
 Referred By... : DR. EVELIINA VINCHENZO  
 Addressee : DR. EVELIINA VINCHENZO 0000000Y  
 Lab. Reference: 20-22524339-FBE-0  
 Requested: 13/06/2020 00:00:00  
 Performed: 13/06/2020 00:00:00  
 Test name: HAEMATOLOGY (FBE-0)  
 Provider name: Laverty Pathology

Clinical Notes : previously abnormal FBC? trend.

| HAEMATOLOGY         |                      |          |           |      |  |
|---------------------|----------------------|----------|-----------|------|--|
| Request Number      | 12288383             | 23164169 | 22524339  |      |  |
| Date Collected      | 16 Apr 18            | 8 May 20 | 13 Jun 20 |      |  |
| Time Collected      | 00:00                | 10:23    | 12:20     |      |  |
| Specimen Type: EDTA |                      |          |           |      |  |
| Hb (115-165)        | g/L                  | 131      | 133       | 140  |  |
| Hct (0.34-0.47)     |                      | 0.39     | 0.39      | 0.41 |  |
| RCC (3.9-5.8)       | x10 <sup>12</sup> /L | 4.3      | 4.4       | 4.6  |  |
| MCV (79-99)         | fL                   | 90       | 89        | 89   |  |
| MCH (27-34)         | pg                   | 31       | 30        | 30   |  |
| MCHC (320-360)      | g/L                  | 340      | 343       | 341  |  |
| RDW (10.0-17.0)     | %                    | 11.7     | 11.6      | 11.7 |  |
|                     |                      |          |           |      |  |
| WBC (4.0-11.0)      | x10 <sup>9</sup> /L  | 7.1      | 7.4       | 8.5  |  |
| Neut (2.0-7.5)      | x10 <sup>9</sup> /L  | 4.5      | 4.6       | 5.5  |  |
| Lymph (1.0-4.0)     | x10 <sup>9</sup> /L  | 1.9      | 2.2       | 2.3  |  |
| Mono (0.2-1.0)      | x10 <sup>9</sup> /L  | 0.6      | 0.5       | 0.6  |  |
| Eos (< 0.7)         | x10 <sup>9</sup> /L  | 0.1      | 0.1       | 0.1  |  |
| Baso (< 0.2)        | x10 <sup>9</sup> /L  | 0.0      | 0.0       | 0.0  |  |
|                     |                      |          |           |      |  |
| Plat (150-400)      | x10 <sup>9</sup> /L  | 249      | 309       | 274  |  |

HAEMATOLOGY: FBC parameters are within reference range.

Requested Tests : ESR\*, CRP\*, FBE

Start Patient : KIM, SARAH  
26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
Birthdate: 07/08/1992 Age: Y27 Sex: F  
Telephone: 89014888  
Your Reference : 746767668  
Lab Reference : 20-22524339  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. EVELIINA VINCHENZO  
Addressee : DR. EVELIINA VINCHENZO  
Lab. Reference: 20-22524339-ESR-0  
Requested: 13/06/2020 00:00:00  
Performed: 13/06/2020 00:00:00  
Test name: E.S.R (ESR-0)  
Provider name: Lavery Pathology

0000000Y

Clinical Notes : previously abnormal FBC? trend.

| HAEMATOLOGY         |                     |
|---------------------|---------------------|
| Request Number      | 12288383 22524339   |
| Date Collected      | 16 Apr 18 13 Jun 20 |
| Time Collected      | 00:00 12:20         |
| Specimen Type: EDTA |                     |
| ESR (< 30) mm/hr    | 9 9                 |

Requested Tests : ESR, CRP\*, FBE

Start Patient : KIM, SARAH  
26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
Birthdate: 07/08/1992 Age: Y27 Sex: F  
Telephone: 89014888  
Your Reference : 746767668  
Lab Reference : 20-22524339  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. EVELIINA VINCHENZO  
Addressee : DR. EVELIINA VINCHENZO  
Lab. Reference: 20-22524339-CRP-0  
Requested: 13/06/2020 00:00:00  
Performed: 13/06/2020 00:00:00  
Test name: C-REACTIVE PROTEIN (CRP-0)  
Provider name: Lavery Pathology

0000000Y

Clinical Notes : previously abnormal FBC? trend.

| C-REACTIVE PROTEIN   |                     |
|----------------------|---------------------|
| Request Number       | 12288383 22524339   |
| Date Collected       | 16 Apr 18 13 Jun 20 |
| Time Collected       | 00:00 12:20         |
| Specimen Type: Serum |                     |
| CRP (< 6.0) mg/L     | < 4.0 < 4.0         |

Requested Tests : ESR, CRP, FBE

Start Patient : KIM, SARAH  
26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
Birthdate: 07/08/1992 Age: Y28 Sex: F  
Telephone: 89014888  
Your Reference : 754655335  
Lab Reference : 20-24239953  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. KALYANI MUTHURAJAH  
Addressee : DR. KALYANI MUTHURAJAH  
Lab. Reference: 20-24239953-INS-0  
Requested: 29/08/2020 00:00:00  
Performed: 30/08/2020 00:00:00  
Test name: SERUM INSULIN (INS-0)  
Provider name: Lavery Pathology

2777395K



Clinical Notes : Thyroidectomy/PCOs.

SERUM INSULIN

Fasting status  
Haemolysis

Random  
Nil

Insulin

22 mU/L (< 10)

ASSESSMENT OF INSULIN RESISTANCE (FASTING SAMPLES ONLY)

< 10 - normal insulin sensitivity  
10-14 - mild insulin resistance  
> 14 - insulin resistance

Insulin results from non-fasting samples are difficult to interpret  
although any result  $\geq 60$  mU/L is likely to indicate insulin resistance.

Requested Tests : TFT\*, INS

Start Patient : KIM, SARAH  
26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
Birthdate: 07/08/1992 Age: Y28 Sex: F  
Telephone: 89014888  
Your Reference : 754655335  
Lab Reference : 20-24239953  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. KALYANI MUTHURAJAH  
Addressee : DR. KALYANI MUTHURAJAH 2777395K  
Lab. Reference: 20-24239953-TFT-0  
Requested: 29/08/2020 00:00:00  
Performed: 30/08/2020 00:00:00  
Test name: **THYROID FUNCTION TEST (TFT-0)**  
Provider name: Laverty Pathology

Clinical Notes : Thyroidectomy/PCOs.

|                      |                  | THYROID PROFILE |          |           |
|----------------------|------------------|-----------------|----------|-----------|
|                      |                  | 12288383        | 23164169 | 24239953  |
| Request Number       |                  |                 |          |           |
| Date Collected       |                  | 16 Apr 18       | 8 May 20 | 30 Aug 20 |
| Time Collected       |                  | 00:00           | 10:23    | 12:03     |
| Specimen Type: Serum |                  |                 |          |           |
| TSH                  | (0.5-4.0) mIU/L  | 0.2             | 3.0      | 1.4       |
| FT4                  | (10-20) pmol/L   | 25              | 21       | 24        |
| FT3                  | (3.5-6.0) pmol/L | 5.6             |          |           |

Thyroid hormone replacement therapy appears adequate.

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

Requested Tests : TFT, INS

Start Patient : KIM, SARAH  
26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
Birthdate: 07/08/1992 Age: Y28 Sex: F  
Telephone: 89014888  
Your Reference : 763754499  
Lab Reference : 20-25085452  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. KALYANI MUTHURAJAH  
Addressee : DR. KALYANI MUTHURAJAH 2777395K  
Lab. Reference: 20-25085452-FBE-0  
Requested: 28/11/2020 00:00:00  
Performed: 29/11/2020 00:00:00  
Test name: **HAEMATOLOGY (FBE-0)**  
Provider name: Laverty Pathology

Trace mineral  
Zn, Cu, Se foods  
to facilitate thyroid  
hormone synth

Clinical Notes : Post hypothyroidism

| HAEMATOLOGY                         |           |          |           |           |
|-------------------------------------|-----------|----------|-----------|-----------|
| Request Number                      | 12288383  | 23164169 | 22524339  | 25085452  |
| Date Collected                      | 16 Apr 18 | 8 May 20 | 13 Jun 20 | 29 Nov 20 |
| Time Collected                      | 00:00     | 10:23    | 12:20     | 08:45     |
| Specimen Type: EDTA                 |           |          |           |           |
| Hb (115-165) g/L                    | 131       | 133      | 140       | 142       |
| Hct (0.34-0.47)                     | 0.39      | 0.39     | 0.41      | 0.42      |
| RCC (3.9-5.8) x10 <sup>12</sup> /L  | 4.3       | 4.4      | 4.6       | 4.8       |
| MCV (79-99) fL                      | 90        | 89       | 89        | 87        |
| MCH (27-34) pg                      | 31        | 30       | 30        | 30        |
| MCHC (320-360) g/L                  | 340       | 343      | 341       | 341       |
| RDW (10.0-17.0) %                   | 11.7      | 11.6     | 11.7      | 11.6      |
|                                     |           |          |           |           |
| WBC (4.0-11.0) x10 <sup>9</sup> /L  | 7.1       | 7.4      | 8.5       | 6.4       |
| Neut (2.0-7.5) x10 <sup>9</sup> /L  | 4.5       | 4.6      | 5.5       | 3.8       |
| Lymph (1.0-4.0) x10 <sup>9</sup> /L | 1.9       | 2.2      | 2.3       | 2.0       |
| Mono (0.2-1.0) x10 <sup>9</sup> /L  | 0.6       | 0.5      | 0.6       | 0.4       |
| Eos (< 0.7) x10 <sup>9</sup> /L     | 0.1       | 0.1      | 0.1       | 0.1       |
| Baso (< 0.2) x10 <sup>9</sup> /L    | 0.0       | 0.0      | 0.0       | 0.0       |
|                                     |           |          |           |           |
| Plat (150-400) x10 <sup>9</sup> /L  | 249       | 309      | 274       | 302       |

HAEMATOLOGY: FBC parameters are within reference range.

Requested Tests : TFT\*, GLU\*, MBA\*, LIP\*, INS\*, FBE, A1C\*

Start Patient : KIM, SARAH  
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Birthdate: 07/08/1992 Age: Y28 Sex: F  
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Your Reference : 763754499  
Lab Reference : 20-25085452  
Medicare Number: 2851319181  
Phone Enquiries:  
Referred By... : DR. KALYANI MUTHURAJAH  
Addressee : DR. KALYANI MUTHURAJAH 2777395K  
Lab. Reference: 20-25085452-LIP-0  
Requested: 28/11/2020 00:00:00  
Performed: 29/11/2020 00:00:00  
Test name: LIPID STUDIES (LIP-0)  
Provider name: Lavery Pathology

Clinical Notes : Post hypothyroidism

#### 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](http://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          | Fasting    |           |
| Total Cholesterol       | 3.4 mmol/L | (3.0-5.2) |
| Triglycerides           | 1.1 mmol/L | (0.5-1.7) |
| HDL Cholesterol         | 0.9 mmol/L | (1.0-2.0) |
| LDL Cholesterol         | 2.0 mmol/L | (1.5-3.4) |
| Non-HDL Cholesterol     | 2.5 mmol/L | (< 3.4)   |
| Cholesterol/HDL-C Ratio | 3.8        | (< 4.5)   |

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   |

Decreased HDL-C may accompany intercurrent illness. It is also seen in hypoalbuminaemia (various forms including Tangier disease) and in association with defects in the ABCA1 transporter protein. In most of these circumstances it is a risk factor for CVD.

Requested Tests : TFT\*, GLU, MBA\*, LIP, INS\*, FBE, A1C\*

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 Telephone: 89014888  
 Your Reference : 763754499  
 Lab Reference : 20-25085452  
 Medicare Number: 2851319181  
 Phone Enquiries:  
 Referred By... : DR. KALYANI MUTHURAJAH  
 Addressee : DR. KALYANI MUTHURAJAH 2777395K  
 Lab. Reference: 20-25085452-GLU-0  
 Requested: 28/11/2020 00:00:00  
 Performed: 29/11/2020 00:00:00  
 Test name: GLUCOSE (GLU-0)  
 Provider name: Laverty Pathology

Clinical Notes : Post hypothyroidism

SERUM/PLASMA GLUCOSE  
 Fasting status Fasting  
 Serum 5.3 mmol/L (3.4-5.4)

Normal glucose concentration.

Requested Tests : TFT\*, GLU, MBA\*, LIP, INS\*, FBE, A1C\*

Start Patient : KIM, SARAH  
 26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
 Birthdate: 07/08/1992 Age: Y28 Sex: F  
 Telephone: 89014888  
 Your Reference : 763754499  
 Lab Reference : 20-25085452  
 Medicare Number: 2851319181  
 Phone Enquiries:  
 Referred By... : DR. KALYANI MUTHURAJAH  
 Addressee : DR. KALYANI MUTHURAJAH 2777395K  
 Lab. Reference: 20-25085452-INS-0  
 Requested: 28/11/2020 00:00:00  
 Performed: 29/11/2020 00:00:00  
 Test name: SERUM INSULIN (INS-0)  
 Provider name: Laverty Pathology

Clinical Notes : Post hypothyroidism

SERUM INSULIN  
 Fasting status Fasting  
 Haemolysis Nil  
 Insulin 15 MU/L (< 10)

ASSESSMENT OF INSULIN RESISTANCE (FASTING SAMPLES ONLY)

< 10 - normal insulin sensitivity  
 10-14 - mild insulin resistance  
 > 14 - insulin resistance



- \* Insulin results from non-fasting samples are difficult to interpret although any result  $\geq 60$  mU/L is likely to indicate insulin resistance.

Requested Tests : TFT\*, GLU, MBA\*, LIP, INS, FBE, A1C\*

~~~~~  
 Start Patient : KIM, SARAH  
 26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
 Birthdate: 07/08/1992 Age: Y28 Sex: F  
 Telephone: 89014888  
 Your Reference : 763754499  
 Lab Reference : 20-25085452  
 Medicare Number: 2851319181  
 Phone Enquiries:  
 Referred By... : DR. KALYANI MUTHURAJAH  
 Addressee : DR. KALYANI MUTHURAJAH 2777395K  
 Lab. Reference: 20-25085452-A1C-0  
 Requested: 28/11/2020 00:00:00  
 Performed: 29/11/2020 00:00:00  
 Test name: GLYCATED HAEMOGLOBIN (A1C-0)  
 Provider name: Laverty Pathology

Clinical Notes : Post hypothyroidism

Specimen Type: EDTA GLYCATED HAEMOGLOBIN (HbA1c)  
 HbA1c- NGSP 5.3 % (4.0-6.0) ✓  
 HbA1c- IFCC 34 mmol/mol (20-42)

The Australian Diabetes Society recommends a general target for glycated haemoglobin (HbA1c) of  $\leq 7.0\%$  (53 mmol/mol) for most patients. However, individualisation of glycaemic targets is recommended based on patient-specific factors, such as the type of diabetes and its duration, pregnancy, diabetes medication being taken, presence of cardiovascular disease, risk of and problems from hypoglycaemia, and comorbidities.

Targets for Type 2 patients with specific clinical situations are listed below:

- Diabetes of short duration with no clinical cardiovascular disease  
 Requiring lifestyle modification +/- metformin  $\leq 6.0\%$
- Requiring anti-diabetic drugs other than metformin/insulin  $\leq 6.5\%$
- Requiring insulin  $\leq 7.0\%$
- Pregnancy or planning pregnancy  $\leq 6.0\%$
- Diabetes of longer duration or clinical cardiovascular disease  $\leq 7.0\%$
- Recurrence or lack of awareness of hypoglycaemia  $\leq 8.0\%$
- Major comorbidity likely to limit life expectancy Symptomatic management of hyperglycaemia

Targets for Type 1 patients with specific clinical situations are listed below:

- Pregnancy or planning pregnancy  $\leq 7.0\%$
- Recurrence or lack of awareness of hypoglycaemia  $\leq 8.0\%$
- Major comorbidity likely to limit life expectancy Symptomatic management of hyperglycaemia and avoidance of ketosis

Requested Tests : TFT\*, GLU, MBA\*, LIP, INS, FBE, A1C

~~~~~  
 Start Patient : KIM, SARAH  
 26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
 Birthdate: 07/08/1992 Age: Y28 Sex: F  
 Telephone: 89014888  
 Your Reference : 763754499  
 Lab Reference : 20-25085452  
 Medicare Number: 2851319181  
 Phone Enquiries:  
 Referred By... : DR. KALYANI MUTHURAJAH  
 Addressee : DR. KALYANI MUTHURAJAH 2777395K

Lab. Reference: 20-25085452-MBA-0  
 Requested: 28/11/2020 00:00:00  
 Performed: 29/11/2020 00:00:00  
 Test name: SERUM CHEMISTRY (MBA-0)  
 Provider name: Lavery Pathology

Clinical Notes : Post hypothyroidism

#### SERUM CHEMISTRY

|                      |           |          |           |
|----------------------|-----------|----------|-----------|
| Request Number       | 12288383  | 23164169 | 25085452  |
| Date Collected       | 16 Apr 18 | 8 May 20 | 29 Nov 20 |
| Time Collected       | 00:00     | 10:23    | 08:45     |
| Specimen Type: Serum |           |          |           |

|            |     |     |     |
|------------|-----|-----|-----|
| Haemolysis | Nil | Nil | Nil |
| Icterus    | Nil | Nil | Nil |
| Lipaemia   | Nil | Nil | Nil |

|          |                           |        |      |    |             |
|----------|---------------------------|--------|------|----|-------------|
| Na       | (135-145)                 | mmol/L | 140  |    | <b>133</b>  |
| K        | (3.6-5.4)                 | mmol/L | 4.0  |    | 4.1         |
| Cl       | (95-110)                  | mmol/L | 106  |    | 100         |
| HCO3     | (22-32)                   | mmol/L | 26   |    | <b>21</b>   |
| An Gap   | (10-20)                   | mmol/L | 12   |    | 16          |
| Urea     | (2.5-6.7)                 | mmol/L | 4.9  |    | 5.2         |
| Creat    | (45-90)                   | umol/L | 50   |    | 50          |
| eGFR     | mL/min/1.73m <sup>2</sup> |        | > 90 |    | > 90        |
| Urate    | (0.14-0.36)               | mmol/L |      |    | <b>0.44</b> |
| Bili     | (< 15)                    | umol/L | 6    |    | 6           |
| AST      | (< 30)                    | U/L    | 16   |    | 19          |
| ALT      | (< 30)                    | U/L    | 12   |    | 19          |
| GGT      | (< 30)                    | U/L    | 12   |    | 17          |
| Alk Phos | (20-105)                  | U/L    | 47   |    | 55          |
| Protein  | (60-82)                   | g/L    | 70   |    | 76          |
| Albumin  | (38-50)                   | g/L    | 44   | 44 | 47          |
| Glob     | (20-39)                   | g/L    | 26   |    | 29          |
| Ca       | (2.10-2.60)               | mmol/L |      |    | 2.37        |
| Corr Ca  | (2.10-2.60)               | mmol/L |      |    | 2.29        |
| PO4      | (0.75-1.50)               | mmol/L |      |    | 1.25        |

eGFR >=90 mL/min/1.73m<sup>2</sup> usually indicates normal kidney function but does not exclude patients with early kidney damage (those with albuminuria, haematuria or abnormal kidney imaging).

Requested Tests : TFT\*, GLU, MBA, LIP, INS, FBE, A1C

Start Patient : KIM, SARAH  
 26/36-50 TAYLOR ST, ANNANDALE, NSW 2038  
 Birthdate: 07/08/1992 Age: Y28 Sex: F  
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 Medicare Number: 2851319181  
 Phone Enquiries:  
 Referred By... : DR. KALYANI MUTHURAJAH  
 Addressee : DR. KALYANI MUTHURAJAH 2777395K  
 Lab. Reference: 20-25085452-TFT-0  
 Requested: 28/11/2020 00:00:00  
 Performed: 29/11/2020 00:00:00  
 Test name: THYROID FUNCTION TEST (TFT-0)  
 Provider name: Lavery Pathology

Clinical Notes : Post hypothyroidism

#### THYROID PROFILE

|                      |           |          |           |           |
|----------------------|-----------|----------|-----------|-----------|
| Request Number       | 12288383  | 23164169 | 24239953  | 25085452  |
| Date Collected       | 16 Apr 18 | 8 May 20 | 30 Aug 20 | 29 Nov 20 |
| Time Collected       | 00:00     | 10:23    | 12:03     | 08:45     |
| Specimen Type: Serum |           |          |           |           |
| TSH                  | (0.5-4.0) | mIU/L    | 0.2       | 3.0       |
| FT4                  | (10-20)   | pmol/L   | 25        | 21        |
| FT3                  | (3.5-6.0) | pmol/L   | 5.6       | 24        |
|                      |           |          |           | 2.1       |
|                      |           |          |           | 21        |

Thyroid hormone replacement therapy appears adequate.



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

Requested Tests : TFT, GLU, MBA, LIP, INS, FBE, A1C

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**Dr Kalyani Muthurajah**  
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2777395K

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