NEWMAN, LAUREN 2018
3/10 EVANS AVE, EASTLAKES. **Sex:** F **Medicare Number:** 2666557506
**Birthdate:** 18/08/1980 **Lab Reference:** 19-17835297-LIP-0^
**Your Reference:** 00016334
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** LIPID STUDIES (LIP-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 31/03/2019
13:50

## 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 | Fasting | | |
| Total Cholesterol | **3.5** | mmol/L | (3.6-5.2) |
| Triglycerides | **0.3** | mmol/L | (0.5-1.7) |
| HDL Cholesterol | 1.2 | mmol/L | (1.0-2.0) |
| LDL Cholesterol | 2.2 | mmol/L | (1.5-3.4) |
| Non-HDL Cholesterol | 2.3 | mmol/L | (< 3.4) |
| Cholesterol/HDL-C Ratio | 2.9 | | (< 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 |

LDL-C exceeds target for higher risk patients and may be excessive in some individuals.

Requested Tests : VBF*, TFT*, TAA*, SOM*, GLU, CDG*, MBA, LIP, IMM, FE*, FBE, DVI*, COE*, APL*, A1C

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. 2018
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016334 **Lab Reference:** 19-17835297-MBA-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** SERUM CHEMISTRY (MBA-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 31/03/2019 13:50

## SERUM CHEMISTRY

| | | | |
|---|---|---|---|
| Specimen Type: Serum | | | |
| Haemolysis | Nil | | |
| Icterus | Nil | | |
| Lipaemia | Nil | | |
| Sodium | 141 | mmol/L | (135-145) |
| Potassium | 4.2 | mmol/L | (3.6-5.4) |
| Chloride | 108 | mmol/L | (95-110) |
| Bicarbonate | 25 | mmol/L | (22-32) |
| Anion Gap | 12 | mmol/L | (10-20) |
| Urea | 5.5 | mmol/L | (2.5-8.0) |
| Creatinine | 50 | umol/L | (45-90) |
| eGFR | > 90 | | mL/min/1.73m^2 |
| Bilirubin | 7 | umol/L | (< 15) |
| AST | 21 | U/L | (< 30) |
| ALT | 20 | U/L | (< 30) |
| GGT | 9 | U/L | (< 30) |
| Alkaline Phosphatase | 58 | U/L | (20-105) |
| Protein | 67 | g/L | (60-82) |
| Albumin | 44 | g/L | (38-50) |
| Globulin | 23 | g/L | (20-39) |

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).

Requested Tests : VBF*, TFT*, TAA*, SOM*, GLU, CDG*, MBA, LIP, IMM, FE*, FBE, OVI*, COE*, APL*, A1C

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. 2018
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016334 **Lab Reference:** 19-17835297-TFT-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** THYROID FUNCTION TEST (TFT-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 31/03/2019 14:03

THYROID PROFILE

| | | | | |
|---|---|---|---|---|
| Request Number | | | 22956764 | 17835297 |
| Date Collected | | | 21 Jun 16 | 30 Mar 19 |
| Time Collected | | | 16:05 | 08:30 |
| Specimen Type: Serum | | | | |
| TSH | (0.5-4.0) | mIU/L | 0.96 | 1.1 |
| FT4 | (10-20) | pmol/L | 17 | |
| FT3 | (3.5-6) | pmol/L | **3.4** | |

Result(s) consistent with euthyroidism.

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

Please note that without a specific indication, Medicare does not fund FT4 and FT3 testing in patients with normal TSH results. If these tests are clinically indicated please contact the laboratory.

Requested Tests : VBF*, TFT, TAA*, SOM*, GLU, CDG*, MBA, LIP, IMM, FE*, FBE, DVI*, COE*, APL*, A1C

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. 2018
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016335 **Lab Reference:** 19-17835298-HOR-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** HORMONE PROFILE (HOR-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 31/03/2019 14:10

## SERUM HORMONE PROFILE

Specimen Type: Serum

| Request Number | Date Collected | FSH IU/L | LH IU/L | OEST2 pmol/L | PROG nmol/L |
|---|---|---|---|---|---|
| 17835298 | 30 Mar 19 | 9 | 4.0 | 85 | |
| 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 : PRL, HOR, AND*

2018

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. **Sex:** F **Medicare Number:** 2666557506
**Birthdate:** 18/08/1980 **Lab Reference:** 19-17835297-VBF-0^
**Your Reference:** 00016334
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** B12, FOLATE, R.C.FOLATE (VBF-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 31/03/2019
14:14

## VITAMIN B12 AND FOLATE STUDIES

| | | | |
|---|---|---|---|
| Vitamin B12 | 415 | pmol/L | (301-740) |
| Serum Folate | > 54.0 | nmol/L | (> 9.0) |

Folate Interpretation:

| | DEFICIENCY | BORDERLINE | SUFFICIENCY |
|---|---|---|---|
| Serum Folate: | <4.5 nmol/L | 4.5 - 9.0 nmol/L | >9.0 nmol/L |
| RBC Folate: | <340 nmol/L | 340 - 570 nmol/L | >570 nmol/L |

Serum Folate Assay:
In the absence of recent oral intake, a serum folate >9.0 nmol/L effectively rules out folate deficiency.

Please note that Medicare requirements for folate testing reflect current best practice. Red cell folate will be reserved for patients with borderline values for serum folate (between 4.5 and 9.0 nmol/L.)

Requested Tests : VBF, TFT, TAA*, SOM*, GLU, CDG*, MBA, LIP, IMM, FE, FBE, DVI*, COE*, APL*, A1C

NEWMAN, LAUREN EASTLAKES. 2018
3/10 EVANS AVE, **Sex:** F **Medicare Number:** 2666557506
**Birthdate:** 18/08/1980 **Lab Reference:** 19-17835297-TAA-0^
**Your Reference:** 00016334
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** THYROID AUTOANTIBODIES (TAA-0)
**Requested:** 28/03/2019 16:38 **Collected:** 30/03/2019 **Reported:** 01/04/2019

## THYROID AUTOANTIBODIES

Specimen Type: Serum

| | | | |
|---|---|---|---|
| Anti-Thyroglobulin Abs (Immulite) | < 20 | IU/mL | (< 41) |
| Anti-Thyroidal Peroxidase Abs | < 28 | 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.

Requested Tests : VBF, TFT, TAA, SOM*, GLU, CDG*, MBA, LIP, IMM, FE, FBE, DVI COE*, APL*, A1C

NEWMAN, LAUREN 2018
3/10 EVANS AVE, EASTLAKES.
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016334 **Lab Reference:** 19-17835297-COE-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** COELIAC MASTER PANEL (COE-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 01/04/2019 17:14

## COELIAC DISEASE SEROLOGY

| | | | |
|---|---|---|---|
| Deamidated gliadin peptide IgA | 1 | U/mL | (< 15) |
| Deamidated gliadin peptide IgG | < 1 | U/mL | (< 15) |
| Total IgA | 2.41 | g/L | (0.40-3.50) |
| Transglutaminase IgA | < 1 | U/mL | (< 15) |

No serological evidence of coeliac disease or dermatitis herpetiformis. False negative results may occur in affected individuals compliant with a gluten-free diet. Affected children aged under 5 years may also be negative for IgA- tissue transglutaminase antibodies.

All testing performed on serum or plasma unless otherwise specified.

Requested Tests : VBF, TFT, TAA, SOM^, GLU, CDG*, MBA, LIP, IMM, FE, FBE, DVI*, COE, APL*, A1C

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. 2018
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016334 **Lab Reference:** 19-17835297-APL-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** ANTI-PHOSPHOLIPID ABS (APL-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 01/04/2019 17:23

## ANTI PHOSPHOLIPID ANTIBODIES

| | | | |
|---|---|---|---|
| Cardiolipin IgG | Negative | < 20 | GPL (< 20) |
| Cardiolipin IgM | Negative | < 20 | MPL (< 20) |

Anti-cardiolipin antibodies were not detected. A proportion of patients with the anti-phospholipid syndrome are negative for anti-cardiolipin antibodies. Further testing for lupus anticoagulant and beta2-glycoprotein 1 antibodies is recommended.

All testing performed on serum or plasma unless otherwise specified.

Requested Tests : VBF, TFT, TAA, SOM*, GLU, CDG*, MBA, LIP, IMM, FE, FBE, DVI*, COE, APL, A1C

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. 2018
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016334 **Lab Reference:** 19-17835297-SOM-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** SOMATOMEDIN (SOM-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 01/04/2019 19:17

## INSULIN-LIKE GROWTH FACTOR-1 (IGF-1)

Specimen Type: Serum

| | | | |
|---|---|---|---|
| IGF-1 (Somatomedin C) | 37 | nmol/L | (11-37) |

Insulin-like growth factor 1 (IGF1) and insulin-like growth factor-binding protein 3 (IGFBP3) measurements can be used to assess growth hormone (GH) excess or deficiency. For all applications, IGF1 measurement has generally been shown to have superior diagnostic accuracy. In particular, for the diagnosis and follow-up of acromegaly and gigantism, IGFBP3 measurement adds little extra diagnostic information.

Requested Tests : VBF, TFT, TAA, SOM, GLU, CDG*, MBA, LIP, IMM, FE, FBE, DVI, COE, APL, A1C

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. 2018
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016334 **Lab Reference:** 19-17835297-DVI-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** VITAMIN D (DVI-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 01/04/2019
19:17

## VITAMIN D

| | | |
|---|---|---|
| Serum 25(OH) Vitamin D | 88 | 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.

Requested Tests : VBF, TFT, TAA, SOM, GLU, CDG*, MBA, LIP, IMM, FE, FBE, DVI, COE, APL, A1C

NEWMAN, LAUREN 2018
3/10 EVANS AVE, EASTLAKES. **Sex:** F **Medicare Number:** 2666557506
**Birthdate:** 18/08/1980 **Lab Reference:** 19-17835298-AND-0^
**Your Reference:** 00016335
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** ANDROGENS (AND-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 01/04/2019

SERUM ANDROGENS

| | | | |
|---|---|---|---|
| Sex Hormone Binding Globulin | 92 | nmol/L | (20-118) |
| DHEAS | 6.2 | umol/L | (1.9-7.3) |
| Androstenedione | **9.5** | nmol/L | (2.6-8.5) |

Requested Tests : PRL, HOR, AND

NEWMAN, LAUREN 2018
3/10 EVANS AVE, EASTLAKES. **Sex:** F **Medicare Number:** 2666557506
**Birthdate:** 18/08/1980 **Lab Reference:** 19-17835297-FBE-0^
**Your Reference:** 00016334
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** HAEMATOLOGY (FBE-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 30/03/2019 20:31

## HAEMATOLOGY

Date Collected 30 Mar 19
Time Collected 08:30
Specimen Type: EDTA

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Hb | 142 | g/L | (115-165) | WBC | 3.2 | x10^9 /L | (4.0-11.0) |
| RCC | 4.1 | x10^12 /L | (3.9-5.8) | Neut | 1.7 | x10^9 /L | (2.0-7.5) |
| Hct | 0.40 | | (0.34-0.47) | Lymp | 1.3 | x10^9 /L | (1.0-4.0) |
| MCV | 98 | fL | (79-99) | Mono | 0.2 | x10^9 /L | (0.2-1.0) |
| MCH | 34 | pg | (27-34) | Eos | 0.0 | x10^9 /L | (< 0.7) |
| MCHC | 351 | g/L | (320-360) | Baso | 0.0 | x10^9 /L | (< 0.2) |
| RDW | 11.8 | % | (10.0-17.0) | | | | |
| Plat | 199 | x10^9 /L | (150-400) | | | | |

HAEMATOLOGY: Slight neutropenia.

Requested Tests : VBF*, TFT*, TAA*, SOM*, GLU*, CDG*, MBA*, LIP*, IMM*, FE*, FBE, PL*, A1C

NEWMAN, LAUREN 2018
3/10 EVANS AVE, EASTLAKES.
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016334 **Lab Reference:** 19-17835297-FE-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** IRON STUDIES (FE-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 31/03/2019

## IRON STUDIES

Specimen Type: Serum

| | | | |
|---|---|---|---|
| Serum Iron | 8 | umol/L | (10-30) |
| Transferrin | 29 | umol/L | (32-48) |
| Transferrin Saturation | 14 | % | (13-45) |
| Serum Ferritin | 32 | ug/L | (30-165) |

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

Requested Tests : VBF, TFT, TAA*, SOM*, GLU, CDG*, MBA, LIP, IMM, FE, FBE,

NEWMAN, LAUREN 2018
3/10 EVANS AVE, EASTLAKES. **Sex:** F **Medicare Number:** 2666557506
**Birthdate:** 18/08/1980 **Lab Reference:** 19-17835297-IMM-0^
**Your Reference:** 00016334
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** IMMUNOGLOBULINS (IMM-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 31/03/2019 13:50

## SERUM IMMUNOGLOBULINS

| | | | |
|---|---|---|---|
| IgG | 6.83 | g/L | (6.50-16.00) |
| IgA | 2.41 | g/L | (0.40-3.50) |
| IgM | 1.04 | g/L | (0.53-3.00) |

Requested Tests : VBF*, TFT*, TAA*, SOM*, GLU, CDG*, MBA, LIP, IMM, FE*, FBE, DVI*, COE*, APL*, A1C

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. 2018
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016334 **Lab Reference:** 19-17835297-GLU-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** GLUCOSE (GLU-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 31/03/2019 13:50

SERUM/PLASMA GLUCOSE

| | | | |
|---|---|---|---|
| Fasting status | Fasting | | |
| Serum | 4.9 | mmol/L | (3.4-5.4) |

Normal glucose concentration.

Requested Tests : VBF*, TFT*, TAA*, SOM*, GLU, CDG*, MBA, LIP, IMM, FE*, FBE, DVI*, COE*, APL*, A1C

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. 2018
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:**
**Your Reference:** 00016335 **Lab Reference:** 19-178
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HI

**Name of Test:** SERUM PROLACTIN (PRL-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Rep**
13:02

## PROLACTIN

Specimen Type: Serum

| Request Number | Date Collected | Prolactin mIU/L |
|---|---|---|
| | Ref Range | (40-570) |
| 17835298 | 30/03/19 | 149 |

Requested Tests : PRL, HOR*, AND*

NEWMAN, LAUREN
3/10 EVANS AVE, EASTLAKES. 2018
**Birthdate:** 18/08/1980 **Sex:** F **Medicare Number:** 2666557506
**Your Reference:** 00016334 **Lab Reference:** 19-17835297-A1C-0^
**Laboratory:** Laverty Pathology
**Addressee:** DR DAVINA HILEY **Referred by:** DR DAVINA HILEY

**Name of Test:** GLYCATED HAEMOGLOBIN (A1C-0)
**Requested:** 28/03/2019 **Collected:** 30/03/2019 **Reported:** 30/03/2019 20:22

## GLYCATED HAEMOGLOBIN (HBA1c)

Specimen Type: EDTA

| | | | |
|---|---|---|---|
| HbA1c- NGSP | 5.0 | % | (4.0-6.0) |
| HbA1c- IFCC | 31 | mmol/mol | (20-42) |

The WHO recommends that an HbA1c cut-off of >=6.5% (48 mmol/mol) is used to diagnose type 2 diabetes.

While it is recognised that HbA1c levels approaching this cut-off place patients at increasingly higher risk of developing diabetes (<6.5%), there is no consensus as to exactly which cut-off at the lower end of the continuum to use for categorising patients as high risk. Various groups quote lower limits for at-risk patients that vary between 5.5% and 6.0% (37 and 42 mmol/mol).

Please note that HbA1c should not be used for diagnosing diabetes mellitus in the following circumstances:
- Children and young people
- Pregnancy - current or within the past 2 months
- Suspected Type 1 diabetes mellitus
- Symptoms of diabetes for <2 months
- Patients who are acutely ill
- Patients taking drugs that can cause rapid onset hyperglycaemia such as corticosteroids, antipsychotic drugs
- Acute pancreatic damage or pancreatic surgery
- Kidney failure
- Patients being treated for HIV infection

Please be cautious when requesting or interpreting HbA1c when patients:
- May have an abnormal haemoglobin
- May be anaemic
- May have an altered red cell lifespan (e.g. post-splenectomy)
- May have had a recent blood transfusion

Requested Tests : VBF*, TFT*, TAA*, SOM*, GLU*, CDG*, MBA*, LIP*, IMM*, FE