

## Aimee Coe

### Issues

Grief, Stress  
Frequent need to Urinate  
Possible Endometriosis  
Migraines & headaches  
Possible Idiopathic intracranial pressure  
Liver Function – higher albumin and globulin  
White Cell Count decreased from previous blood test  
Vagus Function  
Ferritin Functionally low though within range, borderline low active B12,

### Gynaecological/Structural Findings

Endometrial thickness of 8.7mm:

Slightly elevated for the early to mid-follicular phase, but may be normal in the late proliferative or secretory phase. If cycle is not regular, thickness might indicate unopposed estrogen stimulation (when estrogen levels are not properly balanced by progesterone).

Estrogen stimulates tissue growth:

- Thickens the endometrial lining
- Promotes cell proliferation
- Increases fluid retention and inflammation

Progesterone on the other hand:

- Regulates and stabilises the endometrium
- Inhibits excessive growth
- Promotes normal shedding of the lining during menstruation

### Migraines

Estrogen sensitises the Brain

Increases neuronal excitability, particularly in the brain areas involved in pain perception (like the trigeminal nerve pathways – Ophthalmic nerve V1 enters the orbit through the superior orbital fissure. Consider:

- sphenoid bone (greater wings of sphenoid (just lateral to the eyes around the temples)
- frontal bone

- temporal bones
- ethmoid bone
- Occipital bones - decompression plus cervical spine C1-C3 and TMJ

## Blood Markers

Total B12 borderline low  
Active B12 Functionally low

This level may impair methylation, nervous system regulation, and contribute to both migraines and hormonal dysregulation

Iron studies:  
Iron functionally low  
TIBC functionally low  
Ferritin functionally low

White Cell Count  
On the lower end  
Neutrophils and lymphocytes are within typical ratios, but the low WCC may suggest chronic immune stress or depletion, possibly due to inflammation, stress, or nutritional insufficiencies.

Globulin (high-normal) could indicate liver is producing more transport proteins to manage hormone overload or detoxification load. Common in endometriosis, gut dysbiosis, latent infections, or autoimmunity.

Albumin (high) keeps fluid inside your blood vessels, binds and carries fatty acids, hormones (cortisol, thyroid hormones), drugs and toxins and helps buffer the delivery of these substances through the bloodstream, including binding free estrogen. Also acts as an antioxidant and reflects liver and nutritional status – high-normal levels can suggest dehydration or protein concentration due to inflammation or stress.

## Balances

Cranial Bones  
Trigeminal Nerve  
Liver  
Vagus Nerve  
Bladder

## Considerations:

DUTCH or salivary hormone testing  
Keyhole surgery for Endo

## Potential Diagnosis

### Unopposed Estrogen

#### Clinical signs

Cycles that are irregular, very heavy or very painful  
History of migraines linked to the menstrual cycle  
Mid-cycle spotting  
Breast tenderness and swelling  
Mood swings, especially irritability and anxiety pre-menstrually  
Pelvic pain unrelated to clear structural abnormalities

#### Support

Stress management, ovulation support, nutritional therapy – vitamin B6, magnesium, zinc)  
Liver support – cruciferous vegetables, fibre)

Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
Your Reference: 91.47386072 Lab Reference: 91.47386072\_1  
Laboratory: Lumus Imaging North Lakes  
Addressee: Dr LOUISA WILKINSON Referred by: Dr LOUISA WILKINSON  
Copy to:

Dr LOUISA WILKINSON

Name of Test: US Pelvis  
Requested: 16/10/2024 Collected: 16/10/2024 Reported: 16/10/2024  
21:20



Patient Name: ~~DOB~~, AIMEE  
DOB: 30/03/1990  
Gender: F  
Date Collected: 16/10/2024  
Date Reported: 16/10/2024

Address: ~~17 GOBI GRIFFIN AVE~~  
Phone:  
Medicare Number: 44322706211  
Referred By: Dr Louisa  
Wilkinson

[Click here to view images](#)

#### ULTRASOUND PELVIS

Clinical indication:  
Painful irregular periods.

#### Findings:

Transabdominal and transvaginal scans were performed.  
Anteverted uterus is 60cc.  
No uterine lesion.  
Endometrial thickness measures 8.7mm. No endometrial cavity fluid or filling defect.  
Cervix - normal.  
Normal ovaries. Both ovaries are mobile and non tender to transducer palpation.  
Right ovary is 4.9cc.  
Left ovary is 19.9cc. Left corpus luteal cyst measures 1.6 x 2.6 x 1.7 cm  
Moderate free fluid in the pouch of Douglas.  
No adnexal mass.

#### Conclusion:

No uterine, cervical, ovarian or adnexal mass.

Electronically Signed by: DR Winston Erng  
Sonographer: N. Richardson

WCC -

Protein Concentration - Albumin

Hormonal - Chronic low grade inflammation  
- Endo (free fluid)  
- consider liver support.

Ferritin - functionally low

Active B12 - borderline low

Haemoglobin - stable but early signs of nutrient depletion  
Globulin - chronic stress / immune

COE, AIMEE  
27 GOAL CRES, GRIFFIN. 4503  
Phone: 04 20361776  
Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
Your Reference: Lab Reference: 24-77362025-CBC-0  
Laboratory: QML Pathology  
Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: MASTER FULL BLOOD COUNT  
Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
13:43

CUMULATIVE FULL BLOOD EXAMINATION

Date 30/03/23 14/10/24  
Time 12:25 06:40  
Lab No 72826795 77362025

Hb	135		133	g/L	(115-160)
RCC	4.4		4.3	x10 <sup>12</sup> /L	(3.6-5.2)
Hct	0.40		0.40		(0.33-0.46)
MCV	92		93	fL	(80-98)
MCH	31		31	pg	(27-35)
Plats	331		261	x10 <sup>9</sup> /L	(150-450)
WCC	9.0		4.2	x10 <sup>9</sup> /L	(4.0-11.0) ●
Neuts	5.9	58 %	2.4	x10 <sup>9</sup> /L	(2.0-7.5)
Lymphs	2.3	33 %	1.4	x10 <sup>9</sup> /L	(1.1-4.0)
Monos	0.6	7 %	0.3	x10 <sup>9</sup> /L	(0.2-1.0)
Eos	0.09	1 %	0.04	x10 <sup>9</sup> /L	(0.04-0.40)
Basos	0.00	1 %	0.04	x10 <sup>9</sup> /L	(< 0.21)

77362025 Automated Comment:

As per ISLH guidelines - Film not reviewed. If a film review is truly indicated, contact the laboratory within 24 hours of collection. Otherwise investigate any highlighted abnormalities as clinically appropriate.

All haematology parameters are within normal limits for age and sex.

\*\* FINAL REPORT - Please destroy previous report \*\*

COE, AIMEE  
27 GOAL CRES, GRIFFIN. 4503  
Phone: 04 20361776  
Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
Your Reference: Lab Reference: 24-77362025-THY-0  
Laboratory: QML Pathology  
Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: THYROID TEST MASTER  
Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
15:44

CUMULATIVE SERUM THYROID FUNCTION TESTS

Date 30/03/23 14/10/24  
Time 12:25 06:40  
Lab No 72826795 77362025

TSH 0.80 0.76 mIU/L (0.50-4.00)



Euthyroid level. However if hypopituitarism (rare) is suspected, free T4 assay may be indicated.

COE, AIMEE  
27 GOAL CRES, GRIFFIN. 4503  
Phone: 04 20361776  
Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
Your Reference: Lab Reference: 24-77362025-CRP-0  
Laboratory: QML Pathology  
Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: C REACTIVE PROTEIN  
Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
15:54

CUMULATIVE SERUM COMPLEMENT AND C-REACTIVE PROTEIN (CRP)  
Date 14/10/24  
Time 06:40  
Lab No 77362025

CRP < 5 mg/L(0-6)

C-reactive protein (CRP) is a non-specific indicator of tissue damage.  
The level rises rapidly (within 6-10 hours) after tissue injury, peaks at 48-72 hours and returns to normal within a few days. Common causes of markedly increased CRP include infection (particularly bacterial), trauma, surgery, myocardial infarction, many malignancies and inflammatory disorders.

COE, AIMEE  
27 GOAL CRES, GRIFFIN. 4503  
Phone: 04 20361776  
Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
Your Reference: Lab Reference: 24-77362025-25T-0  
Laboratory: QML Pathology  
Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: E/LFT (MASTER)  
Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
15:54

CUMULATIVE SERUM BIOCHEMISTRY

	30/03/23	14/10/24	
Date	12:25	06:40	
Time			
Lab No	72826795	77362025	
	RANDOM	FASTING	FASTING
Sodium	140	140	mmol/L (137-147)
Potass.	4.1	4.1	mmol/L (3.5-5.0)
Chloride	101	105	mmol/L (96-109)
Bicarb	26	27	mmol/L (25-33)
An.Gap	17	12	mmol/L (4-17)
Gluc	4.5	5.4	mmol/L (3.0-6.0)
Urea	4.7	6.1	mmol/L (2.0-7.0)
Creat	69	70	umol/L (40-110)
eGFR	> 90	> 90	mL/min (over 59)

PRL	106	mIU/L (< 400)
LH	5	IU/L
FSH	5	IU/L
E2	320	pmol/L
Prog	33	nmol/L
Testo.	1.1	nmol/L (0.4-2.1)
fTesto.c	10	pmol/L (4-22)
SHBG	83	nmol/L (18-114)

Ranges:	Follicular Phase	Midcycle Peak	Luteal Phase	Post-Menopausal
LH	2 - 12	10 - 130	1 - 17	15 - 60
FSH	1 - 10	3 - 33	1 - 9	20 - 140
Oestradiol	70 - 530	230 - 1310	200 - 790	< 120
Progesterone	< 5	rising	20 - 110	< 3

COE, AIMEE  
 27 GOAL CRES, GRIFFIN. 4503  
 Phone: 04 20361776  
 Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
 Your Reference: Lab Reference: 24-77362025-BFM-0  
 Laboratory: QML Pathology  
 Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: MASTER VITAMIN B12 FOLATE  
 Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
 17:30

#### CUMULATIVE VITAMIN B12 AND FOLATE ASSAYS

Date 14/10/24  
 Time 06:40  
 Lab No 77362025

B12 Total	260	pmol/L	(162-811)
Active B12	55	pmol/L	(> 35)
S.Fol.	22.4	nmol/L	(8.4-55.0)

Comment:  
 77362025

Serum Folate Assay:  
 Adequate Serum Folate.  
 In the absence of recent oral intake, a serum folate >13 nmol/L effectively rules out folate deficiency. Consider repeat fasting Folate, if there has been inadequate fasting, and clinical concern remains.

Serum Vitamin B12 Assay:  
 The vitamin B12 level is in the indeterminate range.  
 B12 depletion may exist with levels up to 350 pmol/L  
 Correlation with Folate levels as well as Holo TC (Active B12 ) assay is recommended.

Holo TC Assay:  
 The Active B12 is in an indeterminate zone, particularly for patients with renal impairment, who may be B12 deplete despite an Active B12 within the reference interval.  
 Correlation with total B12 and homocysteine levels is required.

Urate	0.24	0.28	mmol/L (0.14-0.35)
T.Bili	6	4	umol/L (2-20)
Alk.P	60	52	U/L (30-115)
GGT	22	22	U/L (0-45)
ALT	18	18	U/L (0-45)
AST	22	20	U/L (0-41)
LD	173	148	U/L (80-250)
Calcium	2.54	2.41	mmol/L (2.15-2.60)
Corr.Ca	2.36	2.37	mmol/L (2.15-2.60)
Phos	1.4	1.2	mmol/L (0.8-1.5)
T.Prot	74	66	g/L (60-82)
Alb	49	44	g/L (35-50)
Glob	25	22	g/L (20-40)
Chol	4.5	4.0	mmol/L (3.6-6.7)
Trig	1.2	0.6	mmol/L (0.3-2.2)
Lab No	72826795	77362025	
Date	30/03/23	14/10/24	

COE, AIMEE  
 27 GOAL CRES, GRIFFIN. 4503  
 Phone: 04 20361776  
 Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
 Your Reference: Lab Reference: 24-77362025-DHE-0  
 Laboratory: QML Pathology  
 Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: DHE-S  
 Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
 17:02

#### CUMULATIVE DEHYDROEPIANDROSTERONE-SULPHATE

Date 14/10/24  
 Time 06:40  
 Lab No 77362025

DHEAS 5.1 umol/L (1.4-11.7)  
 DHEAS 1900 ng/mL (500-4300)

COE, AIMEE  
 27 GOAL CRES, GRIFFIN. 4503  
 Phone: 04 20361776  
 Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
 Your Reference: Lab Reference: 24-77362025-FHM-0  
 Laboratory: QML Pathology  
 Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: FERTILITY HORMONE MASTER  
 Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
 17:24

#### CUMULATIVE FERTILITY HORMONES

Date 14/10/24  
 Time 06:40  
 Lab No 77362025



If Pernicious Anaemia (PA) remains a possibility, consider screening with intrinsic factor antibody (IF-Ab) and gastric parietal cell antibody (GPC-Ab) if these have not been performed in the recent past.

**Methodology:**

B12 and Active B12 (HoloTC) assays performed on Siemens Atellica analyser.

For Doctor clinical enquiries, please contact Dr Peter Davidson 07 3121 4444.

Patients should contact their referring doctor in regard to this result.

Tests Completed: ACTIVE VITAMIN B12, TFT, IRON STUDIES, TOTAL TESTOSTERONE, SHBG  
Tests Completed: PROGESTERONE, PRL, E2, LH, FREE TESTOSTERONE, FSH, FBC, SERUM FOLATE

Tests Completed: SERUM VITAMIN B12, SE E/LFT, SE VIT D, SE C-REACTIVE PROTEIN, DHEAS

Tests Pending : BL HBA1C

COE, AIMEE

27 GOAL CRES, GRIFFIN. 4503

Phone: 04 20361776

Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211

Your Reference: Lab Reference: 24-77362025-A1C-0

Laboratory: QML Pathology

Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: HAEMOGLOBIN A1C, BLOOD

Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
17:35

**CUMULATIVE GLYCATED HAEMOGLOBIN**

Date 14/10/24  
Time 06:40  
Lab No 77362025

HbA1c Fraction 5.3 %  
in SI units 34 mmol/mol

Note: Caution is needed in interpreting HbA1c results in the presence of conditions affecting red blood cell survival times, which may lead to either falsely high or falsely low HbA1c results.

**HbA1c diagnostic levels - RCPA 2014**

< 6.1% (<43 mmol/mol) - current diabetes is excluded

6.1-6.4% (43-47 mmol/mol) - high risk for future diabetes

> 6.4% (>48 mmol/mol) - diabetes is likely

Unless patient has supportive symptoms or elevated plasma glucose values, repeat test is recommended.

Currently, Medicare will fund only one diagnostic test per year.

Sample may be collected at any time - fasting is not required.

Note - diabetes tolerance may be impaired by chronic illness, use of certain drugs including steroids, Cushing syndrome, etc. We would advise considering secondary forms in newly-diagnosed patients.

For clinical enquiries, please contact Dr Appleton, Chang or Marshall

COE, AIMEE  
27 GOAL CRES, GRIFFIN. 4503  
Phone: 04 20361776  
Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
Your Reference: Lab Reference: 24-77362025-VD-0  
Laboratory: QML Pathology  
Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: VITAMIN D, SERUM  
Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
15:48

CUMULATIVE SERUM VITAMIN D

Date	30/03/23	14/10/24
Time	12:25	06:40
Lab No	72826795	77362025
Vitamin D3	93	64 nmol/L (> 49)

77362025

\*\* Progress report.

We occasionally see evidence of functional vitamin deficiency and possibly accelerated bone loss with levels in the range of 50-70 nmol/L.

COE, AIMEE  
27 GOAL CRES, GRIFFIN. 4503  
Phone: 04 20361776  
Birthdate: 30/03/1990 Sex: F Medicare Number: 44322706211  
Your Reference: Lab Reference: 24-77362025-ISM-0  
Laboratory: QML Pathology  
Addressee: DR LOUISA WILKINSON Referred by: DR LOUISA WILKINSON

Name of Test: MASTER IRON STUDIES  
Requested: 08/10/2024 Collected: 14/10/2024 Reported: 14/10/2024  
15:54

CUMULATIVE IRON STUDIES

Date	14/10/24
Time	06:40
Lab No	77362025
Iron	12 umol/L (10-33)
TIBC	50 umol/L (45-70)
Saturation	24 % (16-50)
Ferritin	44 ug/L (25-290)

Tests Completed:TFT, IRON STUDIES, FBC, SE E/LFT, SE VIT D, SE C-REACTIVE PROTEIN  
Tests Pending :ACTIVE VITAMIN B12, TOTAL TESTOSTERONE, SHBG, PROGESTERONE, PRL, E2  
Tests Pending :LH, FREE TESTOSTERONE, FSH, SERUM FOLATE, SERUM VITAMIN B12, BL HBA1C  
Tests Pending :DHEAS

COE, AIMEE  
27 Goal, GRIFFIN. 4503