Amino Acids Interpretation (AAI) Scheme

Scheme Organisers
Administration Office
c c/o EMQN CIC Office,
Third Floor, ICE Building
3 Exchange Quay, Salford,
M5 3ED, United Kingdom
Tel: +44 161 757 4952
Fax: +44 161 850 1145
Email: admin@erndim.org

Scientific Advisor
Dr Sabine Scholl-Bürgi
Tirol Kliniken
Anichstr. 35, A-6020 Innsbruck
Austria

2025 Second Round Interim Report *(DOC5149)*

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Please Note:

- This interim report is intended for participants of the ERNDIM AAI scheme. The contents should not be used for any publication without permission of the Scientific Advisor.
- **This is an interim report and it includes provisional scores only**. All scores are subject to change following moderation at the Scientific Advisory Board meeting in autumn of this year. For final scores and performance data the ERNDIM AAI Annual Report should be referred to.
- The fact that your laboratory participates in this scheme is not confidential, however, the raw data and performance scores are confidential and will only be shared within ERNDIM for the purpose of evaluating your laboratories performance, unless ERNDIM is required to disclose performance data by a relevant government agency. For details, please see the ERNDIM Privacy Policy on www.erndim.org.

1. Results Submission

The deadline for submission of the 2025 second round results was 8th September 2025. Participants were able to view the cases and submit their results using the ERNDIM Formdesk website.

148 laboratories registered for the 2025 AAI scheme, of these 142 labs (96%) submitted results for the second round.

2. Scoring System

As for the previous circulations, each of the three aspects, analytical findings, diagnosis, and further tests, were scored equally with a maximum of two points for each category. Plasma amino acid concentrations together with the laboratories reference ranges were provided.

The tables (Table 1-3) show scoring to which the evaluators agreed previously. Scoring was done by two blinded evaluators each (the evaluators were blinded to both, the ERN number and to the scores of the second evaluator). If the scores were not concordant the scheme advisor scored in addition. Further close evaluation based on agreed/revised scoring criteria was used to determine on the final score.

Case 4 abnormalities				2025.04 abnormalities	Case 4 diagnosis				2025.04 diagnosis	Case 4 further testing recommendations				2025.04 recommendations
Each 1 point: elevated tyr and met, **maximum 2 points**					**Tyrosinaemia type I 2 points,** liver failure (due to other IMD like galactosaemia, mitochondrial d., citrin def. etc.) 1 point, tyrosinemia type II 0 points, tyrosinemia 1 point, **maximum 2 points**					**each 1 point (maximum 2 points):** alpha-fetoproteine, organic acids (urine, inclusive succinylacetone), 5-aminolaevulinic acid/ porphobilinogene synthase acitivity, molecular genetic analysis of *FAH* gene				
Highly elevated concentration of Methionine and Tyrosine, elevated concentration of Alanine, Citrulline, Glutamine, Lysine, Proline, Serine and Threonine. Leucine mildly decreased.	#	#	#	2,0	This sample is suspicious for hepatorenal tyrosinaemia (OMIM 276700). DD other forms of tyrosinaemia, adenosylkinase deficiency (OMIM 614300).	#	#	#	2,0	contact metab. center asap. Further: organic acids (urine) (succinylacetone, phenolic hydroxy acids). Alpha-fetoproteine, liver enzymes, 5-aminolaevoulinic acid. If succinylacetone negative: SAM/SAH-analysis. If biochemicaly cleared mutation analysis. proteine balaced diet.	#	#	#	2,0

Figure 1: Example of scoring for case 2025-4.

[1] **If this Report is not Version 1 for this scheme year, go to APPENDIX 2 (page 10) for details of the changes made since the last version of this document.**

3. Results of samples and evaluation of reporting

3.1. Case 2025-4: Tyrosinaemia type I

3.1.1. Sample Details

The laboratory results are from a 1.5-year-old girl who has been tired and pale for several weeks. In addition to paleness, clinical and further examination reveals hepatomegaly.

Further investigation reveals significantly elevated tyrosine and methionine concentrations in plasma. Ultimately, the cause of the clinical symptoms and laboratory changes was tyrosinaemia type I, which was confirmed by molecular genetic testing.

In principle, various differential diagnoses can be considered due to the altered amino acid concentrations in plasma:

- Disorders in tyrosine metabolism (i.e. tyrosinaemia type I), which are consistent with the clinical symptoms of anaemia. The elevated methionine concentration can be explained by the onset of liver failure.
- Secondary changes in the context of liver failure.
- The elevated methionine concentration could also indicate a metabolic disorder in methionine metabolism. However, neither the clinical symptoms nor the elevated tyrosine concentration are consistent with this.

3.1.2. Scoring details

	interpretation		scores (points)
findings, abnormalities, maximum 2 points	elevated	tyr	1
	elevated	met	1
diagnosis, maximum 2 points	tyrosinaemia type I		2
	liver failure (due to other IMD like galactosaemia, mitochondrial disorder, citrin deficiency, etc.)		1
	tyrosinaemia type II		0
further tests, maximum 2 points	alpha-fetoproteine		1
	organic acids (urine)		1
	succinylacetone		1
	homocysteine		1
	5-aminolaevulinic acid/ porphobilinogene synthase acitivity		1
	molecular genetic analysis *FAH* gene		1

Table 1: Scoring details for case 2025-4.
Scores for participating laboratories are in APPENDIX 1 on page 6.

3.1.3. Comments on overall performance

Overall proficiency was 88%. The proficiency for abnormalities was 100%. Proficiency in diagnosis and recommendation for further examinations was significantly lower at 83% and 80%. The reason for the point deduction was the focus on a methionine metabolism disorder or the assumption that the changes were secondary (despite the increased tyrosine concentration). However, no critical error could be detected.

This is an additional difficult case from everyday life, some points made the diagnosis difficult:

- The unspecific clinical symptoms.
- The combined increase in concentration of two amino acids from different metabolic pathways.

3.1.4. Best interpretation (scored with 2 points each)

- **Findings (*135):** Severe hyperaminoacidaemia: Methionine (21x↑), tyrosine (~4.6x↑), phenylalanine (~1.8x↑). Generalized elevation: alanine, proline, serine, glutamine. Low-normal BCAA. Pattern indicates severe hepatocellular dysfunction.

- **Diagnosis (*135)**: The biochemical profile is consistent with tyrosinaemia type I (HT1 - fumarylacetoacetate hydrolase deficiency). Liver dysfunction leads to increased methioninaemia and the presence of cystathionine. Microcytic anaemia may be due to elevated succinylacetone, which inhibits heme synthesis.
- **Further tests (*135):** URGENT: Urine/plasma succinylacetone (diagnostic for HT1). Liver function tests, AFP, coagulation studies, ammonia. If positive: immediate NTBC (nitisinone) therapy and tyrosine/phenylalanine-restricted diet. Genetic testing *FAH* gene. Metabolic genetics/hepatology referral. Address anaemia.

3.2. Case 2025-5: Methionine adenosyl-transferase deficiency I/III

3.2.1. Sample details

The results provided were from an asymptomatic girl, born after 40 gestational weeks. Newborn screening was positive with elevated methionine concentration. The sample was taken at age one month. Homocysteine-concentration was slightly (40.8 µmol/l) and methionine-concentration was grossly (1087 µmol/l) elevated. Cystine concentration was not decreased. The diagnosis was confirmed by mutation analysis showing homozygous for mutation in *MAT1A*-gene.

This case was previously used in 2021.

3.2.2. Scoring details

	interpretation		scores (points)
findings, abnormalities, maximum 2 points	elevated	met	1
	elevated	hcy	1
	slightly elevated (no additional point)	cys	0
diagnosis, maximum 2 points	MATI/III deficiency		2
	CBS deficiency		1
further tests (if molecular genetic recommended specify the gene)**, maximum 2 points**	molecular genetic analysis *MATI/III* gene		2
	molecular genetic analysis *CBS* gene		1
	SAM/SAH		2
	Folic acid, vitamin B12, MMA, acylcarnitine profile		1

Table 2: Scoring details for case 2025-5.

Scores for participating laboratories are in APPENDIX 1 on page 6.

3.2.3. Comments on overall performance

Overall proficiency was 91% (proficiency for laboratory abnormalities 97%, diagnosis 87% and further recommendation 89%).

- For two points in the assessment of laboratory abnormalities, it was necessary to mention all three relevant amino acids (methionine, homocysteine and cystine).
- The main misdiagnosis was classic homocystinuria, which was given a score of one point. Other diagnoses related to methionine metabolism were also given.

3.2.4. Best interpretation (scored with 2 points each)

- **Findings (*38):** Markedly increased Met with only mildly increased Tyr, no decreased Cys and moderately increased homocysteine of 40 µmol/L without treatment (< 50 µmol/L).
- **Diagnosis (*38):** The increased Met without high Tyr points to a disorder of the sulfur amino acid metabolism. The HCy of 40 µmol/L argues against CBS deficiency (typically > 50 µmol/L). Also Met level compared to HCy level is too high for CBS deficiency. DD includes MAT I/III, GNMT, SAHH and ADK deficiency.
- **Further tests (*134):** S-adenosylmethionine/S-adenosylhomocysteine in plasma (low), methylmalonic acid in plasma (normal), Folate, B12 vitamin in plasma (normal), mutation analysis in the *MAT1A*-gene.

3.3. Case 2025-6: Hyperprolinaemia caused by an infusion of Privigen (high in proline content).

3.3.1. Sample details

The results are from a patient who received intravenous immunoglobulins for idiopathic thrombocytopenic purpura. Proline was added to the immunoglobulin preparation for stabilisation. A significantly increased proline concentration was observed. The hydroxyproline concentration was normal. During follow-up examination, the proline concentration was normal again.

3.3.2. Scoring details

	interpretation		scores (points)
findings, abnormalities, maximum 2 points	elevated	pro	1
	normal	h-pro	1
diagnosis, maximum 2 points	hyperprolinaemia		2
	primary causes: P5C DH, Pro DH		2
	secondary causes: medication		2
further tests (if molecular genetic recommended specify the gene)**, maximum 2 points**	medical history (medication)		1
	repetition of amino acid analysis (plasma and/or urine)		1
	Pyrroline-5-carboxylate		1

Table 3: Scoring details for case 2025-6.
Scores for participating laboratories are in APPENDIX 1 on page 6.

3.3.3. Comments on overall performance

Overall proficiency in this case was 79%. The concentrations of amino acids were clearly conspicuous.

- For two points in the assessment of laboratory abnormalities, it was necessary to commend on the hydroxyproline concentration (proficiency 59%).
- A total of 25 participants suspected that the increased proline concentration was caused by an exogenous proline intake, i.e. by medication with immunoglobulins.

3.3.4. Best interpretation (scored with 2 points each)

- **Findings (*145):** Markedly elevated proline. Normal hydroxyproline and alanine. Mildly elevated ornithine and glutamate and low cystine, likely due to delayed processing and breakdown of arginine and glutamine. Otherwise essentially normal.
- **Diagnosis (*27):** Iatrogenic source of proline, possibly from Privigen (IV IgG) treatment that contains proline to treat Idiopatholic Thrombocytopenia Purpura. Otherwise, no obvious inherited primary amino acid metabolism disorder.
- **Further tests (*27):** Contact referring clinician / electronic patient records to check if on IV IgG treatment. Repeat when off treatment to check if proline concentration normalises.

3.4. Comments on the whole of the second circulation results 2025

We hope that we have once again succeeded in presenting three interesting and instructive cases to the participants this year. The aim should be to describe the laboratory changes, the diagnosis and the further recommendations in such a way that it is also easy to understand for the doctors looking after the patient. The participants were largely successful in this endeavour.

This year, an AAI scheme session was held at the ERNDIM Workshop in Madrid. The slides from this workshop can be found on the ERNDIM website (https://www.erndim.org/meetings-reports-cat/meetings/). We would also welcome comments and suggestions for improvement and interesting cases from the participants.

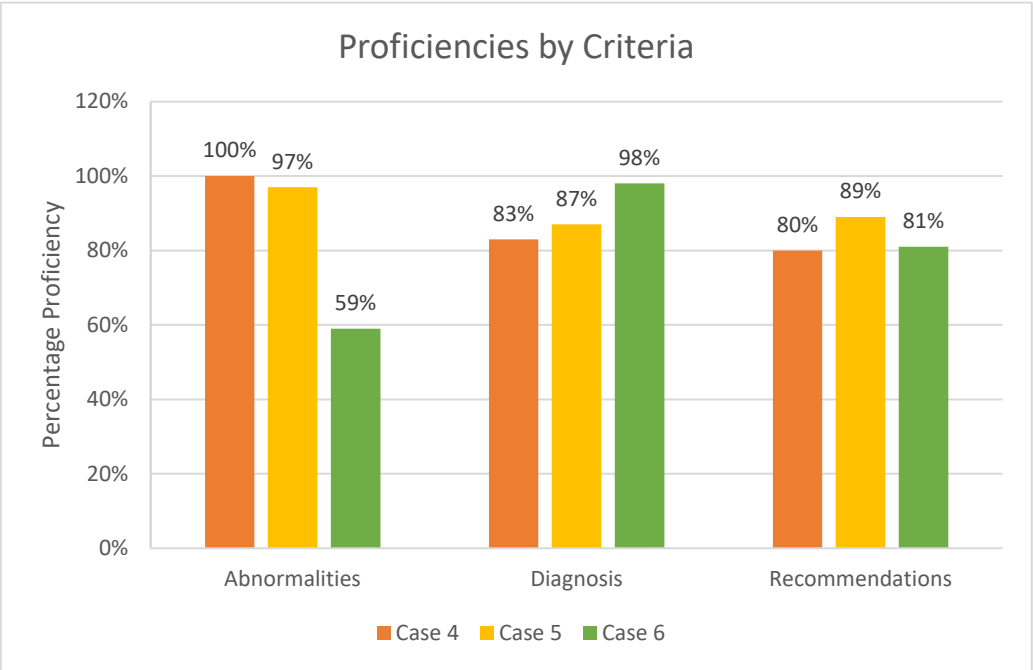

Figure 2: Proficiencies by criteria.

Table 5: Overall scores for the second circulation in the Amino Acid Interpretation scheme

	2025.04				2025.05				2025.06				2025.04 - .06
	A	D	R	Sum	A	D	R	Sum	A	D	R	Sum	Totals
Total Points	283	237	228	748	275	246	253	774	167	277	230	674	2196
% proficiency	100%	83%	80%	88%	97%	87%	89%	91%	59%	98%	81%	79%	86%

Key

A = Findings, abnormalities

D = Diagnosis

R = Recommendations for further testing

We encourage participants to send us comments and suggestions regarding this scheme and do not hesitate to contact us if you question any of our scoring.

Date: 12th December 2025

The Scientific Evaluators

Sabine Scholl-Bürgi, Scientific Advisor
Scheme Assessors: Apolline Imbard (Deputy Scientific Advisor), Olivier Braissant, Rachel Carling, Alistair Horman, Daniela Karall, and Anke Schumann

APPENDIX 1. Detailed scores for submitting laboratories

Key

A = Findings, Abnormalities
D = Diagnosis
R = Recommendations for further testing
DNS = did not submit any results

Anon. lab number	2025.04				2025.05				2025.06				2025.04 - .06
	A	D	R	Sum	A	D	R	Sum	A	D	R	Sum	Total Score
1	2.0	1.0	1.0	4.0	2.0	0.0	0.0	2.0	2.0	2.0	1.0	5.0	11.0
2	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	18.0
3	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	0.0	3.0	13.0
4	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	18.0
5	1.0	1.0	0.0	2.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	11.0
6													DNS
7													DNS
8	2.0	1.0	0.0	3.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	13.0
9	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	1.0	2.0	2.0	5.0	16.0
10	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	18.0
11	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
12	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
13	2.0	1.0	1.0	4.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	14.0
14	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
15	2.0	1.0	0.0	3.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	13.0
16	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
17	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	1.0	2.0	2.0	5.0	16.0
18	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
19	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
20	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	1.0	2.0	1.0	4.0	15.0
21	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	1.0	4.0	14.0
22	2.0	2.0	1.0	5.0	2.0	2.0	2.0	6.0	2.0	2.0	1.0	5.0	16.0
23	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	18.0
24	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
25	2.0	2.0	1.0	5.0	1.0	2.0	2.0	5.0	1.0	2.0	1.0	4.0	14.0
26	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
27	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
28	2.0	1.0	0.0	3.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	13.0
29	2.0	1.0	0.0	3.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	15.0
30	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	15.0
31	2.0	1.0	2.0	5.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	15.0
32	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
33	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
34	2.0	1.0	1.0	4.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	15.0
35	2.0	0.0	0.0	2.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	13.0
36	2.0	1.0	2.0	5.0	2.0	1.0	2.0	5.0	1.0	2.0	2.0	5.0	15.0
37	2.0	1.0	2.0	5.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	14.0
38	2.0	2.0	2.0	6.0	2.0	2.0	1.0	5.0	1.0	2.0	1.0	4.0	15.0

Anon. lab number	2025.04				2025.05				2025.06				2025.04 - .06
	A	D	R	Sum	A	D	R	Sum	A	D	R	Sum	Total Score
39	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	1.0	0.0	1.0	2.0	13.0
40	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	1.0	0.0	1.0	2.0	13.0
41	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
42	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	1.0	2.0	2.0	5.0	16.0
43	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
44	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
45	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
46	2.0	1.0	0.0	3.0	2.0	1.0	0.0	3.0	1.0	2.0	1.0	4.0	10.0
47	2.0	1.0	2.0	5.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	17.0
48	2.0	1.0	2.0	5.0	2.0	2.0	2.0	6.0	2.0	2.0	1.0	5.0	16.0
49	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	2.0	2.0	1.0	5.0	15.0
50	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	2.0	2.0	2.0	6.0	17.0
51	2.0	0.0	0.0	2.0	2.0	1.0	2.0	5.0	2.0	2.0	1.0	5.0	12.0
52	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	1.0	5.0	17.0
53	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
54	2.0	2.0	2.0	6.0	2.0	2.0	1.0	5.0	1.0	2.0	2.0	5.0	16.0
55	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	1.0	2.0	1.0	4.0	13.0
56	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
57													DNS
58	2.0	1.0	2.0	5.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	15.0
59	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	18.0
60	2.0	1.0	0.0	3.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	13.0
61	2.0	1.0	1.0	4.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	15.0
62	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
63	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	1.0	2.0	1.0	4.0	15.0
64	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	1.0	2.0	1.0	4.0	15.0
65	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
66	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
67	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
68	2.0	2.0	2.0	6.0	2.0	2.0	0.0	4.0	2.0	2.0	2.0	6.0	16.0
69	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
70	2.0	1.0	2.0	5.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	16.0
71	2.0	1.0	0.0	3.0	2.0	1.0	1.0	4.0	1.0	2.0	1.0	4.0	11.0
72	2.0	1.0	1.0	4.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	15.0
73	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
74	2.0	1.0	0.0	3.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	12.0
75	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
76	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
77	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	0.0	4.0	16.0
78	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	1.0	5.0	17.0
79	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	1.0	2.0	2.0	5.0	16.0
80	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	1.0	2.0	1.0	4.0	15.0
81	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	18.0
82	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
83	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	15.0

Anon. lab number	2025.04				2025.05				2025.06				2025.04 - .06
	A	D	R	Sum	A	D	R	Sum	A	D	R	Sum	Total Score
84	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	1.0	2.0	1.0	4.0	15.0
85	2.0	1.0	2.0	5.0	2.0	1.0	2.0	5.0	1.0	2.0	2.0	5.0	15.0
86	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
87	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	15.0
88	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
89	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
90	2.0	2.0	2.0	6.0	1.0	1.0	1.0	3.0	0.0	2.0	1.0	3.0	12.0
91	2.0	2.0	2.0	6.0	2.0	1.0	0.0	3.0	1.0	2.0	1.0	4.0	13.0
92	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	18.0
93	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	15.0
94	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
95	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
96	2.0	1.0	0.0	3.0	2.0	1.0	2.0	5.0	2.0	2.0	2.0	6.0	14.0
97	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
98	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	1.0	4.0	14.0
99	2.0	1.0	0.0	3.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	12.0
100	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
101													DNS
102	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
103	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
104	2.0	0.0	0.0	2.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	12.0
105	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
106	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
107	2.0	0.0	0.0	2.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	11.0
108	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
109	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
110	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
111	2.0	0.0	1.0	3.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	15.0
112	2.0	0.0	0.0	2.0	2.0	1.0	2.0	5.0	1.0	1.0	1.0	3.0	10.0
113	2.0	0.0	0.0	2.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	13.0
114	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
115	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	1.0	2.0	2.0	5.0	16.0
116	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	15.0
117													DNS
118	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	2.0	5.0	15.0
119	2.0	1.0	2.0	5.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	16.0
120	2.0	1.0	0.0	3.0	2.0	2.0	2.0	6.0	2.0	2.0	1.0	5.0	14.0
121	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
122	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	18.0
123	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	1.0	2.0	2.0	5.0	16.0
124	2.0	0.0	0.0	2.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	13.0
125	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	18.0
126	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	16.0
127	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
128	2.0	1.0	1.0	4.0	2.0	2.0	1.0	5.0	1.0	2.0	2.0	5.0	14.0

Anon. lab number	2025.04				2025.05				2025.06				2025.04 - .06
	A	D	R	Sum	A	D	R	Sum	A	D	R	Sum	Total Score
129	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
130	2.0	1.0	0.0	3.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	15.0
131	2.0	2.0	0.0	4.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	15.0
132	2.0	1.0	0.0	3.0	2.0	2.0	2.0	6.0	1.0	2.0	1.0	4.0	13.0
133	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	1.0	4.0	14.0
134	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
135	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	1.0	2.0	2.0	5.0	16.0
136	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	0.0	1.0	2.0	14.0
137													DNS
138	2.0	2.0	2.0	6.0	2.0	1.0	1.0	4.0	1.0	2.0	1.0	4.0	14.0
139	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
140	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
141	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
142	2.0	2.0	2.0	6.0	2.0	1.0	2.0	5.0	1.0	2.0	2.0	5.0	16.0
143	2.0	1.0	1.0	4.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	15.0
144	2.0	2.0	2.0	6.0	2.0	2.0	1.0	5.0	1.0	2.0	2.0	5.0	16.0
145	2.0	2.0	1.0	5.0	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	17.0
146	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
147	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0
148	2.0	2.0	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0	2.0	5.0	17.0

APPENDIX 2. Change log (changes since the last version)

Version Number	Published	Amendments
1	12 December 2025	• 2025 second round interim report published

END OF REPORT