

NEONATAL LABORATORY VALUES

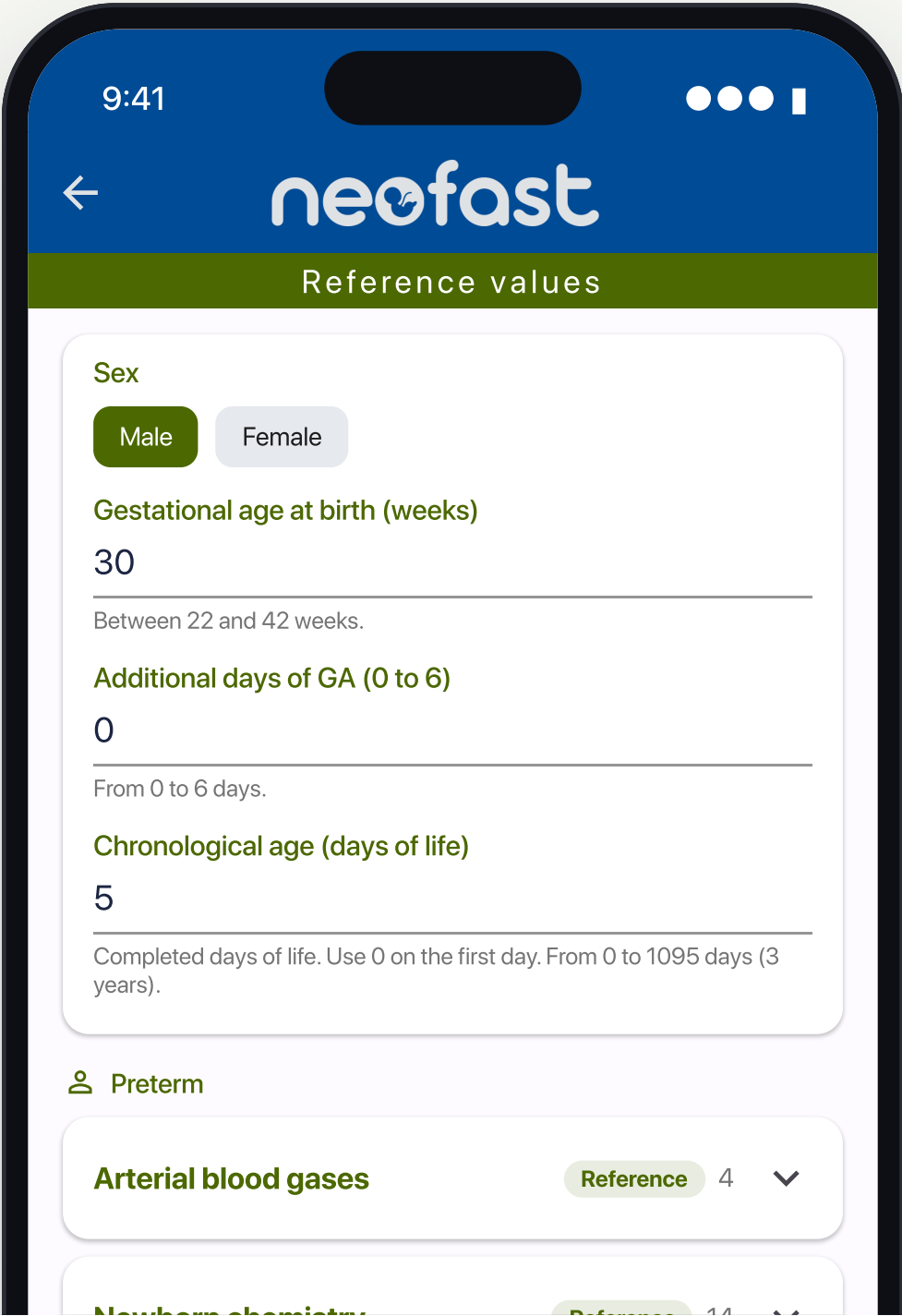
The normal range for **this** newborn, in three fields.

Sex, gestational age at birth and days of life. For every test, NeoFast picks the published range that applies to this patient.

132 parameters

11 groups

Harriet Lane · AAP



WHY IT MATTERS

Same test, same day 5. Different range.

What the app shows for two boys on day 5 of life: one born at 30 weeks, the other at 39.

Parameter	Preterm · 30 wk	Term · 39 wk
Total T4 (mcg/dL)	6.29 (2.10) 28-30 wk · Day 7	12.67 (2.87) >37 wk · Day 7
Free T4 (ng/dL)	1.82 (0.66) 28-30 wk · Day 7	2.70 (0.57) >37 wk · Day 7
TSH (mUI/L)	3.60 (2.50) 28-30 wk · Day 7	2.60 (1.80) >37 wk · Day 7
aPTT (s)	50.5 (26.9-74.1) Preterm · Day 5	42.60 (8.62) Full-term · Day 5
Antithrombin III (U/mL)	0.56 (0.30-0.82) Preterm · Day 5	0.67 (0.13) Full-term · Day 5
Protein C (U/mL)	0.31 (0.11-0.51) Preterm · Day 5	0.42 (0.11) Full-term · Day 5

Values exactly as the app displays them: mean (SD) or mean (limits), as in the source; under each one, the band from the original table. Thyroid: Williams 2004. Coagulation: Andrew 1987 and 1988.

HOW IT WORKS

Three fields. No guessing.

- **1. Sex**
Male or female. Required, like the others.
- **2. Gestational age at birth**
22 to 42 weeks, plus 0 to 6 days.
- **3. Chronological age**
Completed days of life, 0 to 1,095 (3 years).
- Age is chronological, not corrected. Prematurity comes in through gestational age, the way the tables themselves do it.
- Every value carries the source's band label: "4-7 d", "Preterm · Day 5".
- If the source does not cover that age, the app says so. It never offers the neighbouring band.

9:41

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Reference values

Sex

Male Female

Gestational age at birth (weeks)

30

Between 22 and 42 weeks.

Additional days of GA (0 to 6)

0

From 0 to 6 days.

Chronological age (days of life)

5

Completed days of life. Use 0 on the first day. From 0 to 1095 days (3 years).

Preterm

Arterial blood gases Reference 4

Newborn chemistry Reference 14

Chemistry 37

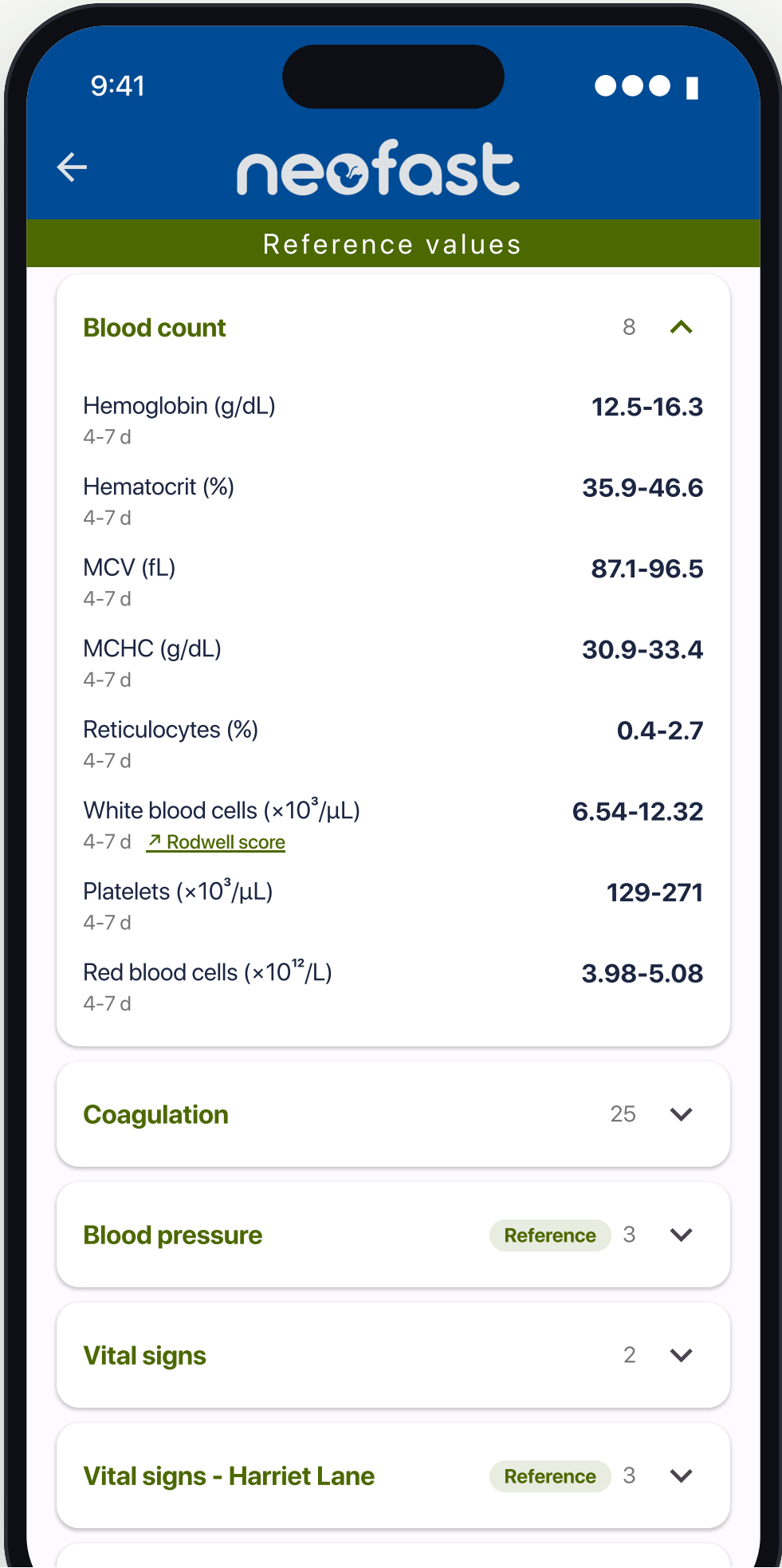
Cerebrospinal fluid Reference 13

Thyroid 3

EXAMPLE · 30-WEEK NEWBORN, DAY 5

This patient's blood count, already filtered.

- **8 parameters**
Haemoglobin, haematocrit, MCV, MCHC, reticulocytes, white cells, platelets and red cells.
- **The right band**
For day 5 the app uses the 4-7 d column and shows it under every number.
- **Shortcut**
On white cells, one tap opens the Rodwell score.



COAGULATION

25 coagulation parameters, by GA and day of life.

- **Preterm and term apart**
Both Andrew series: days 1, 5, 30, 90 and 180.
- **From PT to inhibitors**
PT, aPTT, TT, fibrinogen, factors II to XIII, antithrombin, proteins C and S, plasminogen.
- **Read it straight**
Mean and limits side by side, as published.

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Reference values

Coagulation

25

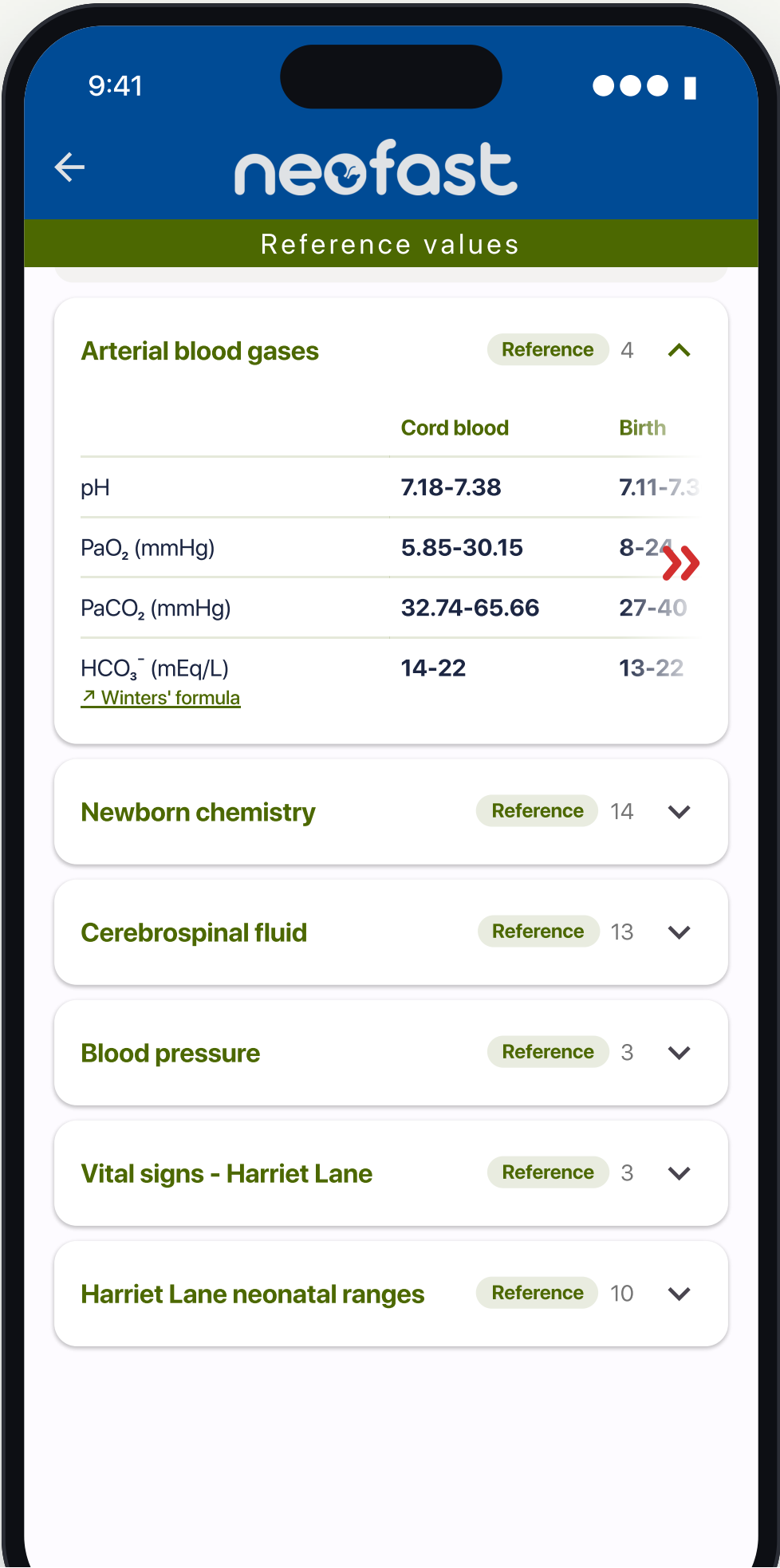
PT (s)	12.5 (10.0-15.3)
Preterm · Day 5	
aPTT (s)	50.5 (26.9-74.1)
Preterm · Day 5	
Thrombin time (s)	24.1 (18.8-29.4)
Preterm · Day 5	
Factor I - fibrinogen (g/L)	2.80 (1.60-4.18)
Preterm · Day 5	
Factor II - prothrombin (U/mL)	0.57 (0.29-0.85)
Preterm · Day 5	
Factor V (U/mL)	1.00 (0.46-1.54)
Preterm · Day 5	
Factor VII (U/mL)	0.84 (0.30-1.38)
Preterm · Day 5	
Factor VIII (U/mL)	1.15 (0.53-2.05)
Preterm · Day 5	
von Willebrand factor (U/mL)	1.33 (0.72-2.19)
Preterm · Day 5	
Factor IX (U/mL)	0.42 (0.14-0.74)
Preterm · Day 5	
Factor X (U/mL)	0.51 (0.19-0.83)
Preterm · Day 5	
Factor XI (U/mL)	0.41 (0.13-0.69)
Preterm · Day 5	
Factor XII (U/mL)	0.39 (0.09-0.69)
Preterm · Day 5	
Prekallikrein (U/mL)	0.45 (0.26-0.75)
Preterm · Day 5	
High-molecular-weight kininogen	0.62 (0.24-1.00)

REFERENCE TABLES

To look something up, fill in nothing.

- **Arterial blood gases**
Cord, birth, 5-10, 30 and 60 min, 1 d.
- **Newborn chemistry**
Cord blood and venous at 2 to 4 h.
- **Cerebrospinal fluid**
Preterm, term 1-7 d and 8-30 d, infant, up to adult.
- **Blood pressure**
By gestational age, days 1 to 7 and 30.
- **Vital signs**
Harriet Lane, from premie to adolescent.

Wide table? The red arrow tells you it keeps going sideways.



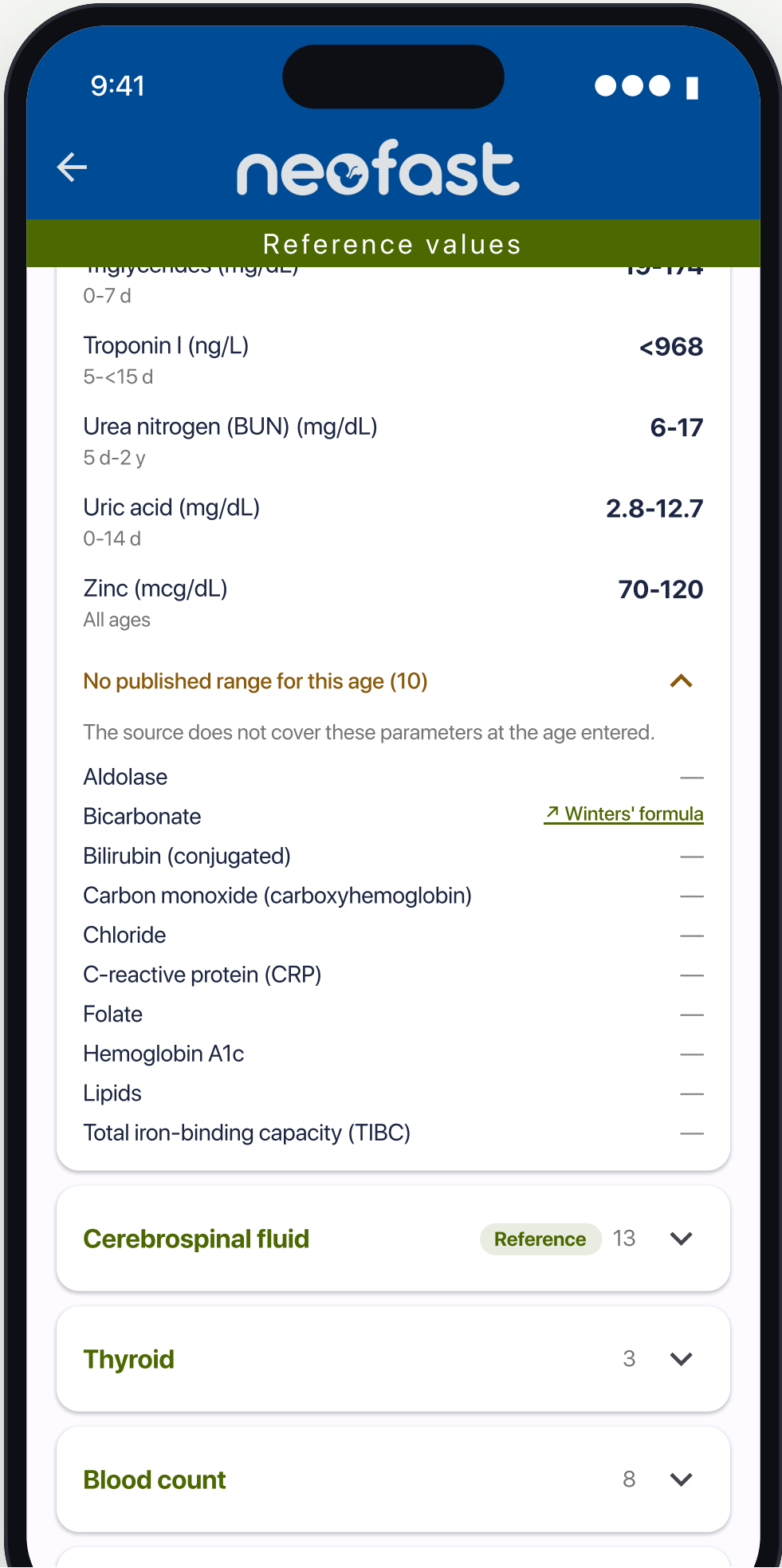
SHORTCUTS AND TRANSPARENCY

When the app already calculates it, it points there.

Parameters with no published range for the age entered sit in their own block, named one by one. If NeoFast has the calculator, the link is right there.

SHORTCUTS FROM THIS SCREEN

- Rodwell score
- Winters' formula
- Hyperbilirubinemia
- Creatinine clearance
- Fraction of sodium excreted
- Plasma osmolality
- Normal CSF values in newborns
- Mean Arterial Pressure



IN THE APP

Other calculations and scores >

Reference values

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Reference ranges

Laboratories use different analysers, reagents and methods. Always check the ranges of the laboratory that ran the test before making decisions. A reference range covers 95% of results from healthy people: 1 in every 20 tests ordered falls outside it without the patient being ill. This screen uses CHRONOLOGICAL age, not corrected. Prematurity enters as its own axis, through gestational age.

REFERENCES

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