Malaria conundrum

CME SSTTM January 2025

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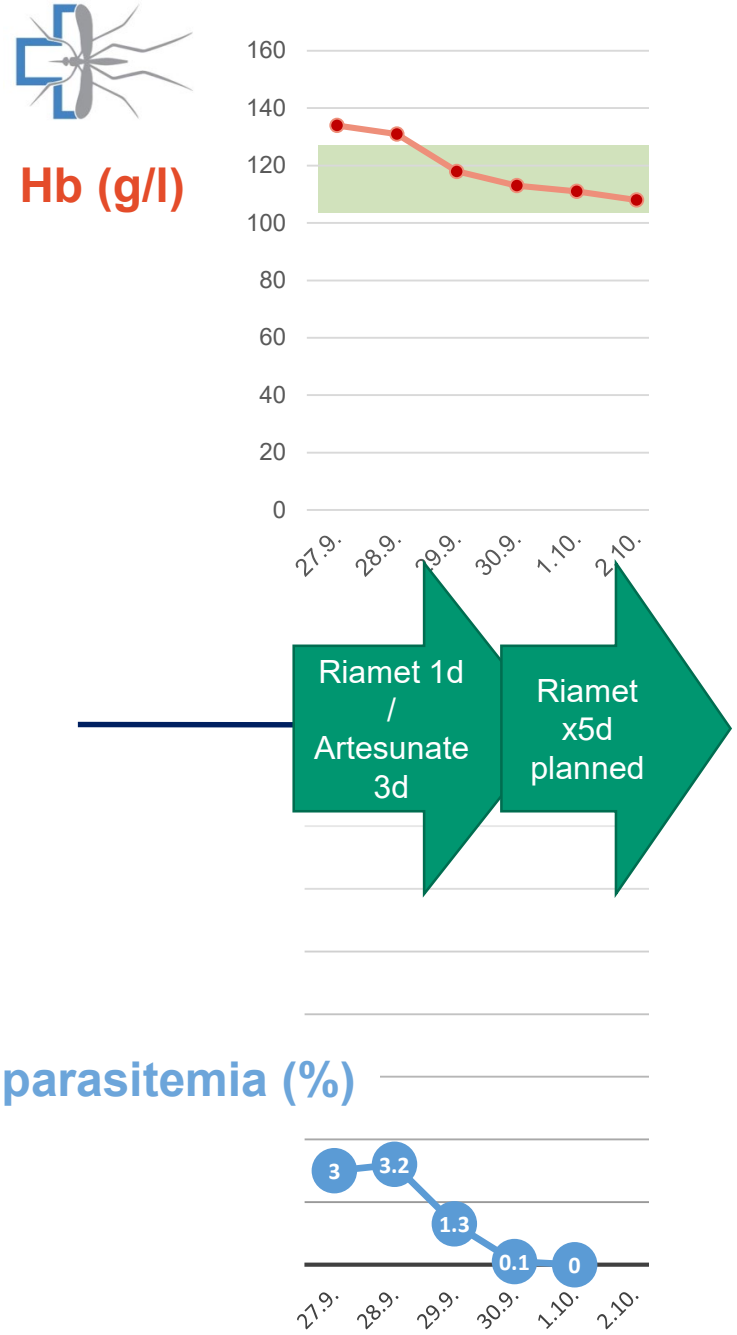
Case presentation

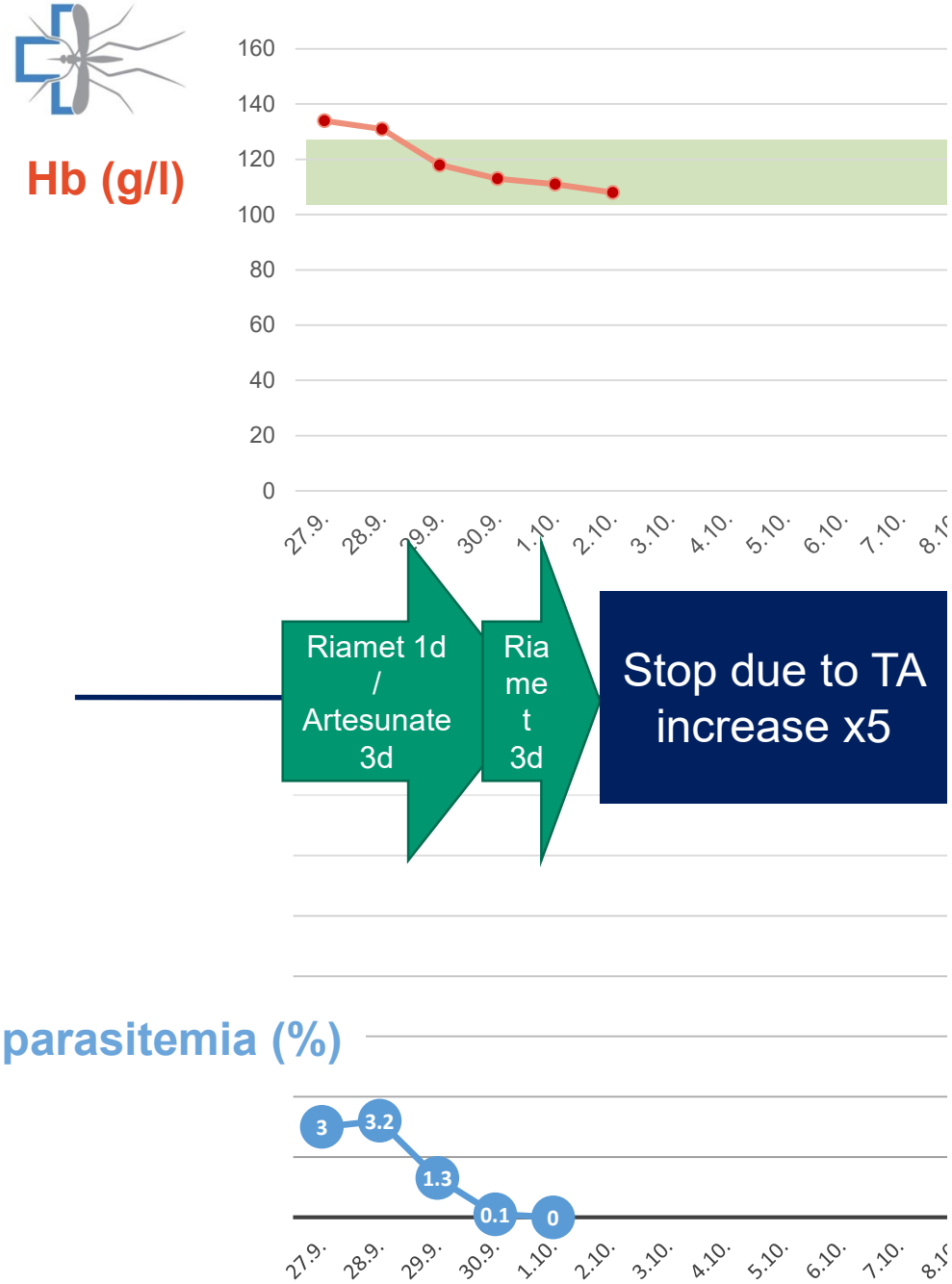
- 55 yo lady
- Uganda 24.8. – 14.9.2024
- No malaria prophylaxis

- presents on 27.9. with 3 day h/o fatigue, headache, nausea, feeling «awful»
- o/e: GCS 15, T 38.9°C, no meningism, no path. findings on clinical exam



02.10.

«uncomplicated» *P. falciparum* malaria


Hb (g/l)
160
140
120
100
80
60
40
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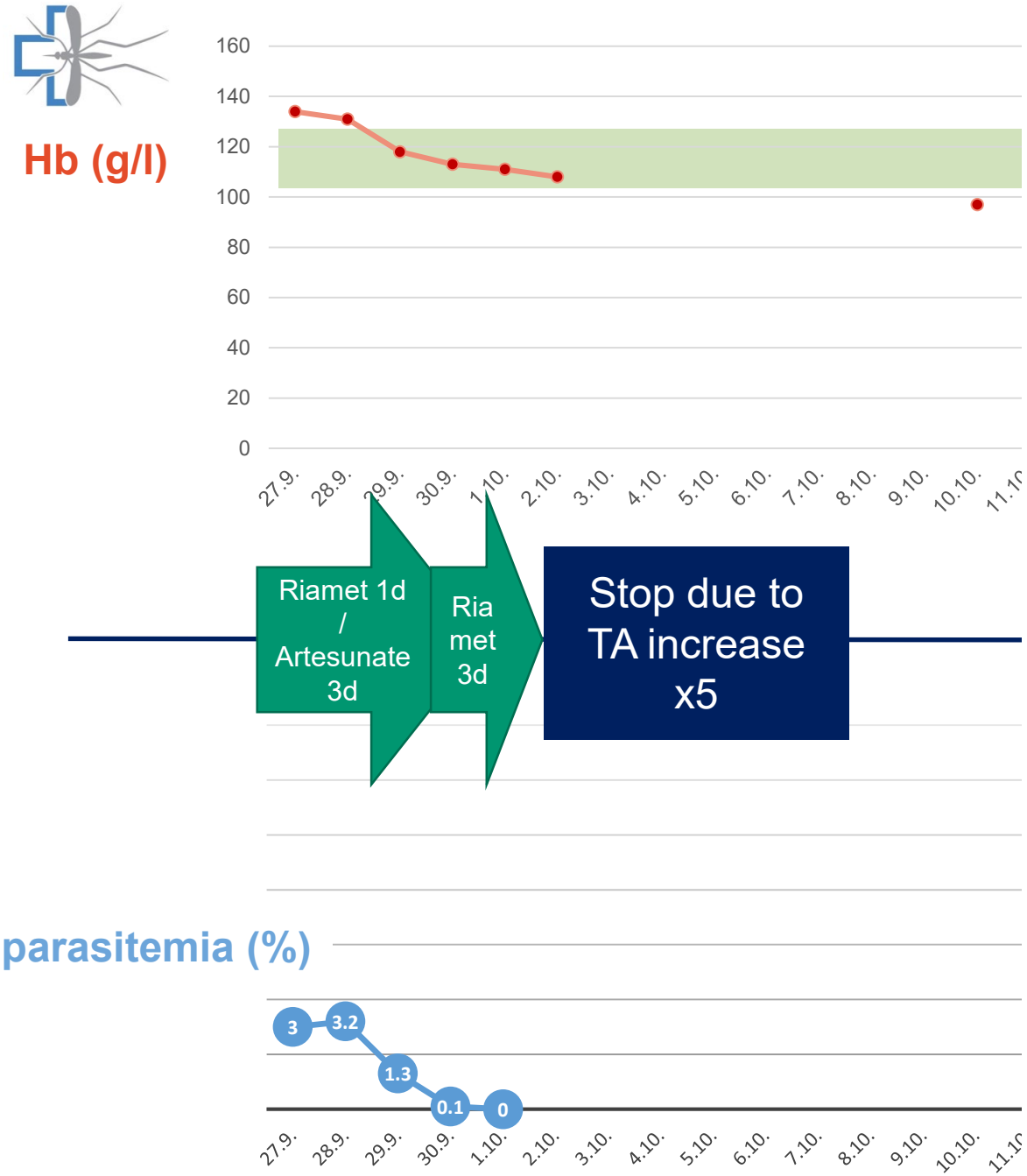
27.9.
28.9.
29.9.
30.9.
1.10.
2.10.
3.10.
4.10.
5.10.
6.10.
7.10.
Riamet 1d / Artesunate 3d
Riamet 3d
Stop due to TA increase x5
parasitemia (%)
3
3.2
1.3
0.1
0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Ria met 3d
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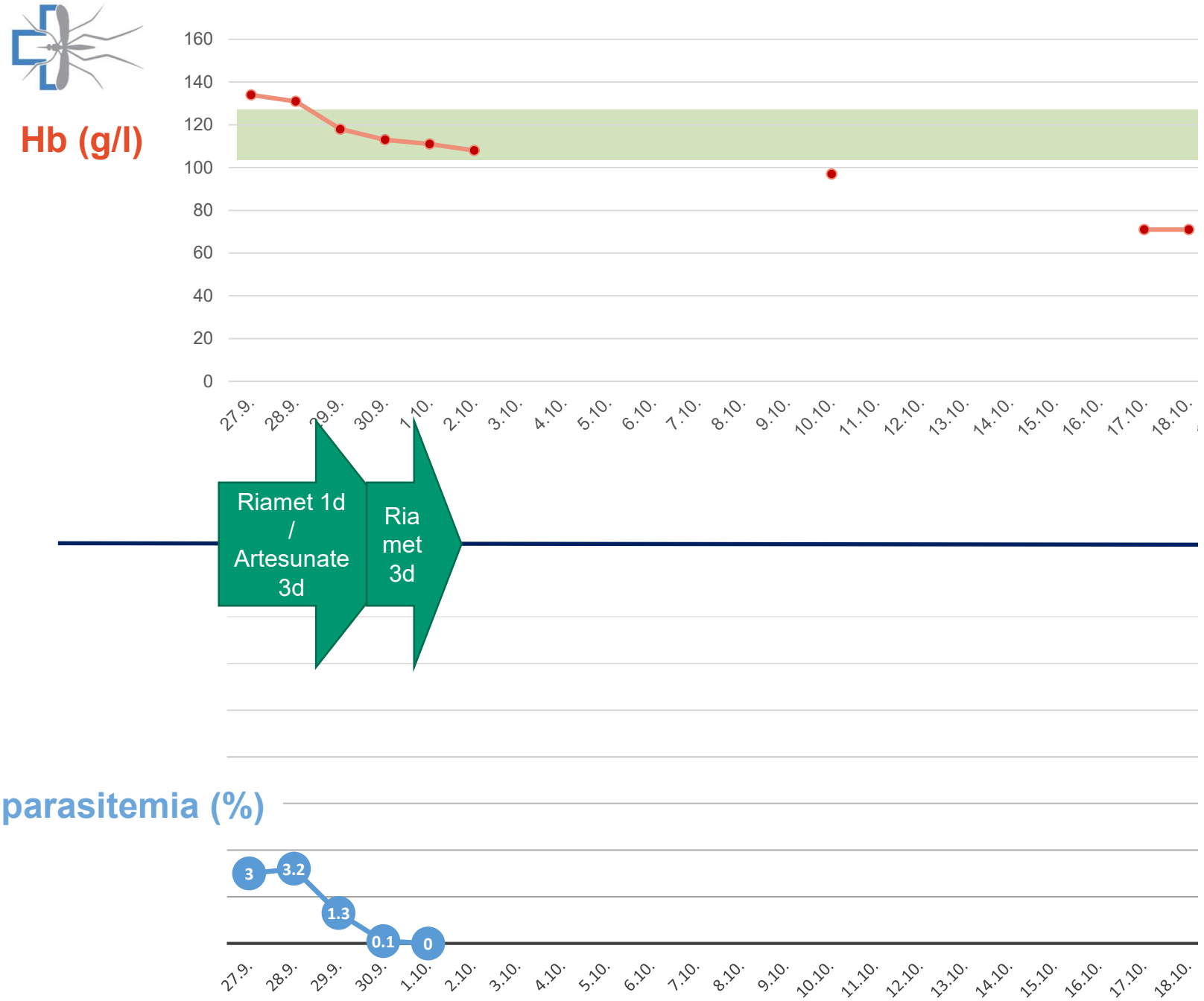


17.10.

«still feels tired, fatigued, lack of appetite». No fever.

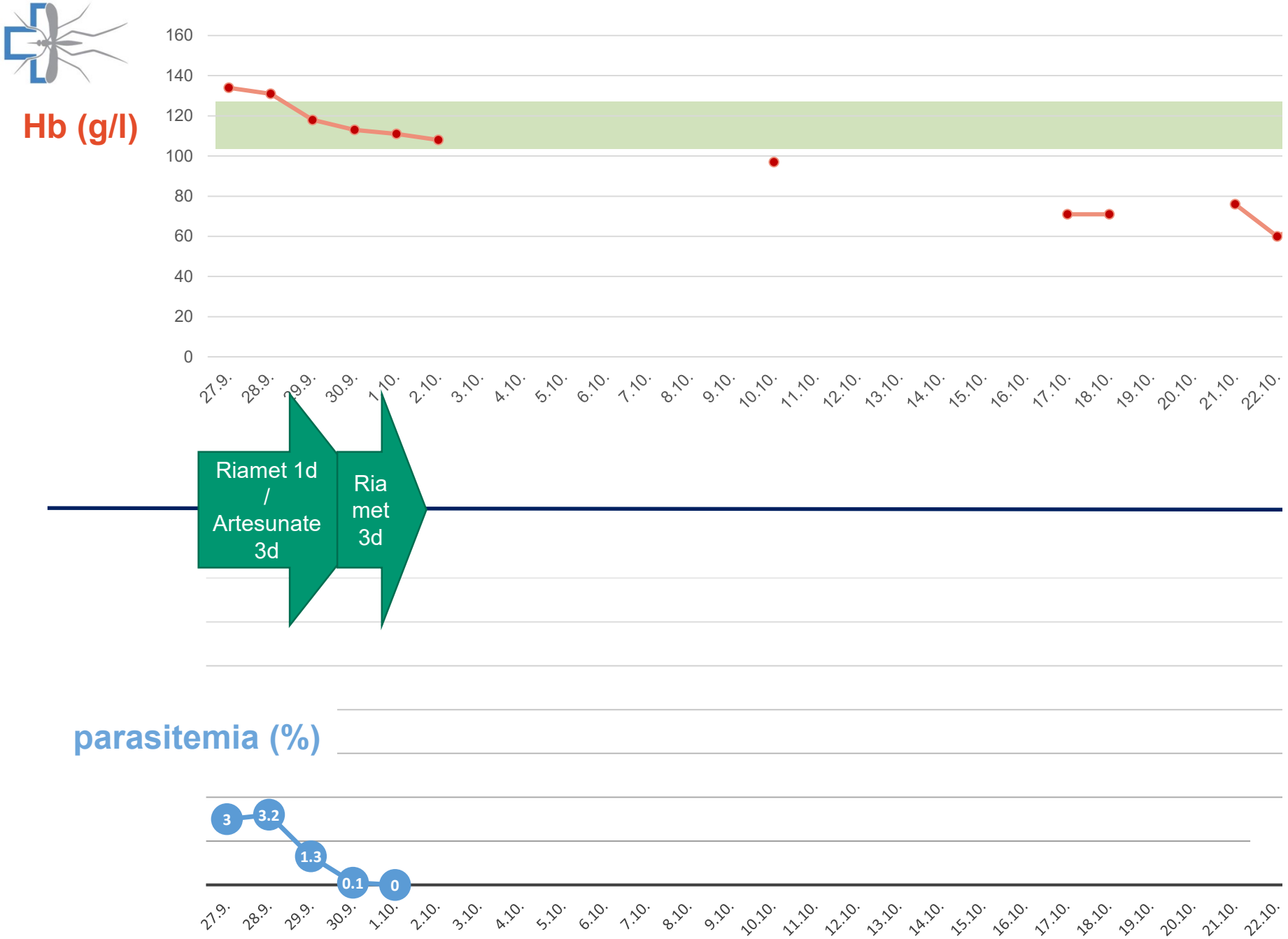
o/e: T 37.2°C

Hb 71 g/l

Diagnoses
Post-artesunate delayed hemolysis

After uncomplicated *P. falciparum* malaria

Hepatotox. due to ALu

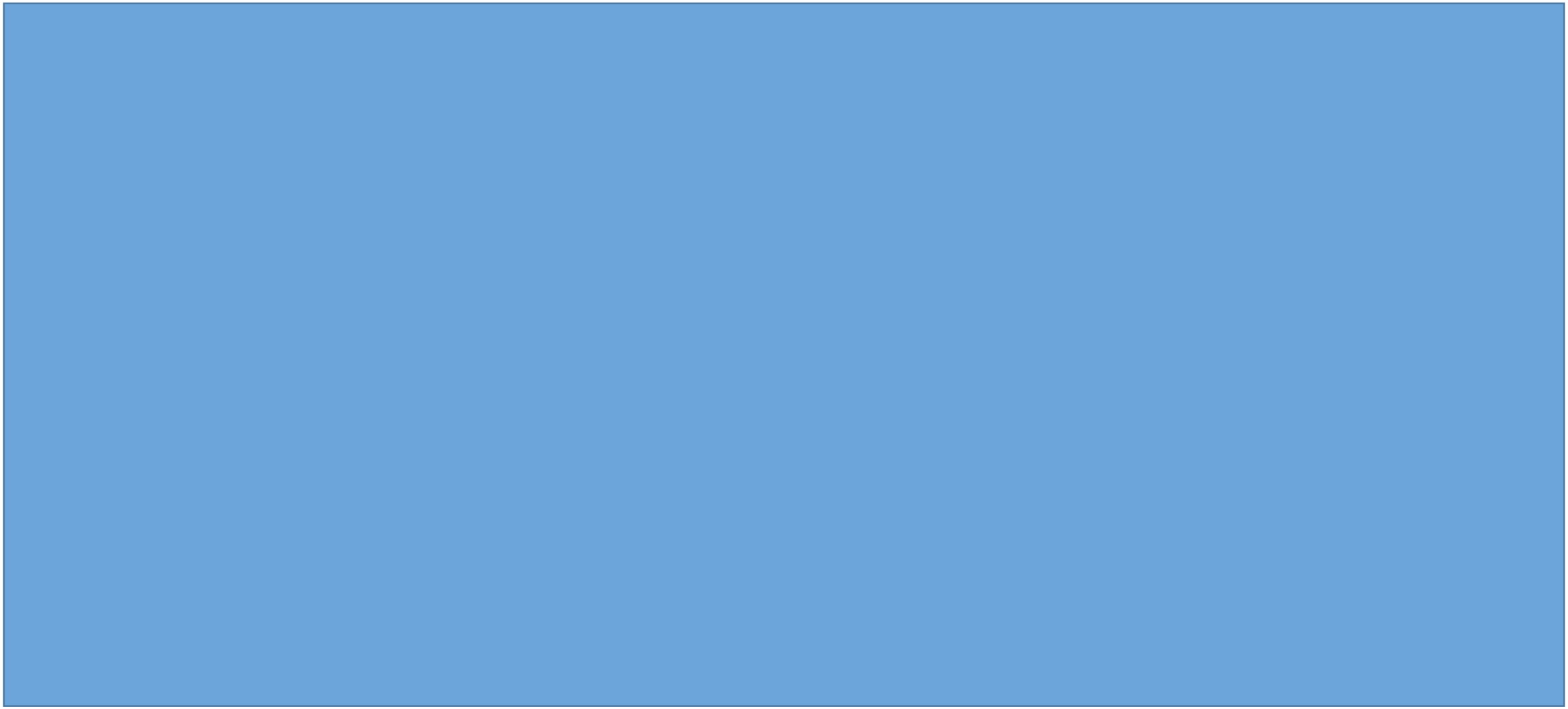


21.10.

Readmitted
fever since 3d
dizziness
dry cough

Labs
Hb 60g/l
haptoglobin non-detectable
Tc 149 G/l
CRP 114 mg/l
ASAT/ALAT 61/20 U/L
Bili total 26 umol/L (ref <21)

Differentials??



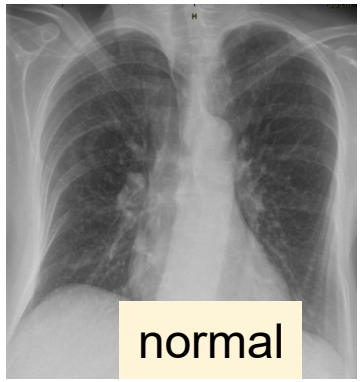
Differentials??

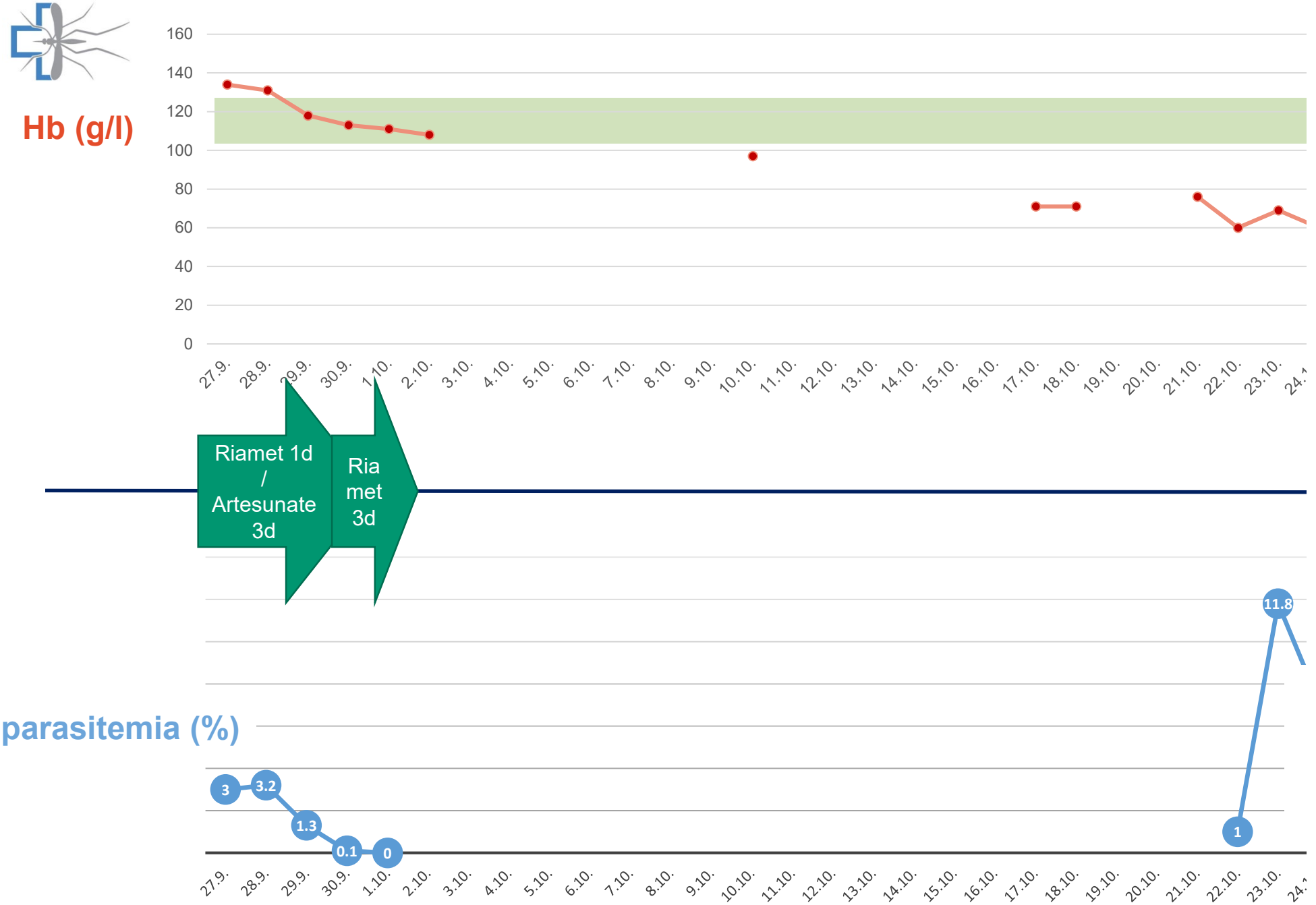
- Influenza / Covid-19 / viral respiratory infection
- viral hemorrhagic fever
- bleeding from ? Needs assessment
- post-artesunate delayed hemolysis (PADH)
- Recrudescence *P. falciparum*
- *P. vivax* / *P. ovale*
- Typhoid fever
- HIV / HBV ?

Too late: 5 weeks since return

diagnosis by exclusion

examined for



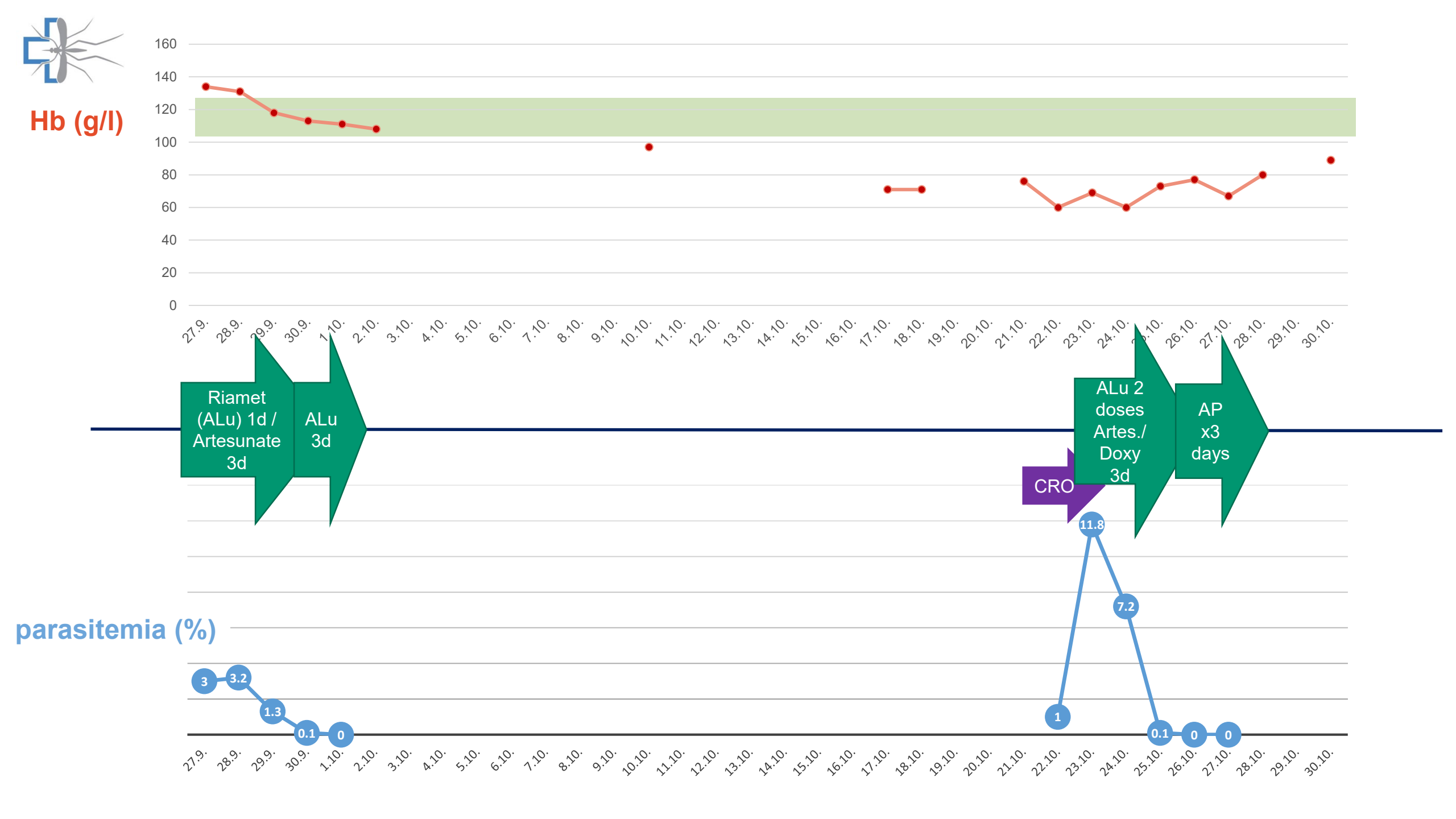


***P. falciparum* confirmed** by RDT, microscopy and PCR

no mixed infection

blood-borne viruses neg.

blood cultures neg.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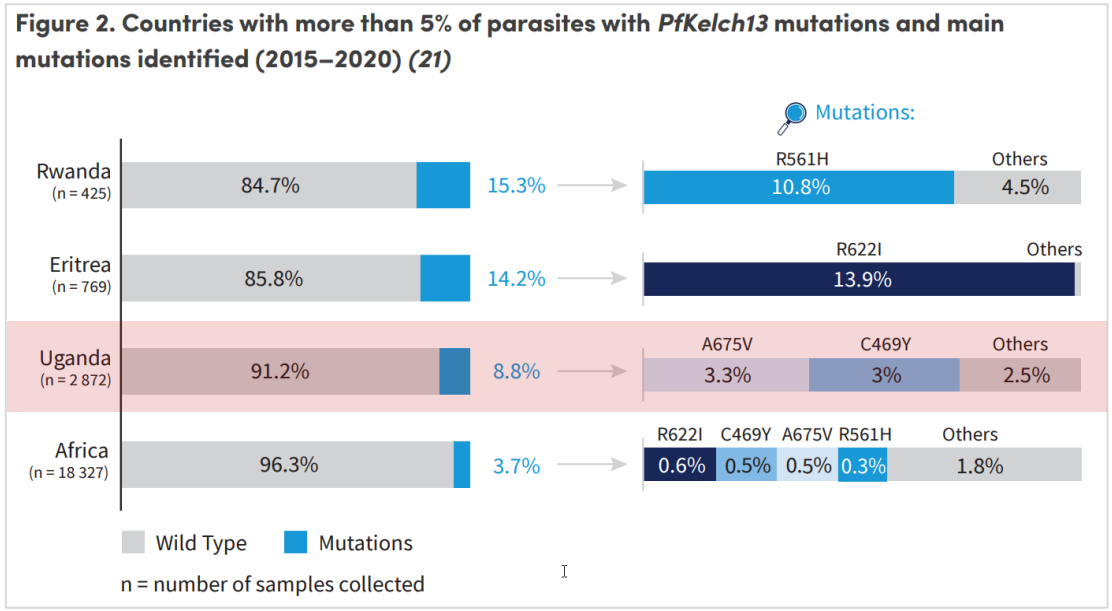
26.10.
27.10.
28.10.
29.10.
30.10.
Riamet (ALu) 1d / Artesunate 3d
ALu 3d
CRO
ALu 2 doses Artes./ Doxy 3d
AP x3 days
parasitemia (%)
3
3.2
1.3
0.1
0
1
11.8
7.2
0.1
0
0

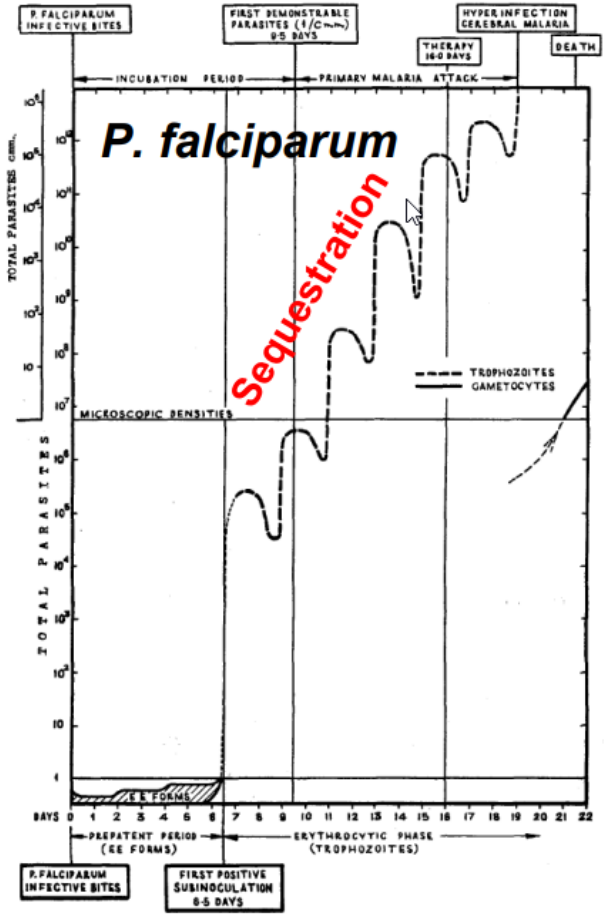
To sum up

- Recrudescence … actually exists
- Weekly checks after treatment relevant
- DD of PADH is recrudescence…
- Kelch13 mutation?



Agaba, B.B. et al. Emerging threat of artemisinin partial resistance markers (*pfk13* mutations) in Plasmo*dium falciparum* parasite populations in multiple geographical locations in high transmission regions of Uganda. *Malar J* **23**, 330 (2024). https://doi.org/10.1186/s12936-024-05158-9

Sequestration explains fluctuation parasitemia



Fairley NH. Trans R Soc Trop Med Hyg. 1947;40:621-76.

Thank you for your attention!