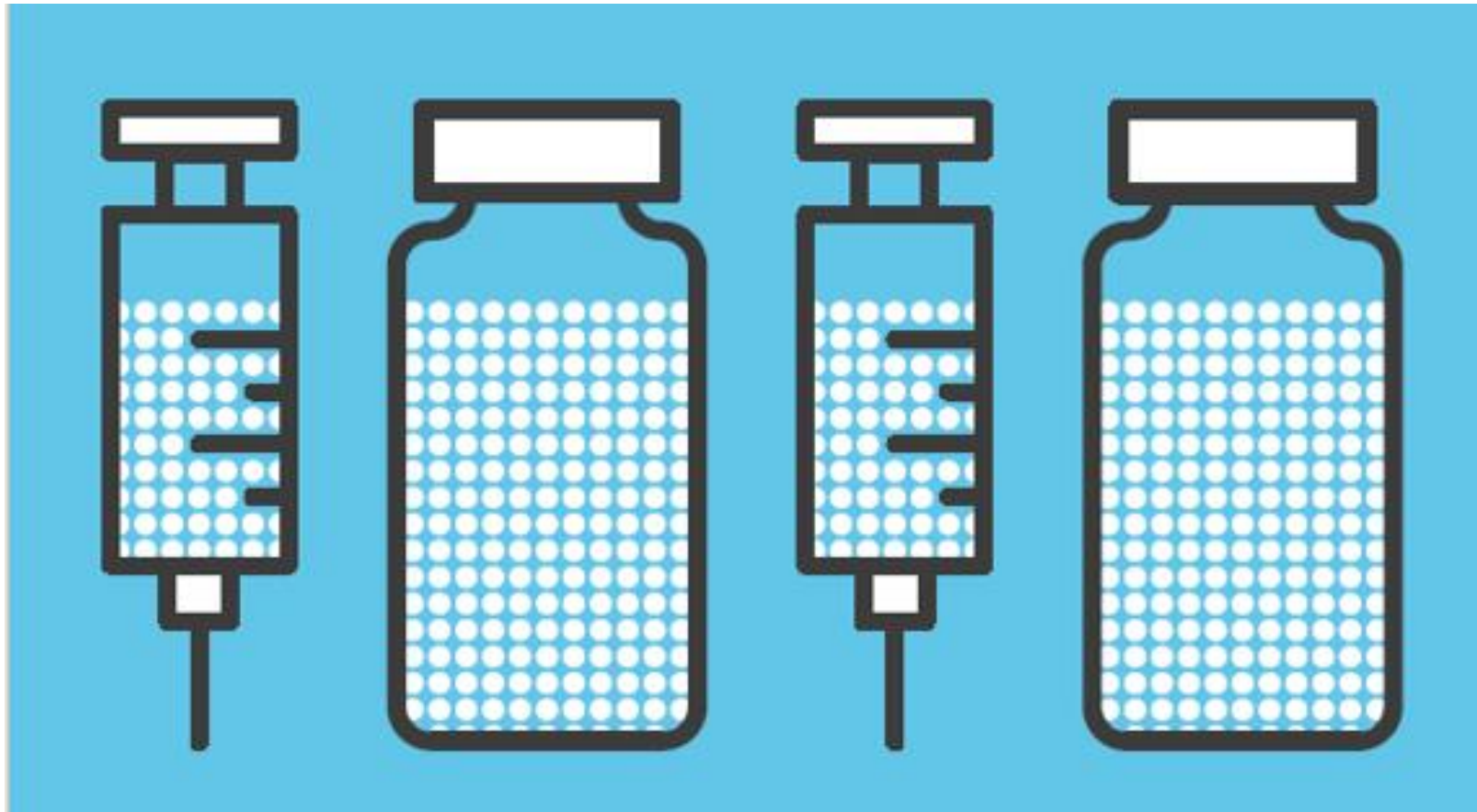


# UK NEQAS

Blood Transfusion Laboratory Practice



Anti-D  
EQA  
samples  
AGAIN?!

Katy Veale

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# What do?

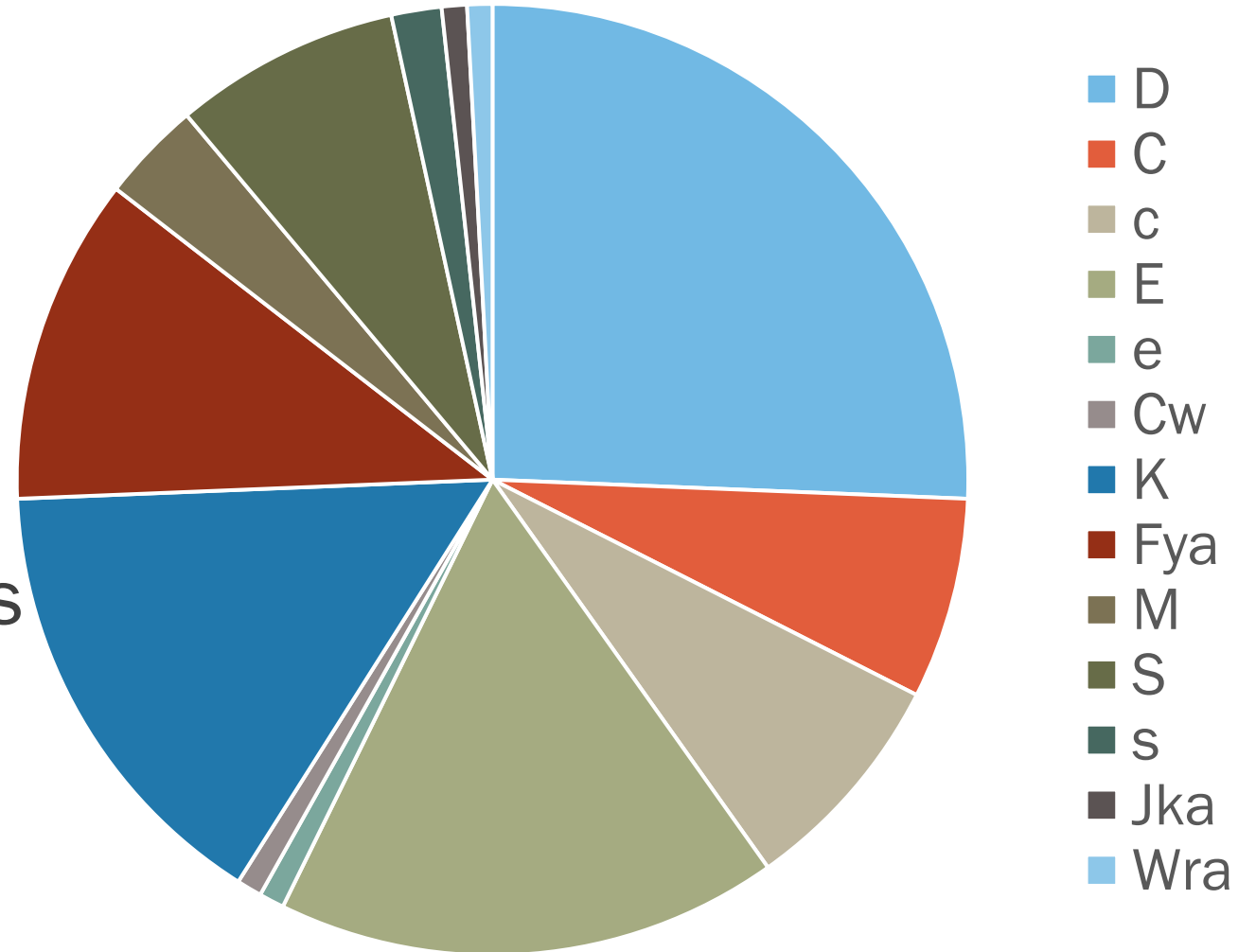
- What do we send?
- Why all the anti-D?
  
- Findings

# Last 5 years

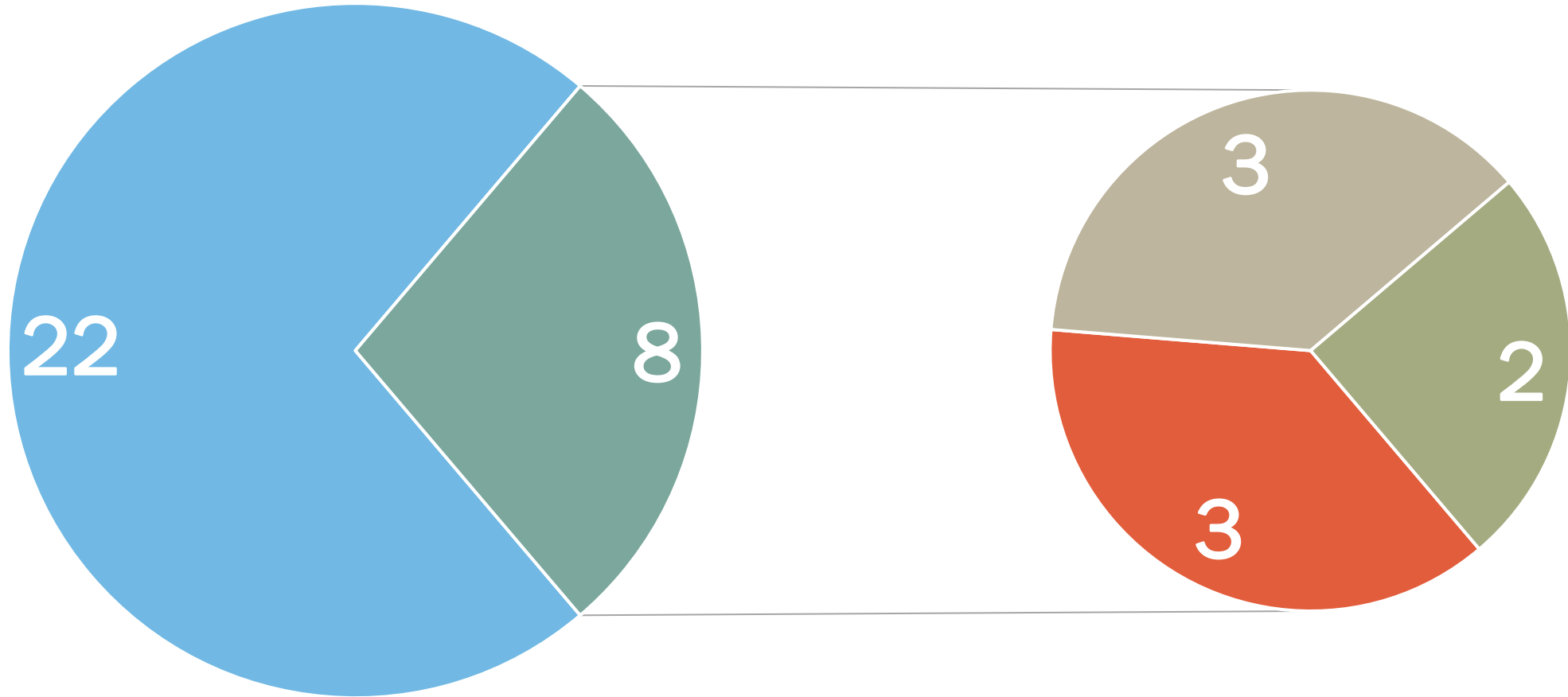
- 180 samples
  - 96 inert (53%)
  - 82 with antibodies
    - 33 with two antibodies
    - 117 antibodies

# Last 5 years

- 180 samples
- 96 inert (53%)
- 82 with antibodies
  - 33 with two antibodies
  - 117 antibodies



# Anti-D



■ D Boring ■ UK NEQAS anti-D "standard" ■ ? D Standard ■ D EQALM

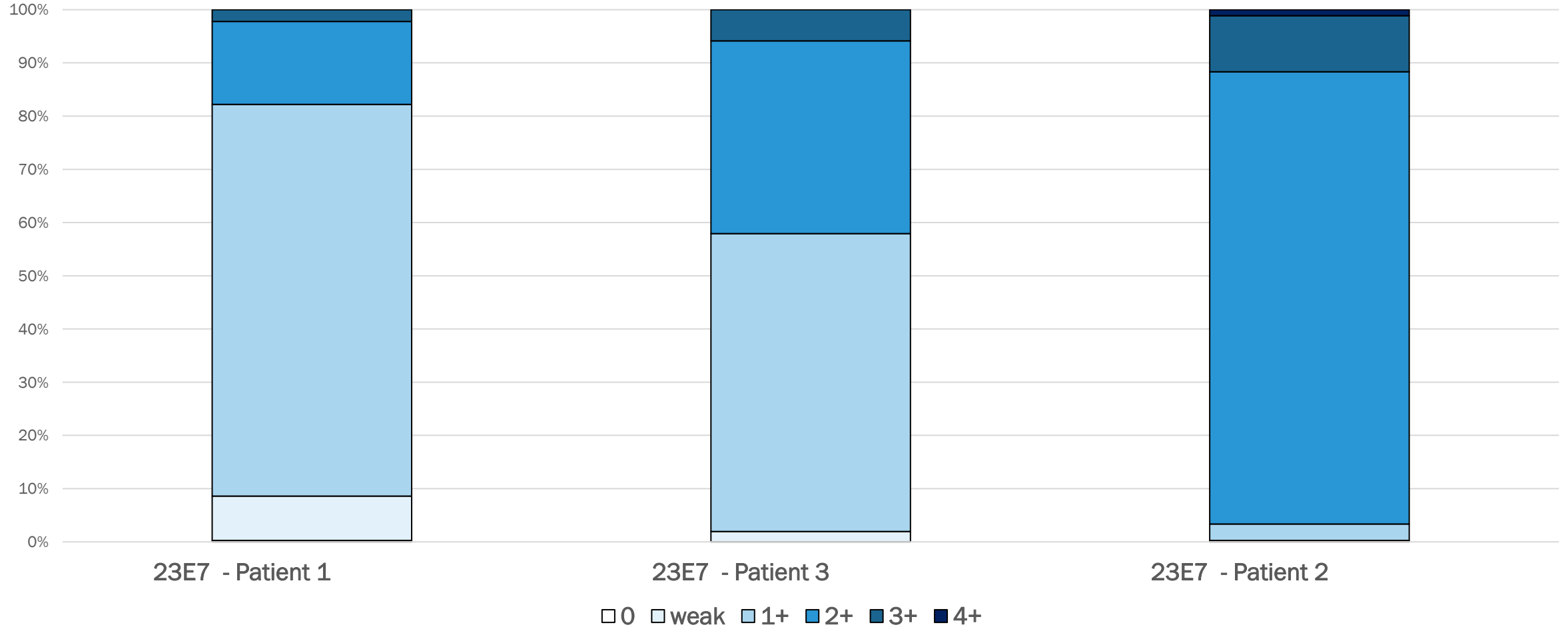
# UK NEQAS anti-D “standard”

- Consistency of detection of a weakish anti-D
  - Since 2006
  - 2018 – reaction grades
  - 2023 – NEW!
- BSH Guideline 2012 – Compatibility testing
  - *5.4.3. A weak anti-D control (containing anti-D at a level of **less than 0.1 IU/mL**) should be used on a regular basis to assure the efficacy of the whole test procedure*

# New UK NEQAS anti-D “standard”

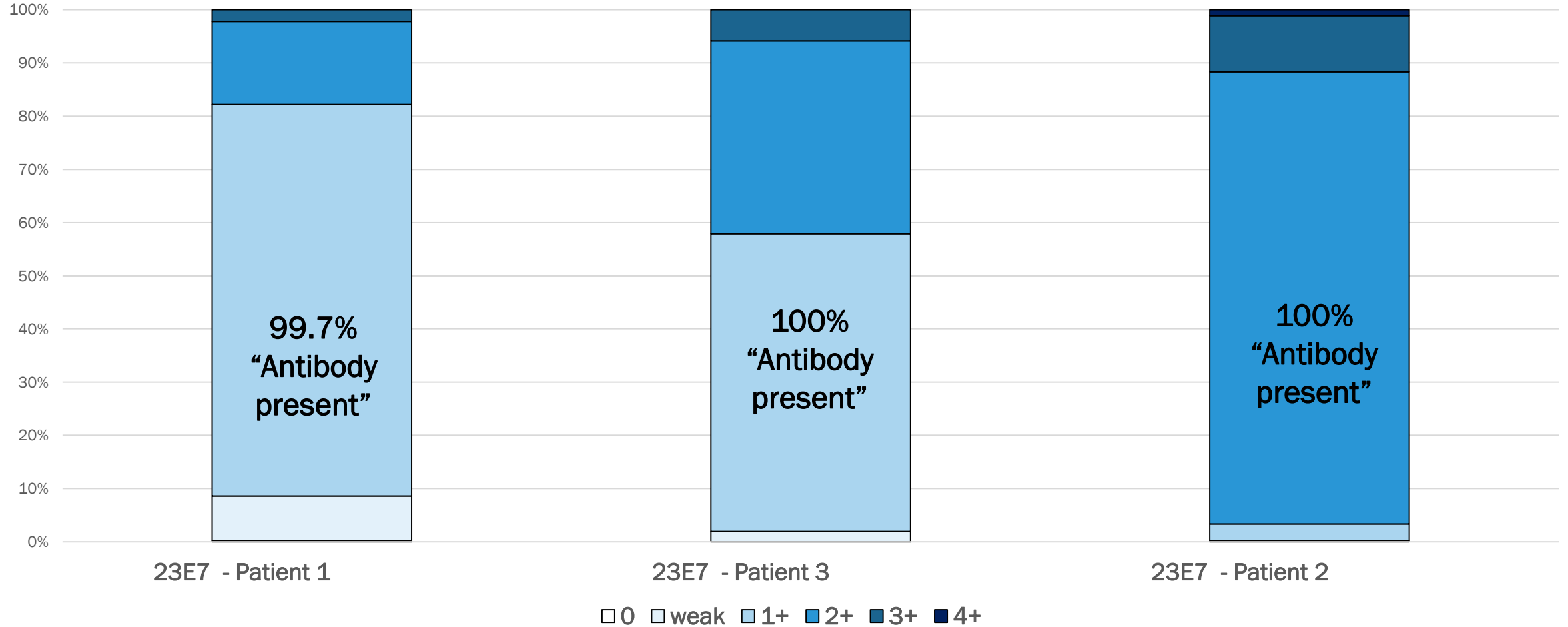
- 23E7
  - Patient 1 = 1/66
  - Patient 3 = 1/44
  - Patient 2 = 1/22

# New UK NEQAS anti-D “standard”

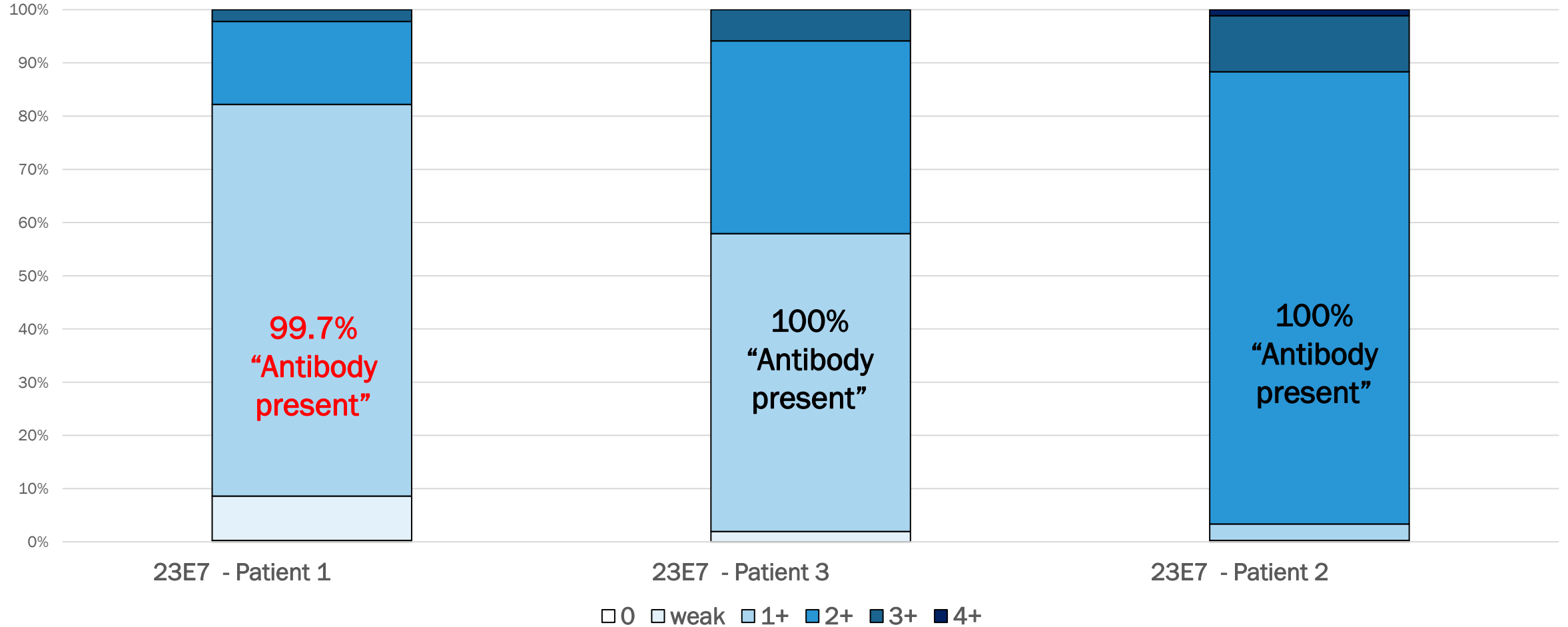




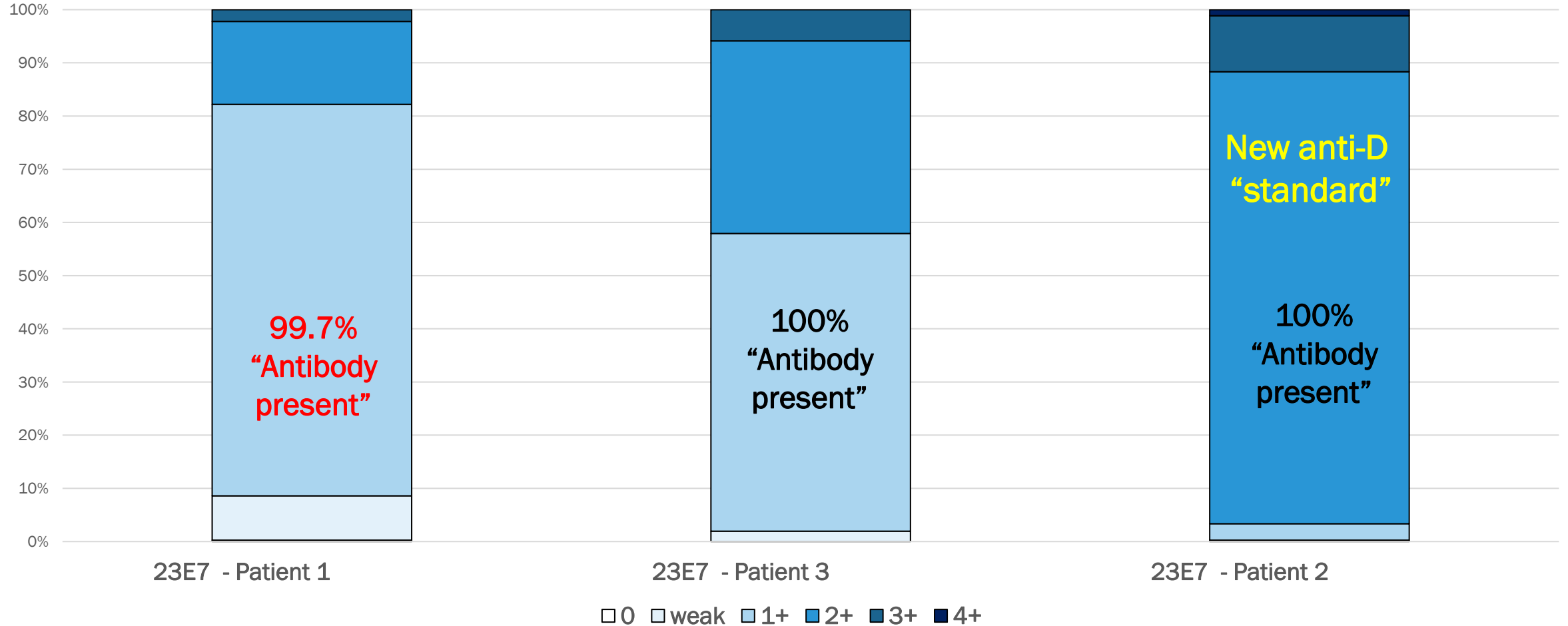
# New UK NEQAS anti-D “standard”



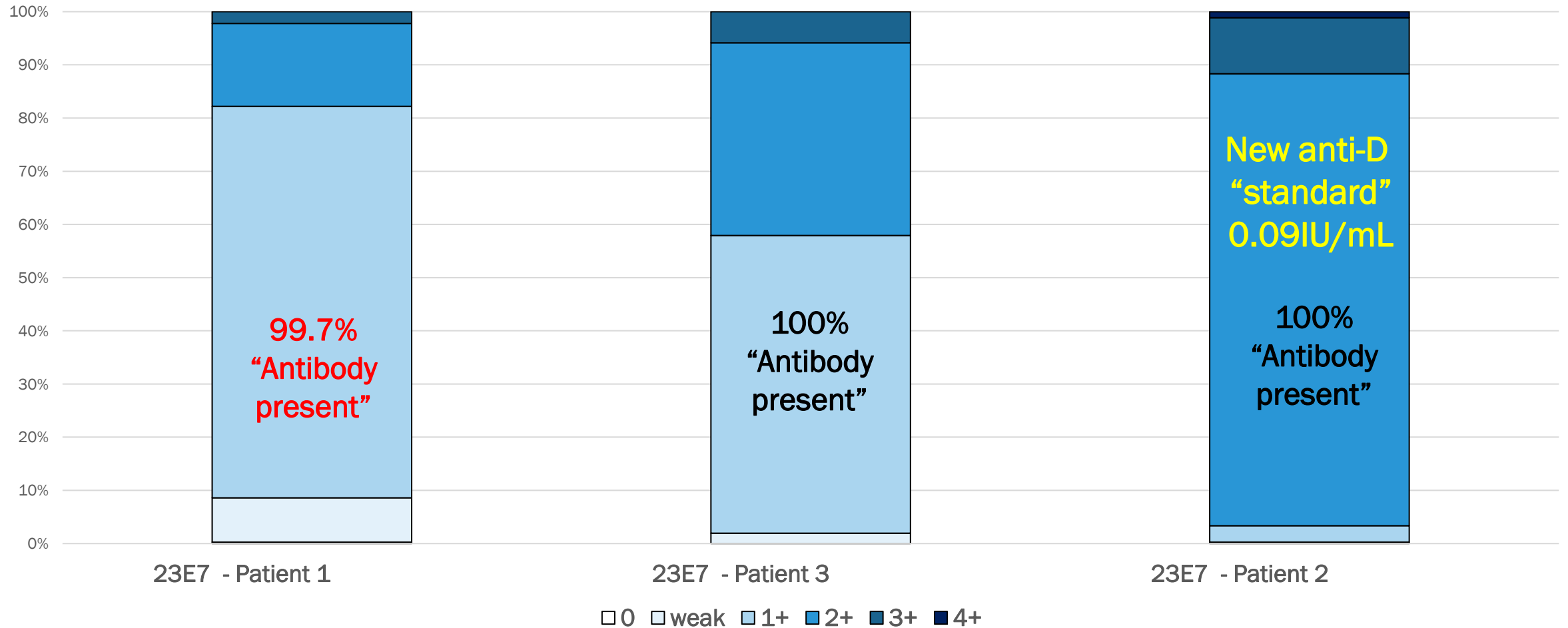
# New UK NEQAS anti-D “standard”



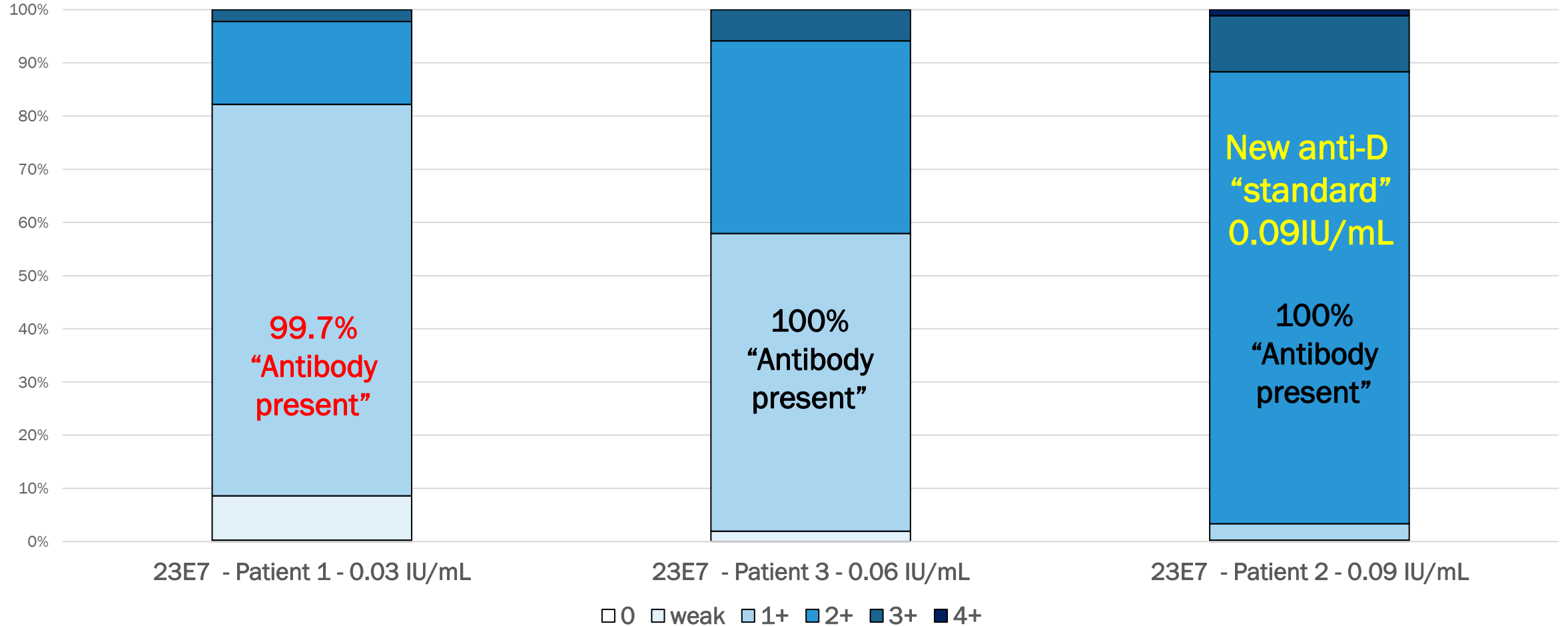
# New UK NEQAS anti-D “standard”



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# New UK NEQAS anti-D “standard”



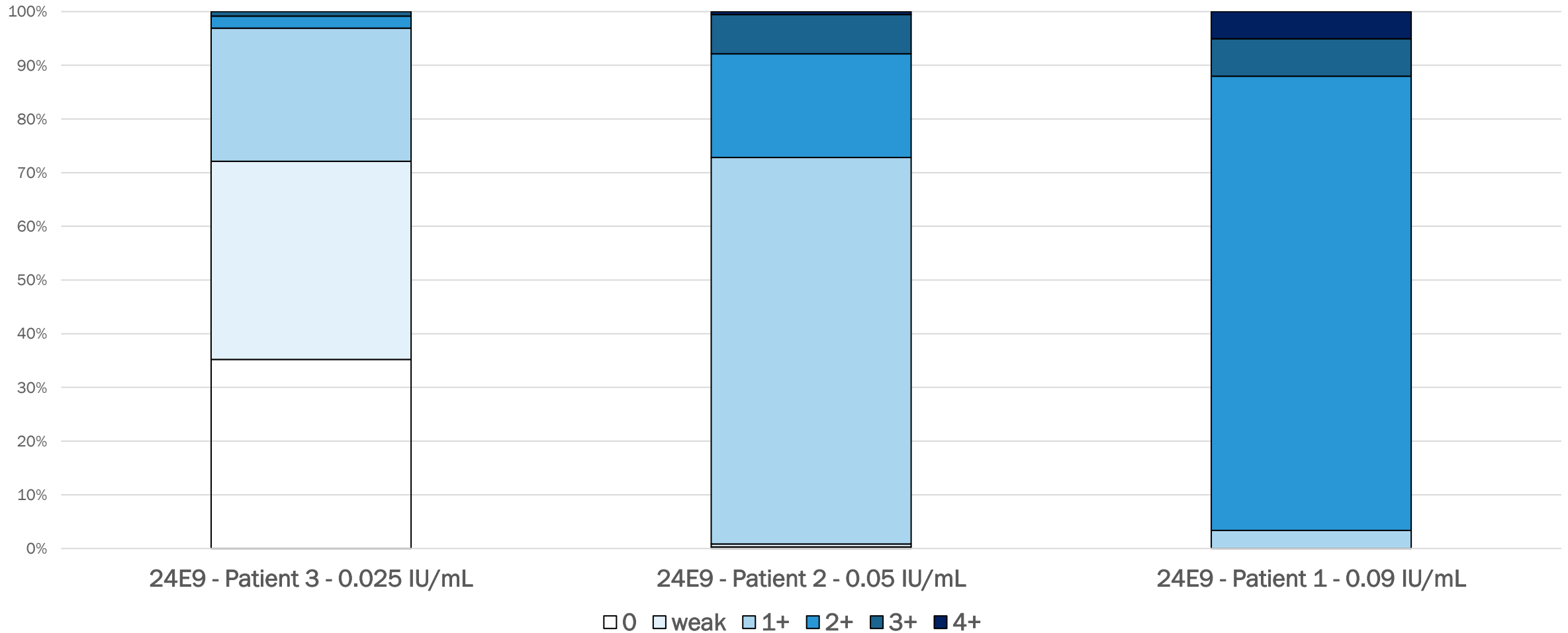
# EQALM anti-D limit of detectability trial

- EQALM = The **E**uropean Organisation for External **Q**uality **A**ssurance Providers in **L**aboratory **M**edicine
- Frenemies of NEQAS
- Not for profit

# EQALM anti-D limit of detectability trial

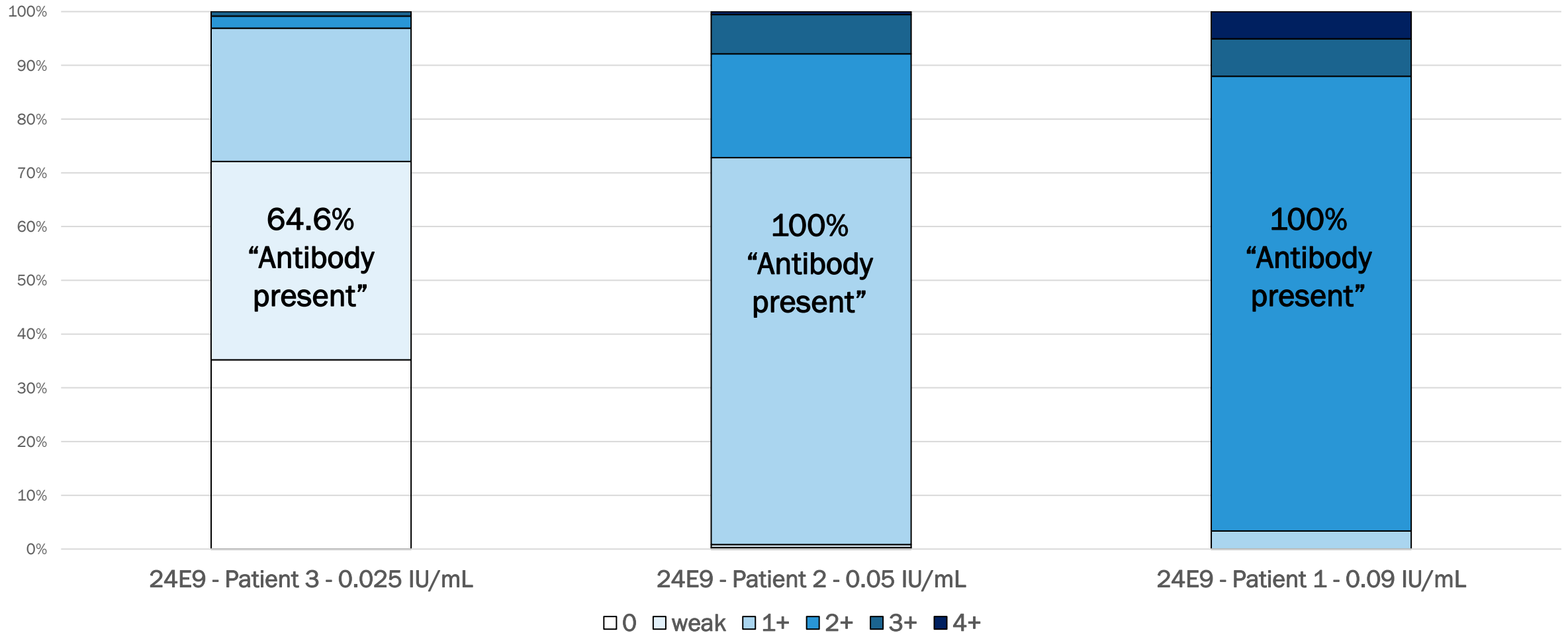
- 24E9
  - Patient 3 = EQALM 3
    - 0.025IU/mL
  - Patient 2 = EQALM 2
    - 0.05IU/mL
  - Patient 1 = UK NEQAS BTLP anti-D standard
    - 0.09IU/mL ish

# EQALM anti-D limit of detectability trial

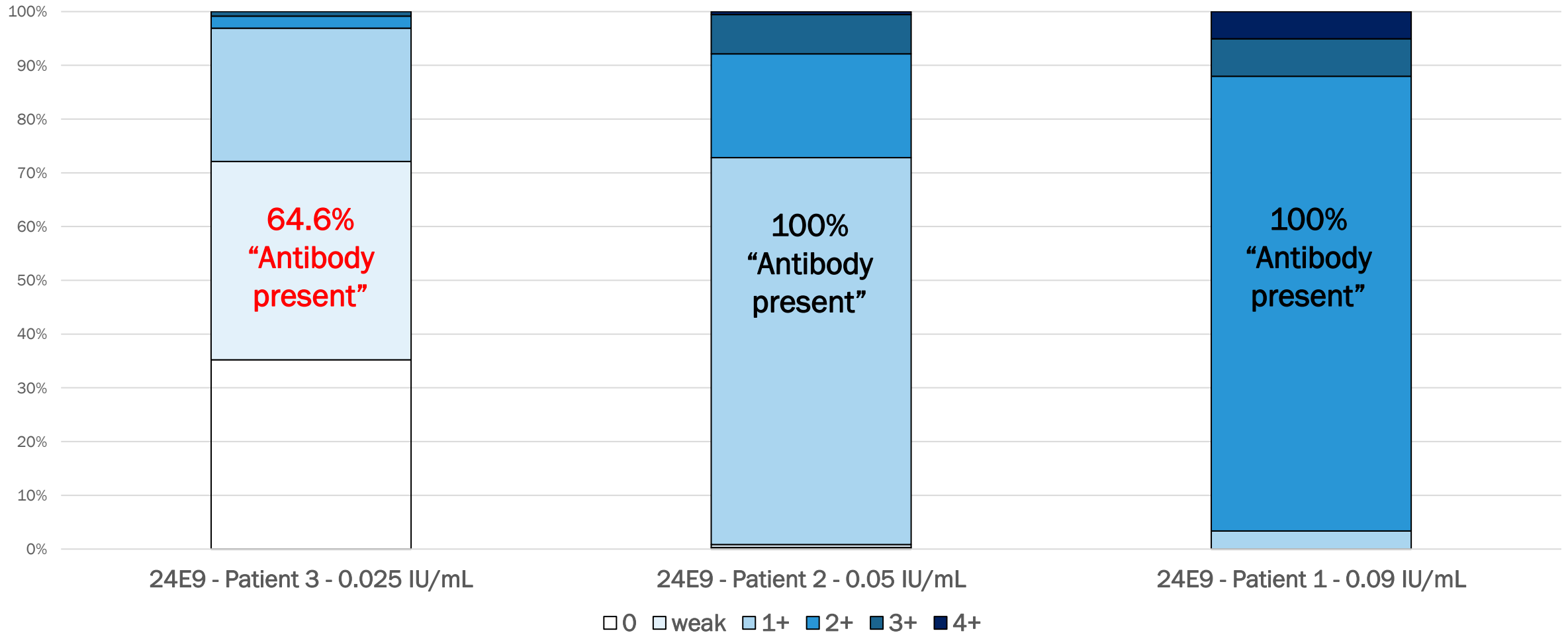




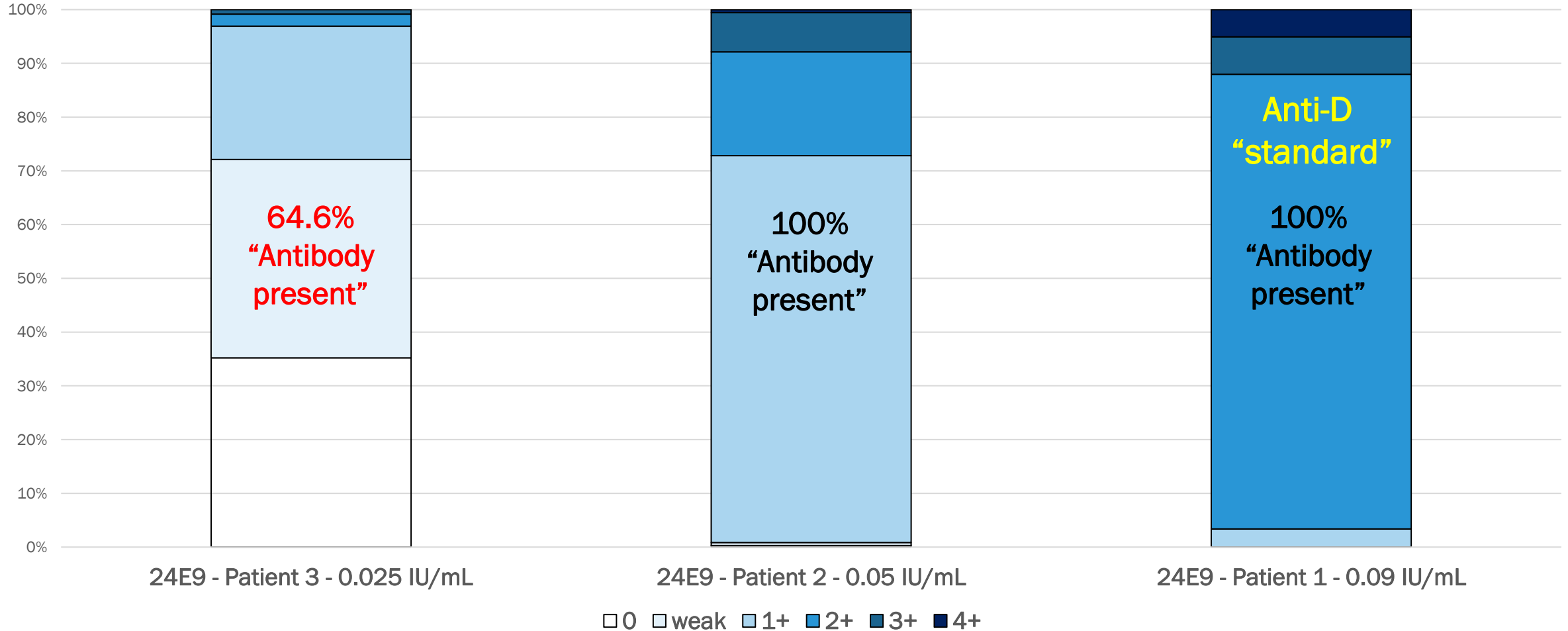
# EQALM anti-D limit of detectability trial



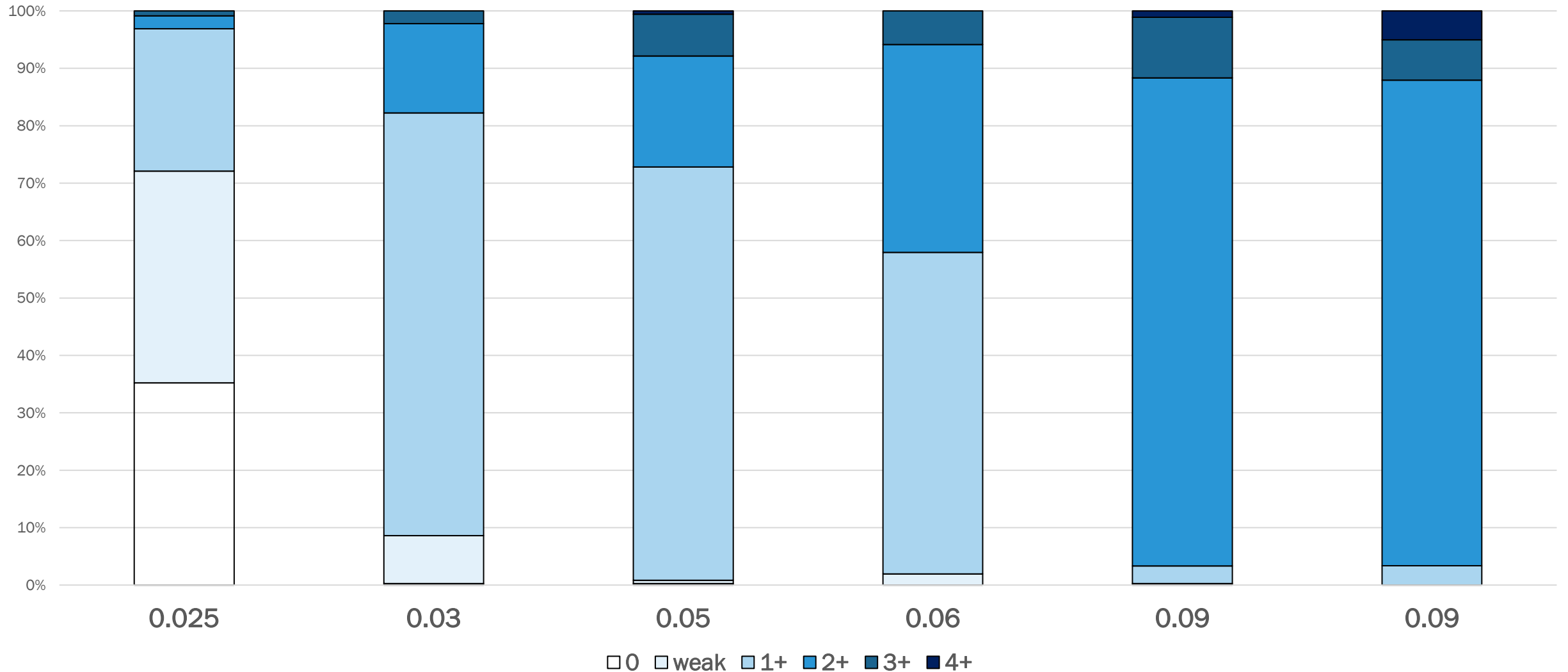
# EQALM anti-D limit of detectability trial



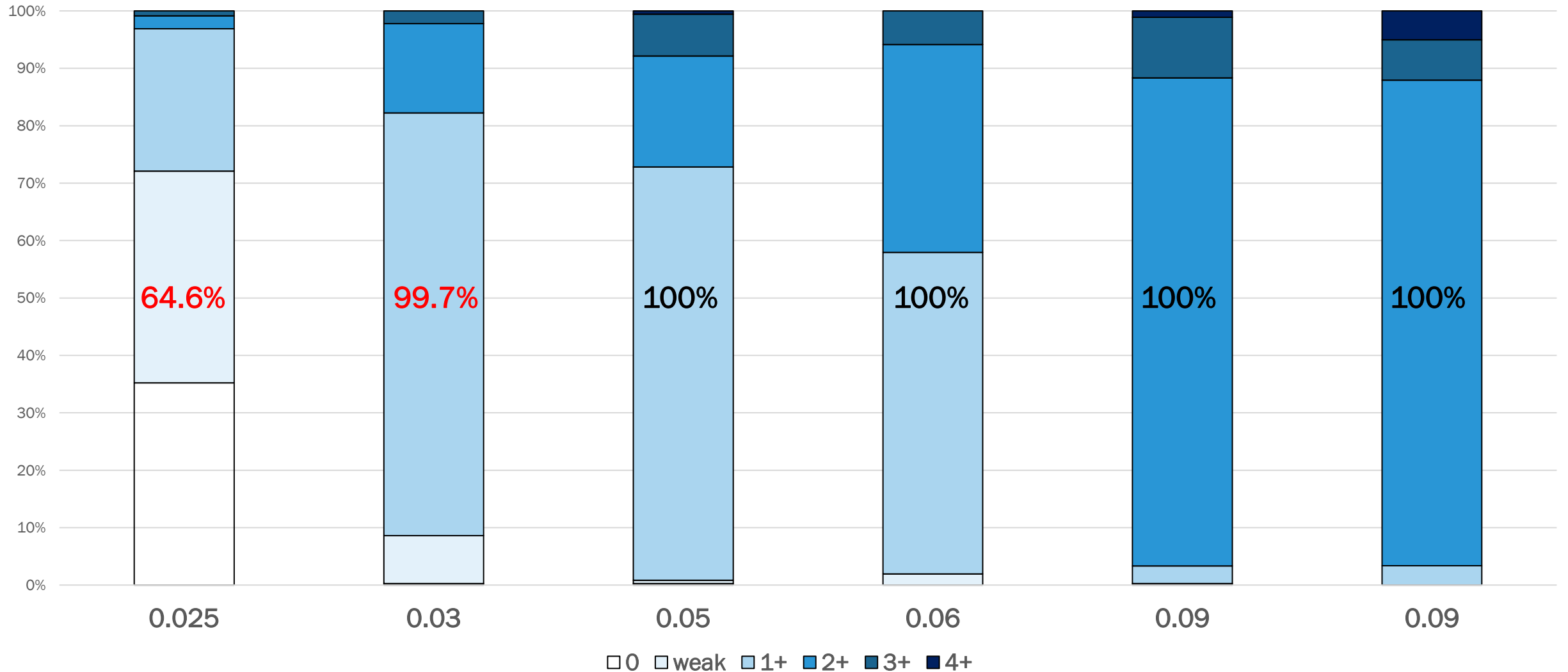
# EQALM anti-D limit of detectability trial



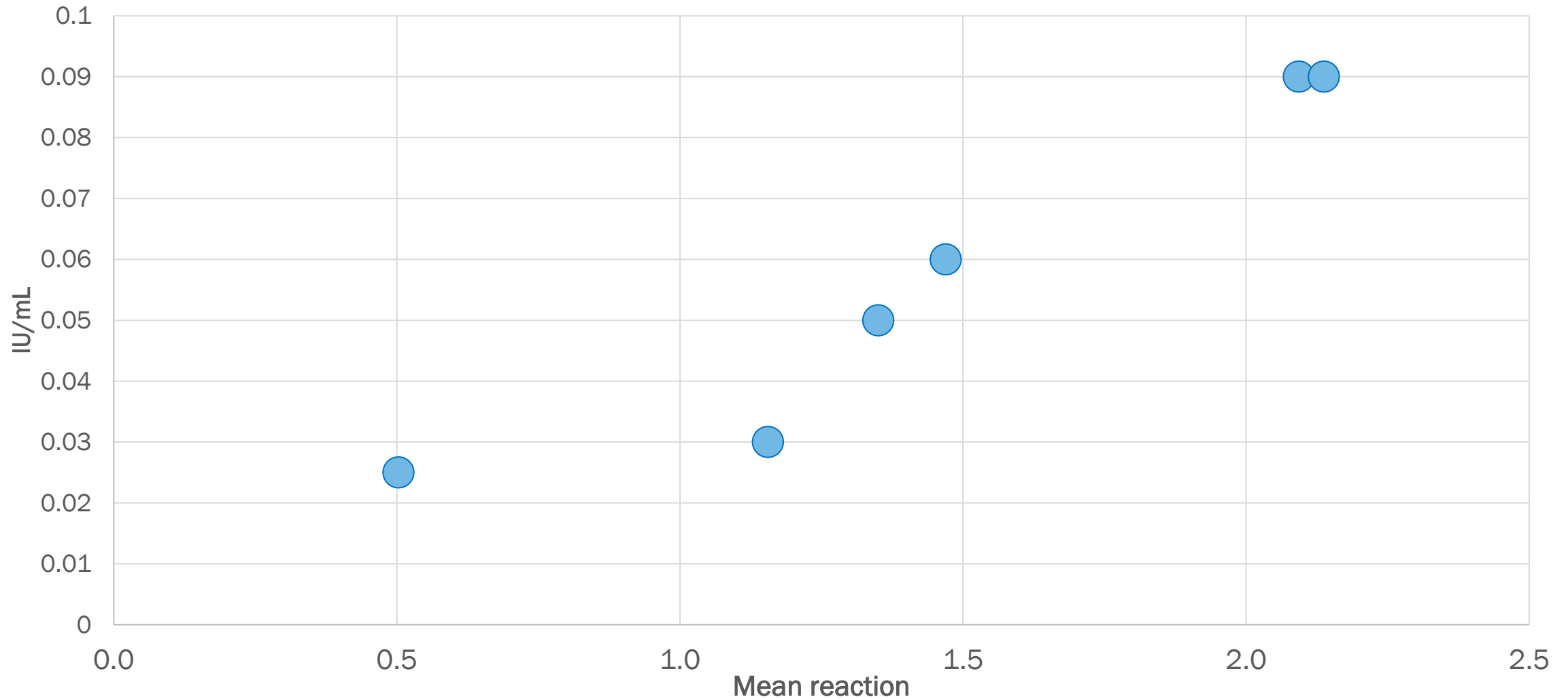
# NEQAS samples with known IU/mL



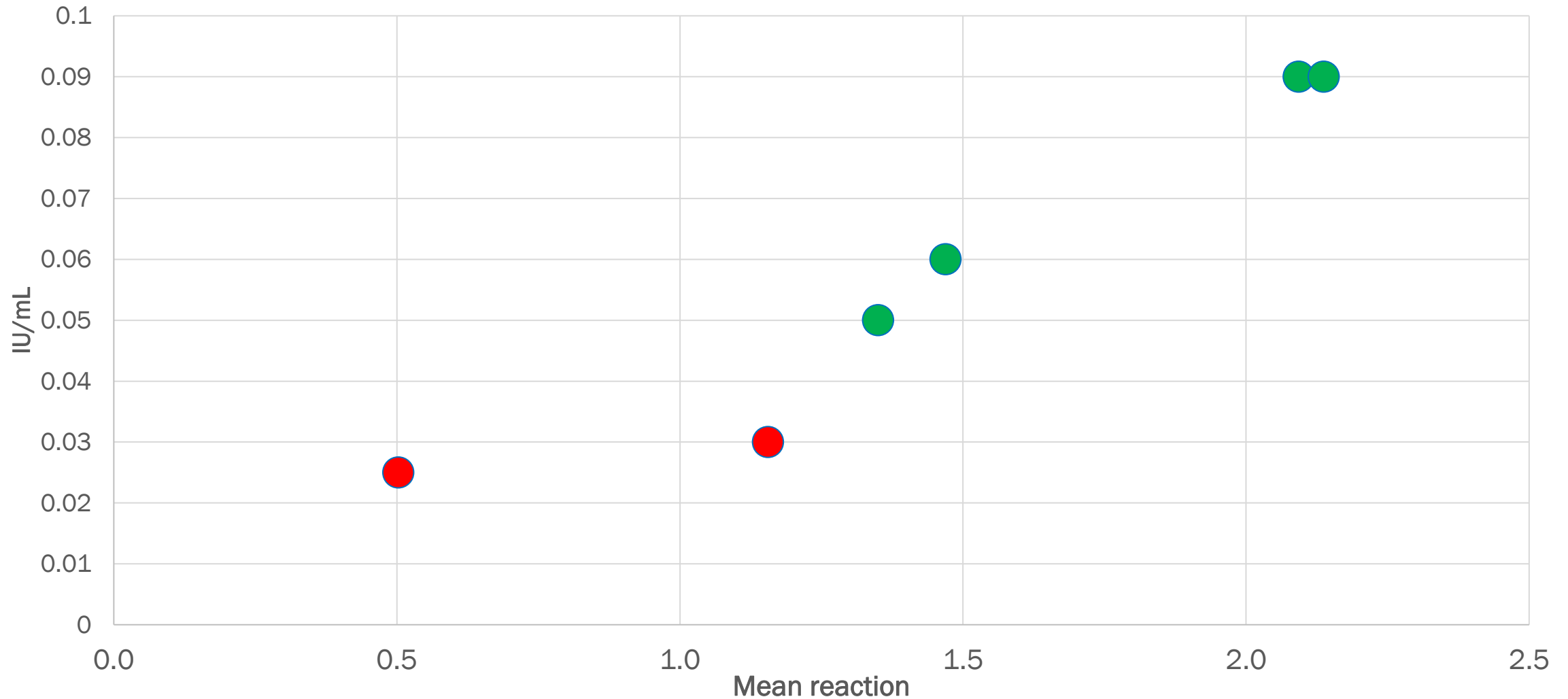
# NEQAS samples with known IU/mL



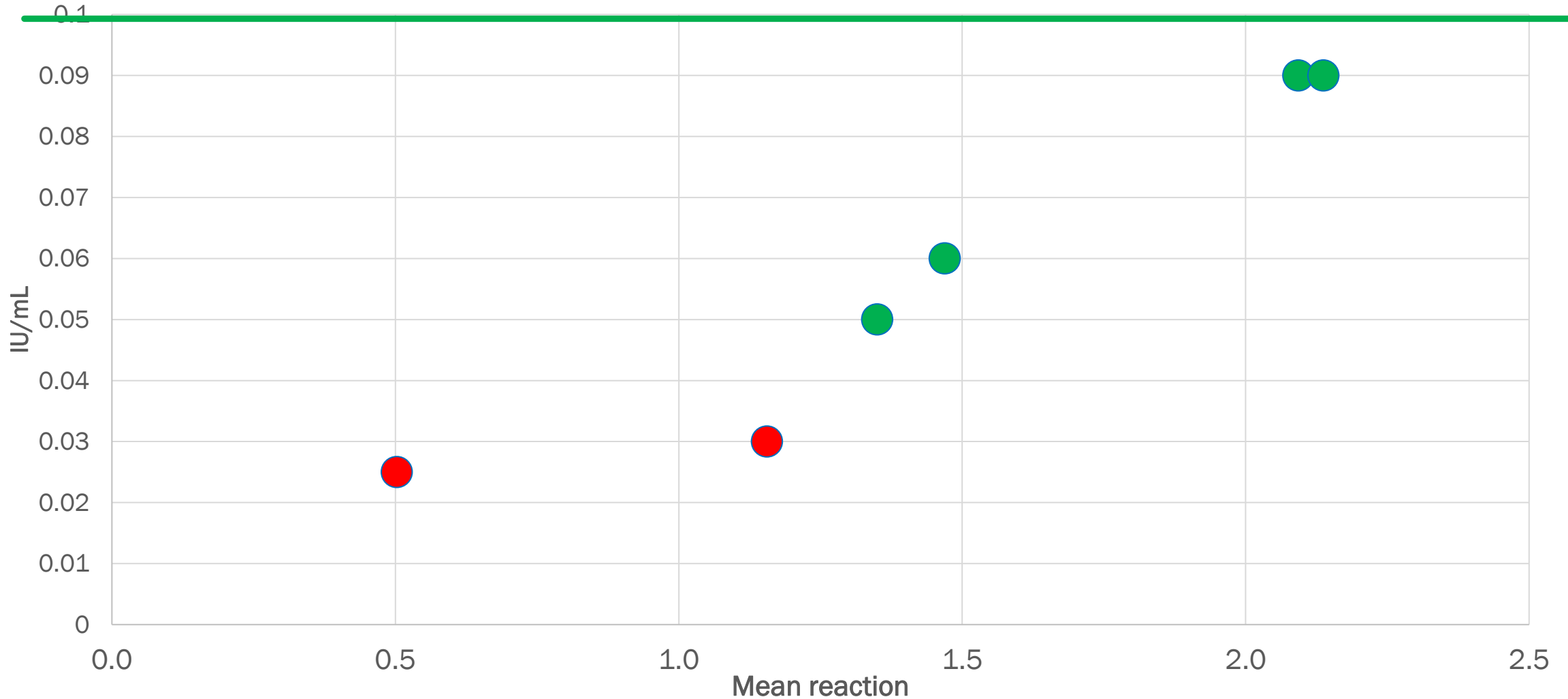
# NEQAS samples with known IU/mL



# NEQAS samples with known IU/mL

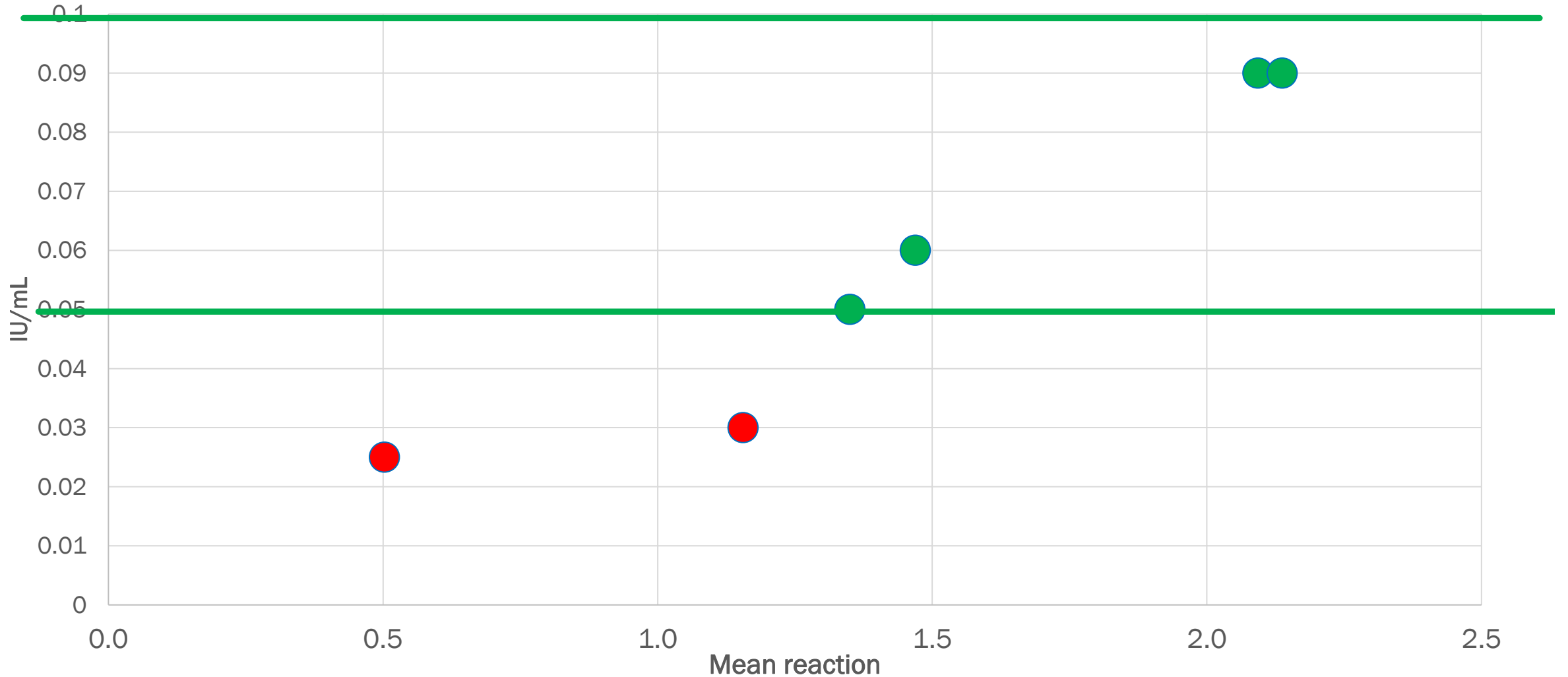


# NEQAS samples with known IU/mL





# NEQAS samples with known IU/mL



## Discussion

- Should we expect to detect very low levels?
- Should  $<0.1$  IU/mL be changed?

# Conclusions

- All UK and RoI labs able to detect the NEQAS D standard
  - 0.09IU/mL
    - In line with BSH guidance
- All also able to detect at 0.05UI/mL
  - Many able to detect a lot lower
- Technology surpassing expectations
  - Nothing wrong with it not detecting very low levels