Health Education England

British Society for Haematology
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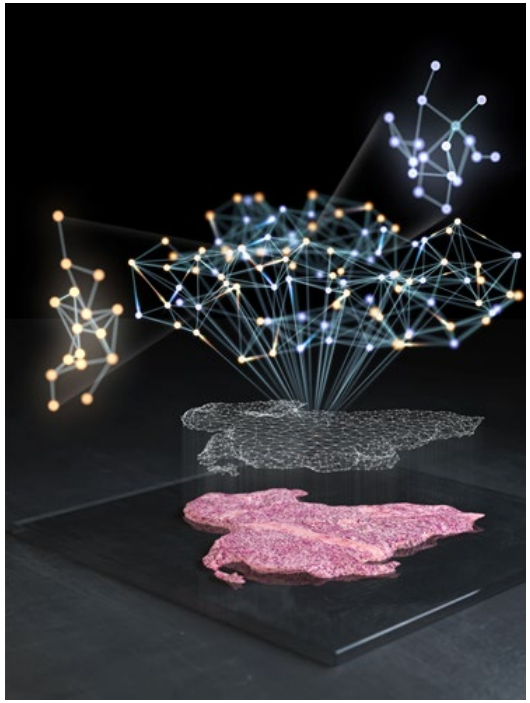
The Royal College of Pathologists
Pathology: the science behind the cure



# The Pathology Portal:

## *harmonising learning for the laboratory workforce of the future*

Authors: Dr Amany Mohamed, Dr Olga Tsiamita, Dr Tanya Freeman & Dr Guy Hannah

**On behalf of the Haematology Editorial Board Subgroup**

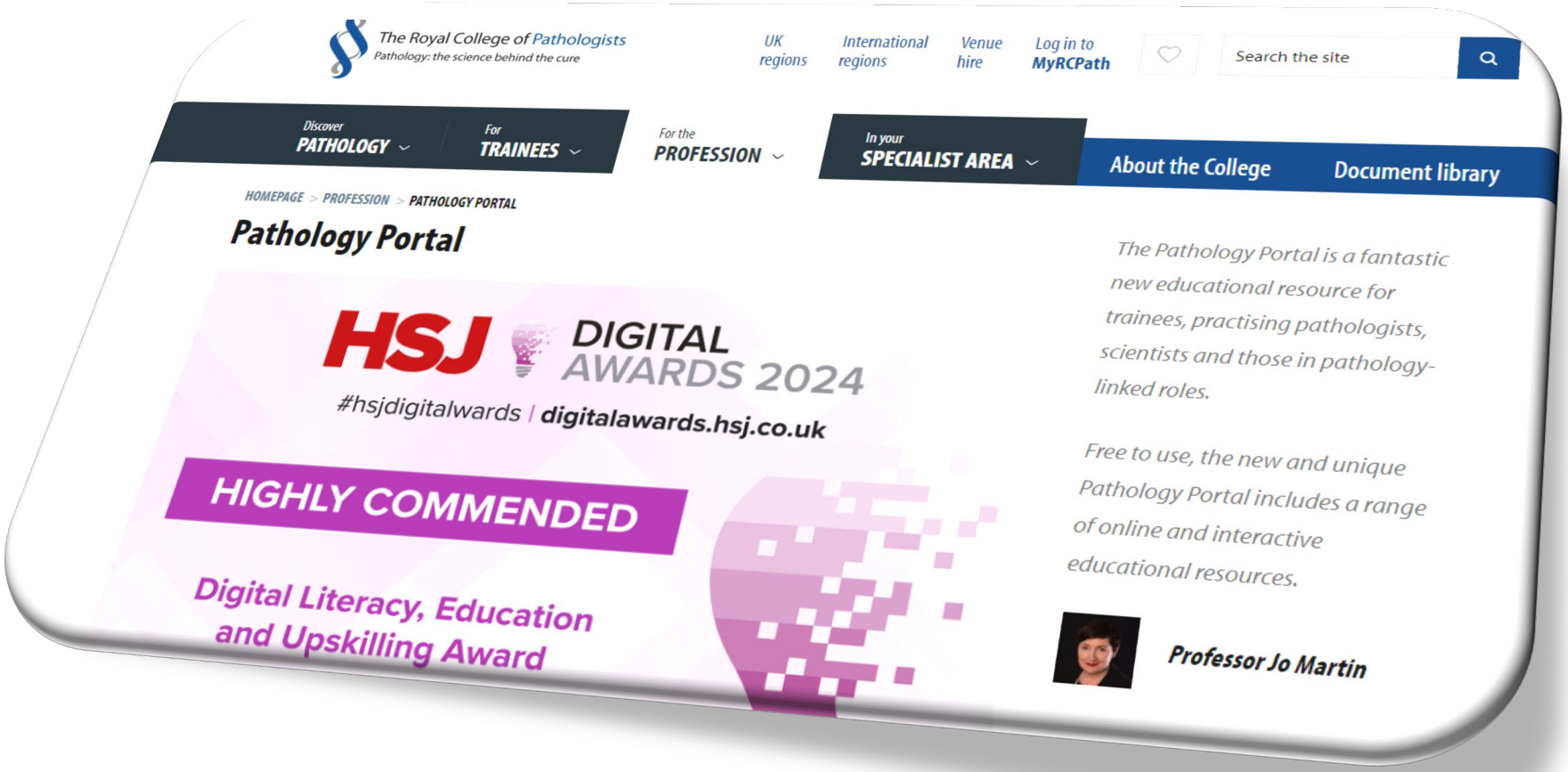
*Image: Tumor environment-associated context learning using graph deep learning. Prof Sunghoon Kwon.* 

# Disclosures

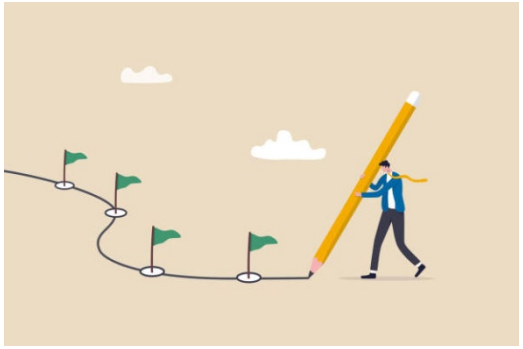
- *The speakers have no relevant conflicts of interest to disclose.*

# Sign up:

https://learninghub.nhs.uk/catalogue/pathologyportal



# Progress updates/Targets



**As of the end of 2024** (vs BSH 2024)

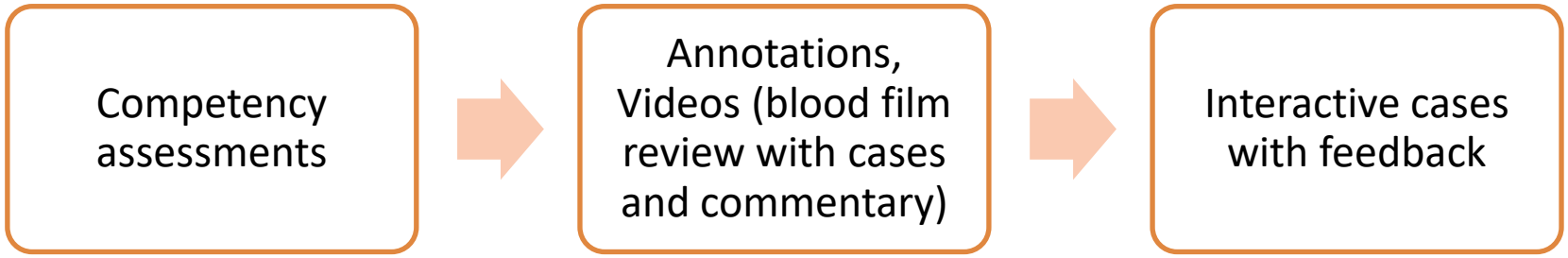
- **4886** (vs 3370) users across the Portal

Haematology section:

- **847** (vs 842) published resources in the morphology section
- launched **7,257** (vs 5740) times

- ✓ Paediatric cases
- ✓ Short and long cases (disclaimer)
- ✓ Annotations
- ✓ Live sessions
- ✓ Organise (can search according to diagnosis or experience or type of module)

# From beginners to maintaining skills




# Case scenario

## Review the FBC and blood film

**A 2-year-old child presents to his GP with pallor and failure to thrive.**

**A Full blood count was performed:**

Hb 74 g/L (110-125 g/L)

MCV 60 fl (70-86)

MCH 15.7 pg (23 – 31.0)

Red blood count 4.71 x 1012/L (3.80 – 5.20)

WCC 6.8 x 109/l (5.0 – 16.0)

Platelets 343 x 109/l (150 - 400)

Neuts 2.0 x 109/l (1.5 - 7.0)

Lymph 3.9 x 109/l (5.0 - 10.0)

https://learninghub.nhs.uk/Resource/53133/Item

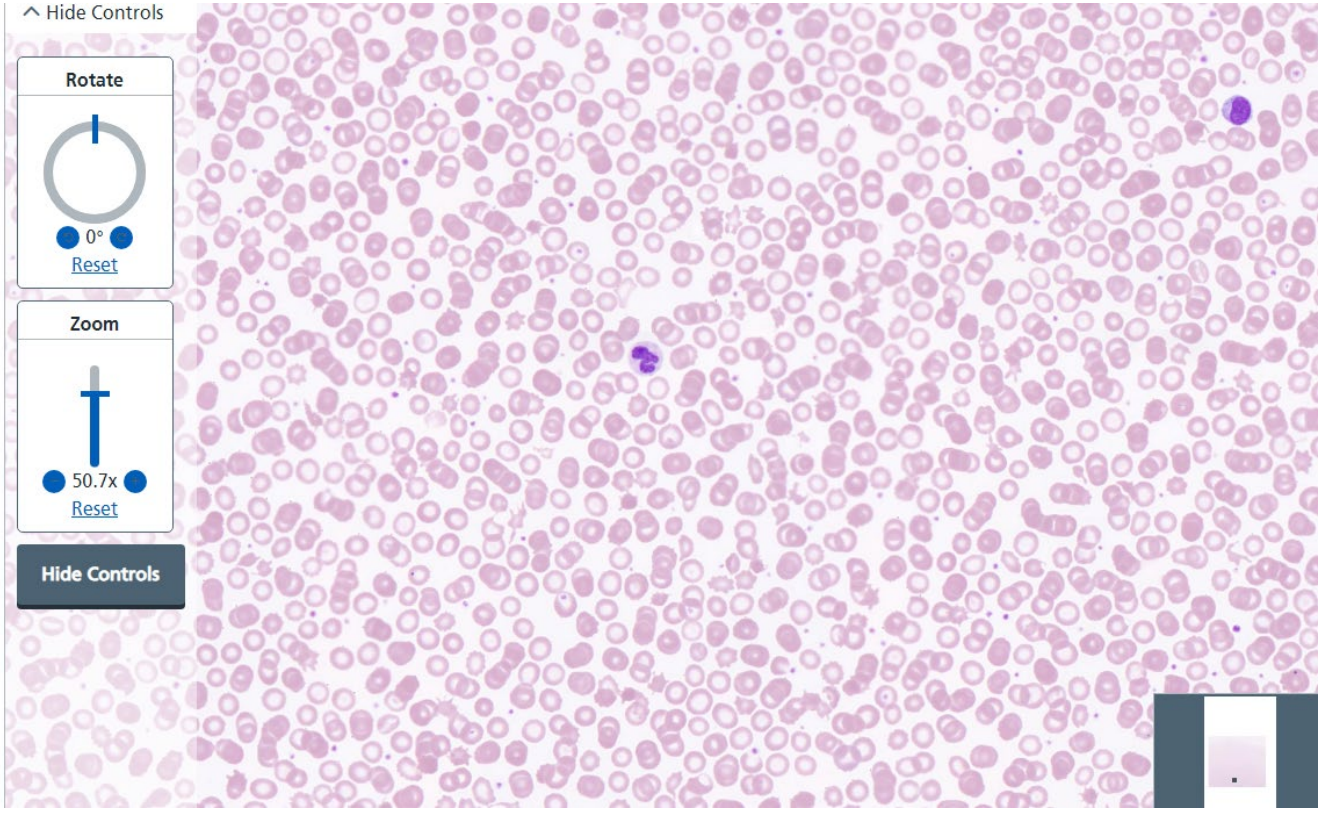
## HPLC result

**A haemoglobinopathy (HPLC) was performed. The results showed:**

Haemoglobin A

Haemoglobin A2 2.1% (1.5 – 3.5)

Haemoglobin F <0.1% (0.5 – 1.5)



# Case feedback

What is the likely diagnosis?

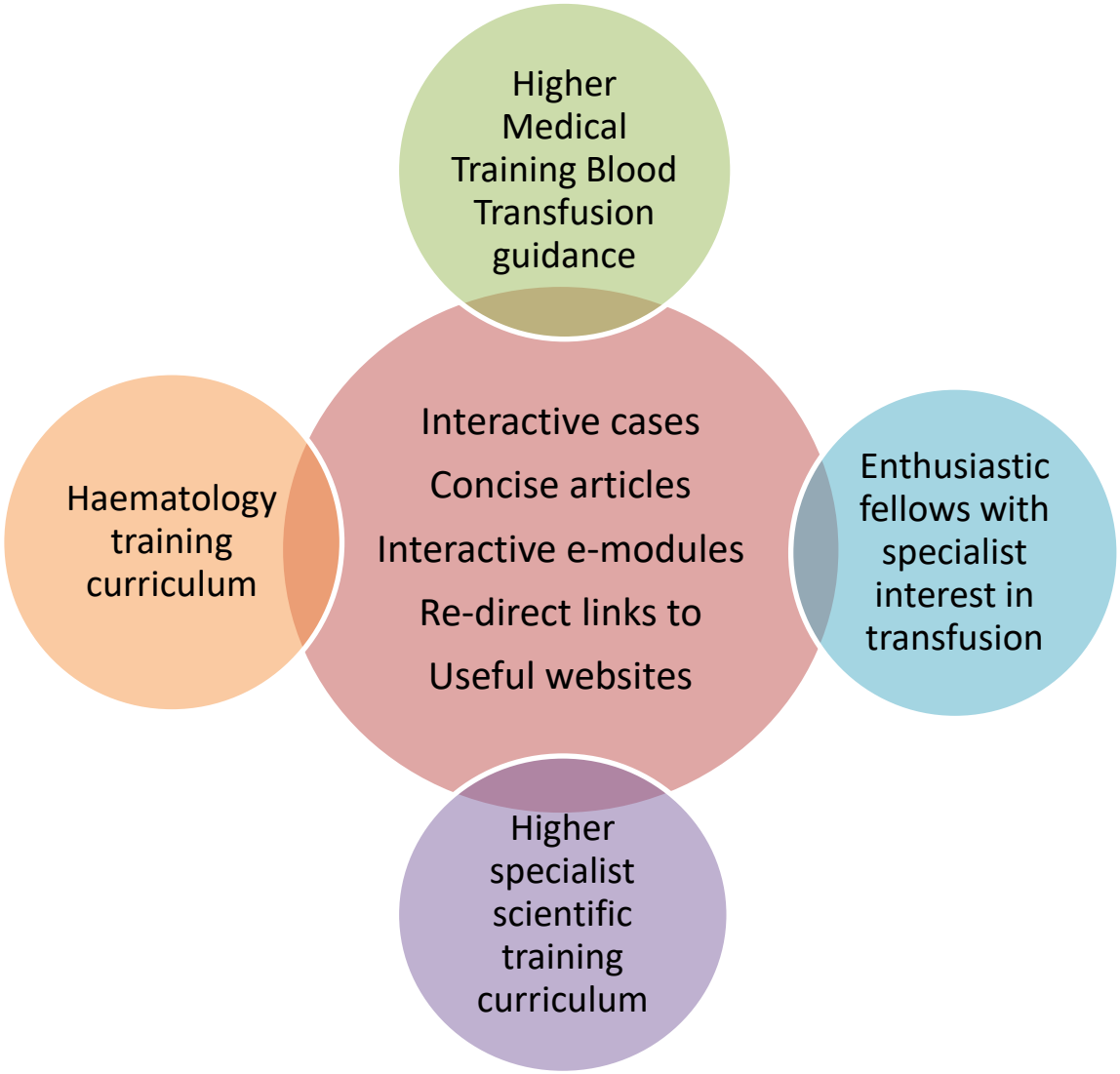
- ✗ Haemolytic Uraemic Syndrome
- ✓ Iron deficiency anaemia and splenectomy
- ✗ Megaloblastic anaemia
- ✗ Severe sepsis
- ✗ Transfusion dependent thalassaemia

## Option 2 is the best answer

There is a microcytic hypochromic anaemia with target cell elliptocytes. The HPLC is normal. This would therefore be most consistent with an iron deficiency anaemia. You can get occasional target cells in iron deficiency. There aren't other hyposplenic features.

There are no fragments or haemolysis in keepign with Haemolytic Uraemic Syndrome. There is no left shift in white cells consistent with severe sepsis. There is no macrocytosis consistent with mega

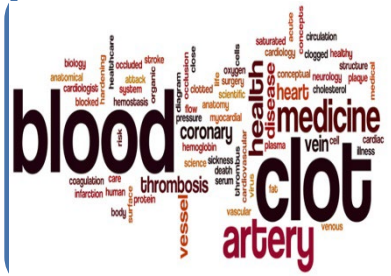
# Transfusion



# Other


## Interactive cases with blood film integration

- HPLC
- Flow cytometry




## Haemostasis and Thrombosis key topics

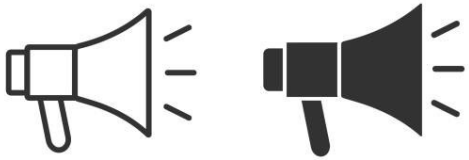
- Clinical cases in question and answer format
- UKHCDO talks recordings (short videos)

## Any good quality relevant resource

- Webinars
- Presentation slides

# Call for trainees & scientists

- We need you! We are looking for keen educators to contribute and expand our library of content. If you have teaching materials or ideas for modules, we would love to collaborate with you, or you can join our haematology editorial team.



# Using the portal to teach live

## My learning

You can use this page to search and filter learning resources you've accessed, download certificates and generate a report of your activity.

▸ Learn how to manage My learning

Download a report of your learning.

Download PDF

### Search within My learning

798 activity results

This week  This month  Last 12 months

▸ Filter results

Filtered by Date: All dates

# Live sessions – why?

*This project aimed to conduct live teaching morphology sessions using the pathology portal platform

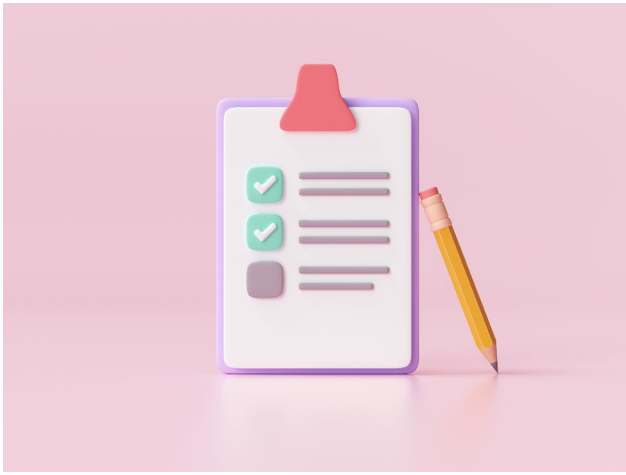
*To assess trainees' confidence and competence in reviewing and reporting blood films.

# Live sessions – how/what?

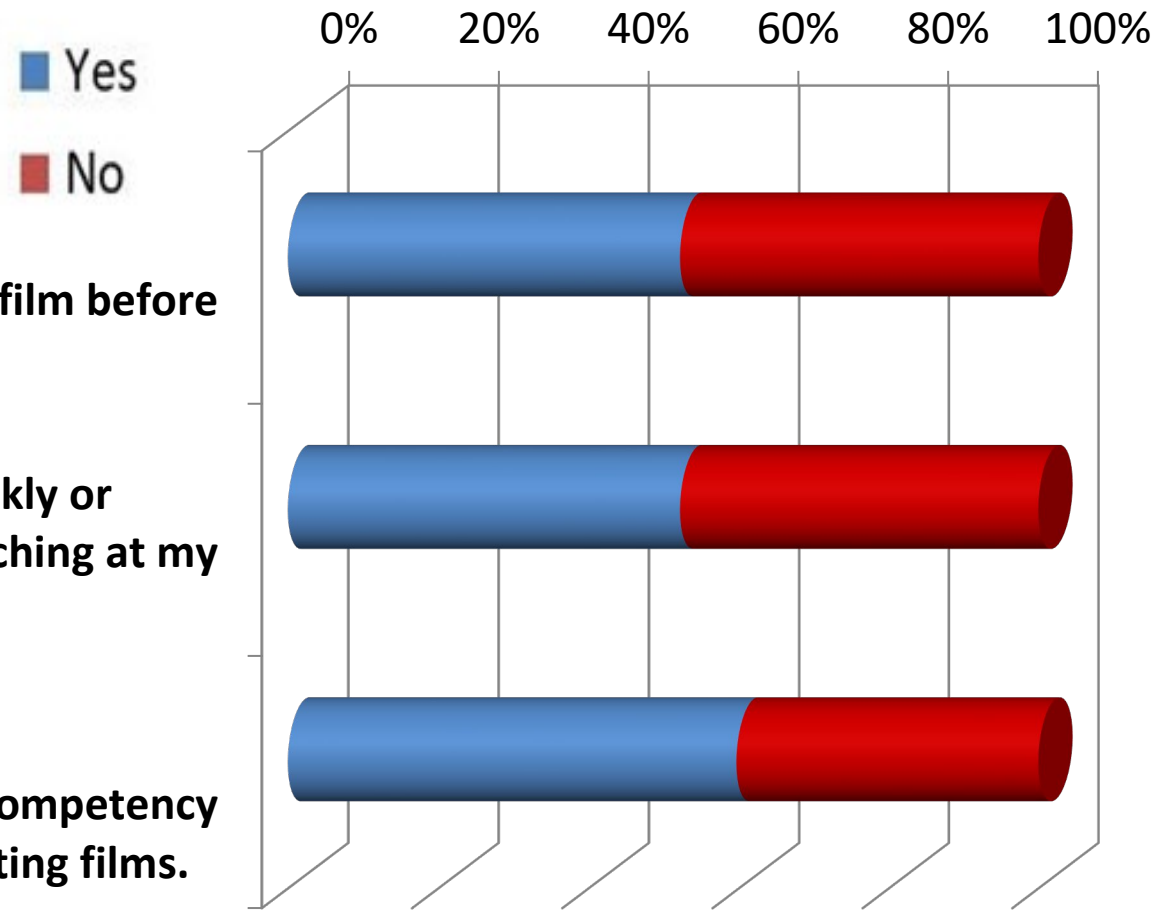
- We devised 4 nationwide weekly live digital morphology sessions using the Pathology Portal materials targeted at ST3 trainees.

- Invites to sign-up were sent to all haematology trainees via the JRCPTB

- Pre- and post-course questionnaires to participants



# Pre-course questionnaire
# **67 responses!**

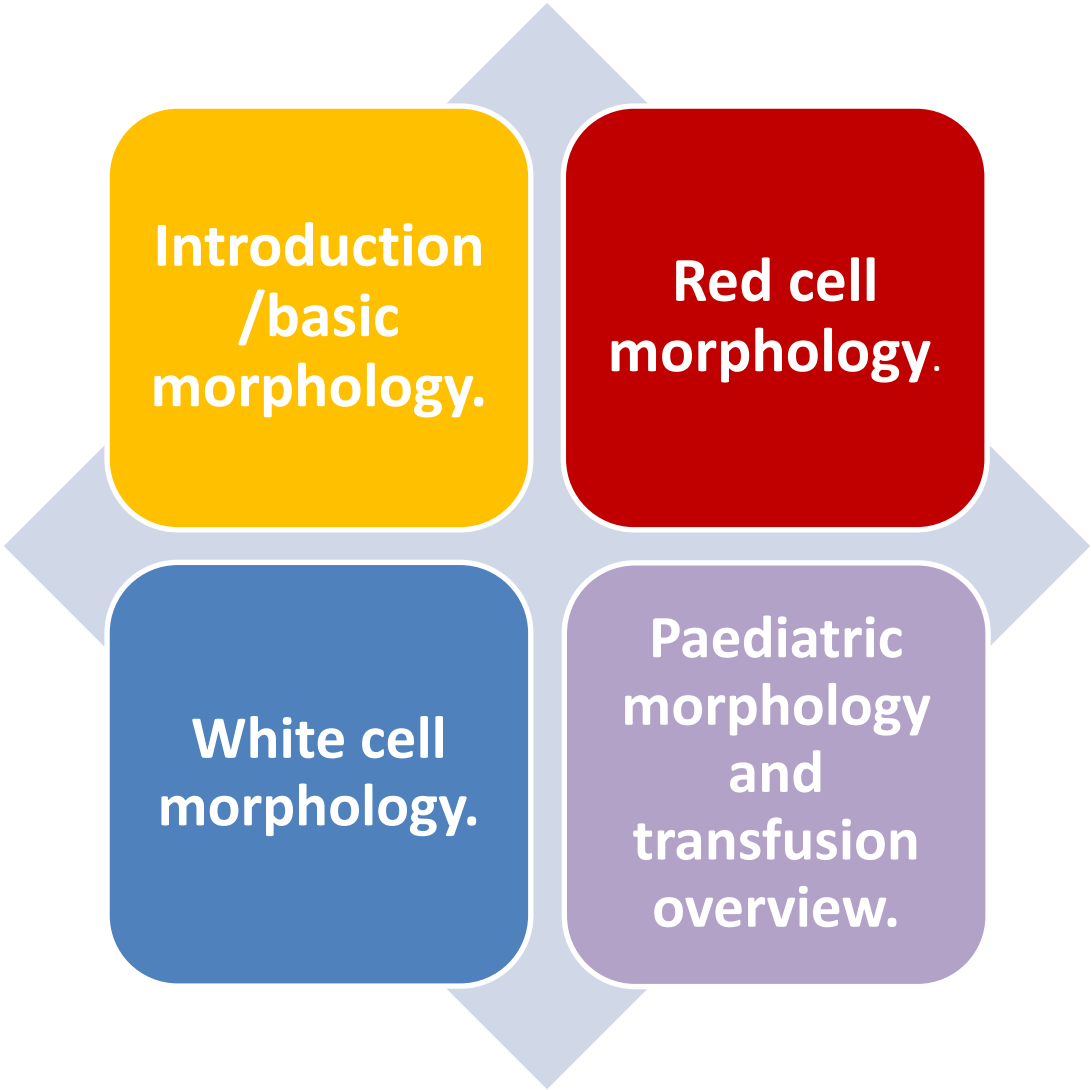



**I have reviewed a blood film before starting ST3.**

**I was offered regular weekly or monthly morphology teaching at my workplace.**

**I was offered structural competency assessment before reporting films.**

# Sessions conducted



# Live sessions-feedback

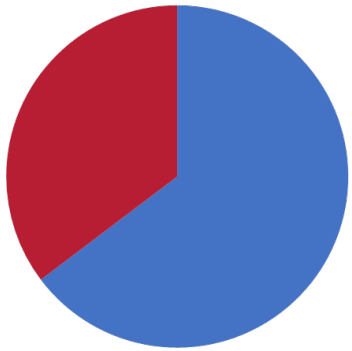
- Mean attendance per session was 56 participants.

***Feedback on quality***

Sessions: 4.75/5

Speakers 4.65/5

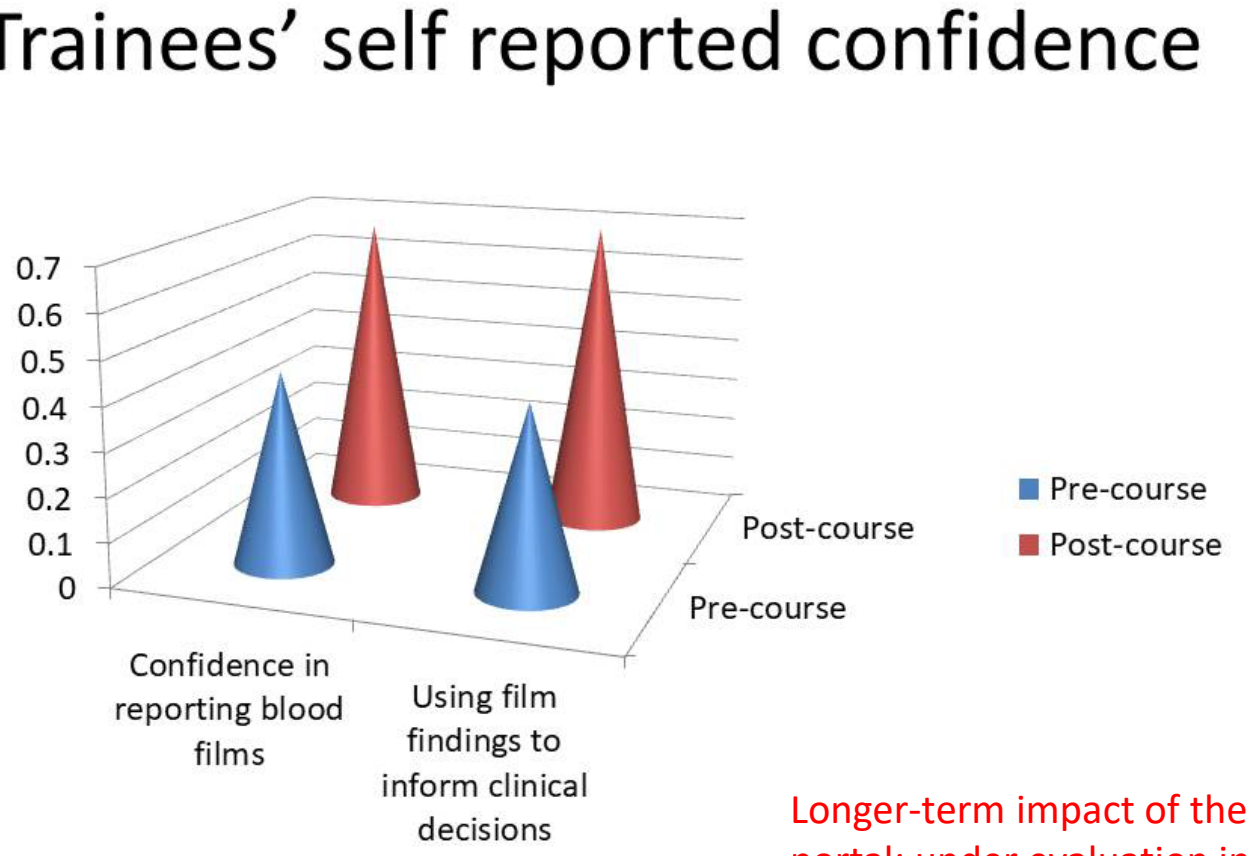
***64.7%of trainees who accessed the Portal found self-directed learning useful (4/5) in improving their morphology skills.***



Impact of live sessions

# Post-course survey

## *18 responses!*




Longer-term impact of the pathology portal: under evaluation in currently circulating survey. Does using the Portal increase trainees' confidence?

# Conclusions

Digital resources can lead to harmonisation & greater inter-observer concordance.

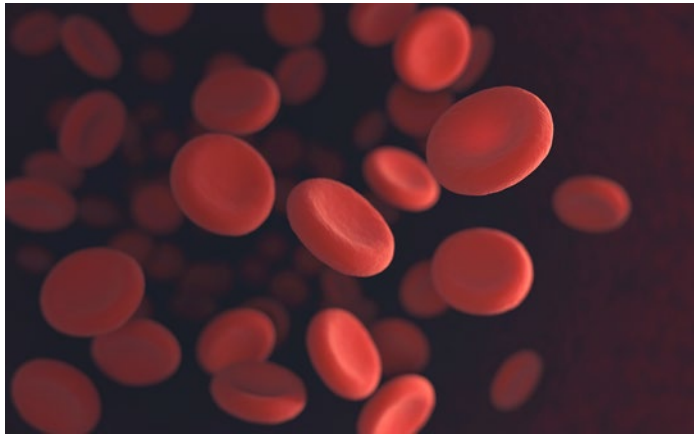
Our pre-course survey highlighted the need for structured& regular morphology teaching.

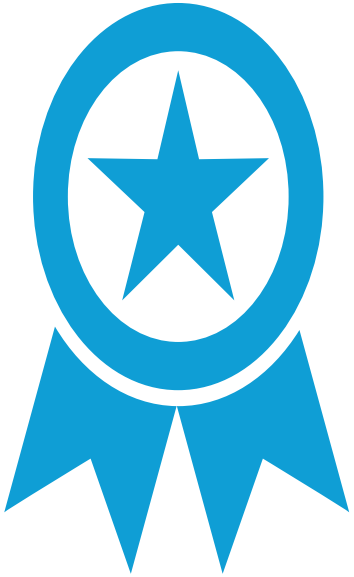
Virtual teaching aided by the portal was well perceived and led to subjective improvement in morphology skills.

**However,** digital morphology is not a panacea; optical microscopy remains the gold standard for morphological diagnosis and self-directed learning should not replace local skill-sharing and team-bonding.

# Future sessions

We recommend running similar sessions annually with invitation to expand to biomedical scientists and NHS staff outside specialty training grades





# Learners & Educators

- **Sign up:** https://learninghub.nhs.uk/catalogue/pathologyportal

# For contributors

Come and join us!

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# Acknowledgements


- We would like to thank the Royal College of Pathologists, the Pathology Portal Haematology editorial team, Dr Jesal Patel, Dr Matthew Poynton and the transfusion editorial team, all Pathology Portal Contributors and Mr Luke Thrower for their support.

# Thank you and Questions?