The Royal College of Pathologists
Pathology: the science behind the cure

**Part 1 examination**

**Haematology Clinical Scientist: First paper**

**Tuesday 24 September 2019**

***Candidates must answer all FOUR essays and all carry equal weight***

**Time allowed: Three hours**

1. Your pathology department has been designated as an Essential Services Laboratory/Local Genetics Laboratory (spoke laboratory) and all specialised testing (approximately 50% of the current workload) will be carried out at the Core/Hub laboratory (Genomics Laboratory Hub (GLH)) which is situated at the University Teaching hospital in a city 50 miles distant.

   Discuss the factors to consider in order to continue providing an excellent service for the local population.

2. Discuss the impact that monoclonal antibody therapy used for haematological disorders may have on laboratory testing, residual disease monitoring and/or response assessment. Provide examples to support your answer.

3. Discuss the laboratory diagnostic work up for a case of persistent eosinophilia.

4. Contrast the pathophysiology of the thrombotic microangiopathies. How does their diagnosis and management exemplify a multidisciplinary approach in pathology?

The Royal College of Pathologists
Pathology: the science behind the cure

# Part 1 examination

## Haematology: First paper

## Tuesday 25 September 2018

## Candidates must answer all questions. Each question is worth a total of 25 marks.

## Time allowed: 3 hours

1.Discuss current developments in haemophilia A and B therapy and highlight in your answer any perceived benefits and limitations to these approaches.

2.The investigation of anaemia in a 40 year old male: Discuss the classification of anaemias and appropriate diagnostic investigations and therapy.

3. Monoclonal B-cell lymphocytosis : diagnosis, natural history, and risk stratification.

4.A novel assay for analyte x has been developed: describe how you would validate this assay for diagnostic use and what would you do in the absence of an EQA scheme?

The Royal College of Pathologists
Pathology: the science behind the cure

# Part 1 examination

## Haematology Clinical Science: First paper

## Tuesday 26th September 2017

## *Candidates must answer ALL questions*

## Time allowed: Three hours

### Question 1: Management

Discuss the advantages and the pitfalls of setting up an integrated diagnostic service for haematological malignancies.

### Question 2: Haem-Oncology

Discuss, using chronic myeloid leukaemia as an example, how the molecular monitoring of acquired resistance / disease relapse, can aid patient management?

### Question 3: General Haematology

Describe the pathophysiology and the molecular basis of Haemochromatosis. Discuss clinical management and relevance of the most common variants.

### Question 4: Haemostasis and Thrombosis

A 22 year old student is referred to an outpatient clinic several weeks after presenting to A&E with prolonged severe epistaxis (several episodes over a 24 hour period each lasting in excess of 30 mins). This has happened before, requiring packing and cauterisation. She reports a personal history of menorrhagia since her early teens and family history of unexplained bruising (investigated for Von WIllebrands disease with no significant findings). She has had no other significant haemostatic challenges. Her out-patient FBC was unremarkable apart from a thrombocytopenia (50 X $10^9$/L) and PT and APTT were both within the normal range.

Briefly outline appropriate investigations and potential diagnoses, and describe how you would propose to investigate the cause of this apparent bleeding disorder.