**BSc Practical: White Cell Morphology** - Thursday 4 October 2012

**Case 12** 30 year-old woman. **WBC 92 x 109/l**, **Hb 10.5 g/dl**, MCV 93 fl, platelet count 46 x 109/l. Immunophenotype (gating on CD45-moderate cells in blast window) was: CD10 99%++, CD19 98%++, CD20 16%+/-, CD79a 99%+, cCD22 99%+cμ 19% +/-, CD2 0%, CD7 0%, cCD3 0%, CD13 0%, CD33 96%, CD15 0%, CD117 0%, HLA-DR 98%++, MPO 0%, lysozyme 0%, TdT 99%+, CD34 87%. The karyotype was 46,XX, add(16)(p13),add(16)(q24),add(21)(p11)[3]/46,XX[7]. At a subsequent relapse a proportion of the blast cells also expressed MPO and lysozyme.

**Case 13** Adult male. **WBC 76.5 x 109/l**, **Hb 8.3 g/dl**, MCV 91 fl, **platelet count 91 x 109/l**. Immunophenotype: expression of CD13 (weak), CD14, CD15, CD17 (weak), CD33, CD34, CD56 and CD64. Cytogenetic analysis: del(7p).

**Case 14** 81-year-old man. **WBC 75.1 x 109/l**, Hb 13.5 g/dl, MCV 95 fl, platelet count 192 x 109/l.

**Case 17**. 15-year-old West African boy.

History of weight loss, tiredness and epistaxis for 3 months and abdominal fullness for 6 weeks. Spleen palpable 18 cm below left costal margin. **WBC 274 x 109/l**, **Hb 8.4 g/dl**, MCV 78 fl, platelet count 393 x 109/l.