Case-Based Questions (please see page 3 for answers)

1. “Anaplastic” morphology in retinoblastoma is a feature seen predominantly with
   a. EGFR amplification
   b. PTEN deletion
   c. MYCN amplification
   d. DICER1 mutations
   e. C19 gains

2. Which of the following special stains are helpful in the evaluation of granular corneal dystrophy?
   a. Congo Red
   b. Masson Trichrome
   c. Luxol fast blue
   d. Gram stain
   e. Alizarin red

3. The most common lymphoma of the ocular adnexa is
   a. Anaplastic large T-cell lymphoma
   b. Mantle lymphoma
   c. Hodgkin lymphoma
   d. Extranodal marginal zone B-cell lymphoma
   e. Large B-cell lymphoma
Scroll to Page 3 for Answers
Question 1: Correct answer and rationale: c. MYCN. A subset of retinoblastomas lack RB1 loss and have other alterations including MYCN amplification, which may be associated with histologic anaplasia in the form of nuclear enlargement and macronucleoli.

Question 2: Correct answer and rationale: b. Masson trichrome. The stromal deposits of granular dystrophy show intense fuchsinophilia with Masson trichrome.

Question 3: Correct answer and rationale: d. Extranodal marginal zone B-cell lymphoma. In contrast, large B-cell lymphoma is the predominant type of intraocular lymphoma.