An unsatisfactory cytology result is reported when there are insufficient cells for the cytopathologist to properly evaluate the specimen. This occurs in approximately 2% of cytologic samples. A number of factors can contribute to this outcome, including atrophy, poor or improper collection technique, obscuring inflammation, poor slide preparation, presence of blood, excessive lubricant in the specimen, and increased thickness of the smear.

When specimen results are reported as unsatisfactory, the 2019 management guidelines recommend repeating age-based screening in 2-4 months (Figure 1). A negative HPV test obtained in conjunction with unsatisfactory cytology is should not be considered a valid result. In this scenario, the recommendation is to repeat both the cytology and HPV test in 2-4 months. Colposcopy should be performed if the subsequent cytology result is again unsatisfactory.

Overall, these recommendations are unchanged from the 2012 management guidelines.
Figure 1. Management of unsatisfactory cytology (adapted from Figure 5 of Perkins et al, 2019 ASCCP Risk-Based Management Consensus Guidelines for Abnormal Cervical Cancer Screening Tests and Cancer Precursors).

This topic will likely become increasingly less relevant with more widespread adoption of primary HPV testing over time.