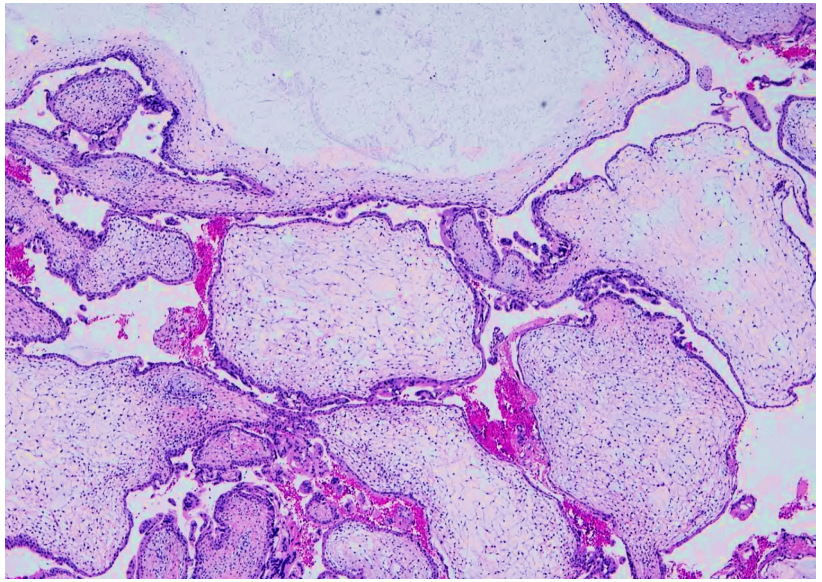
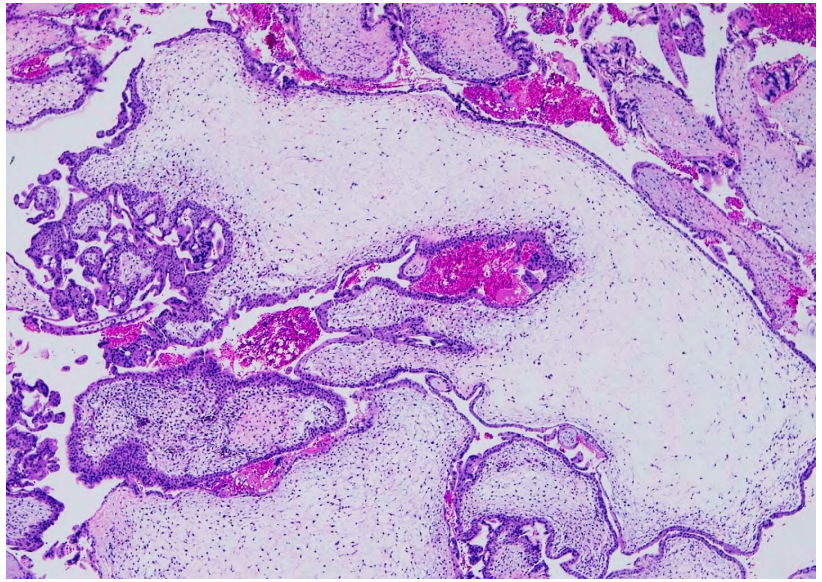
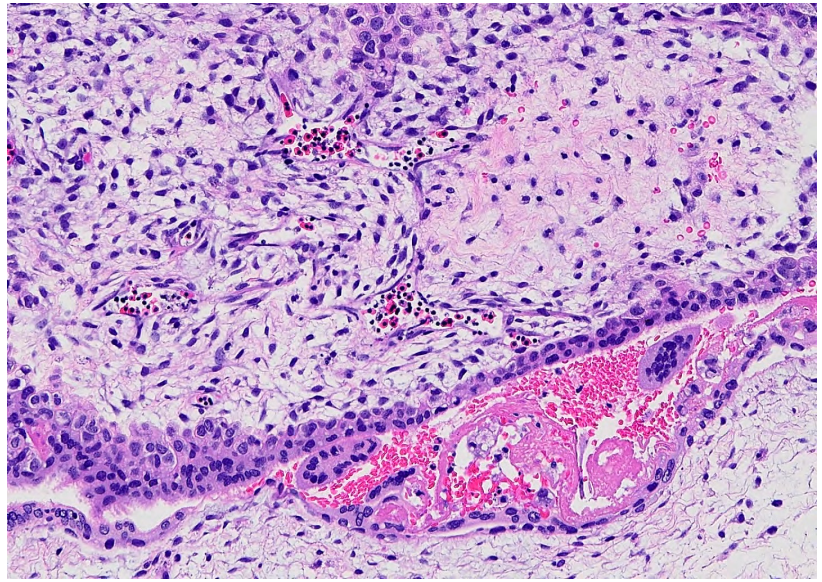
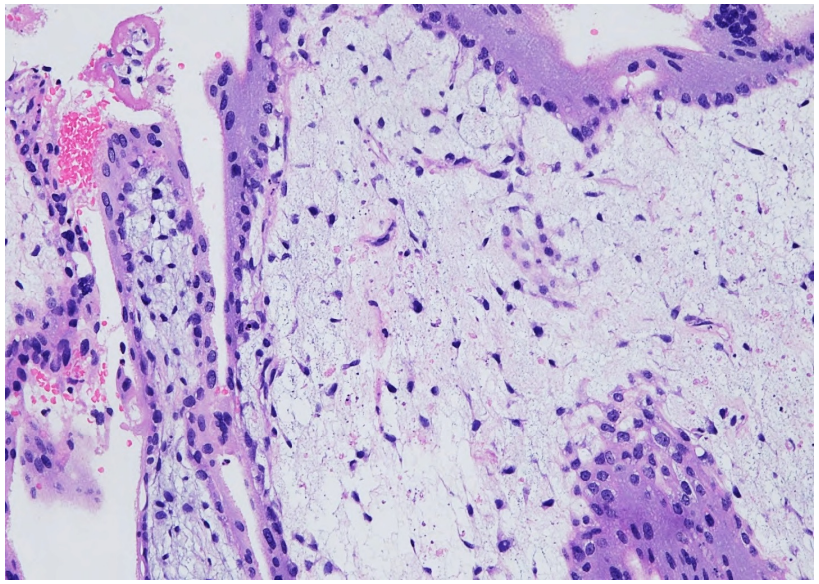
Where Knowledge is Created and Shared
Yale Pathology

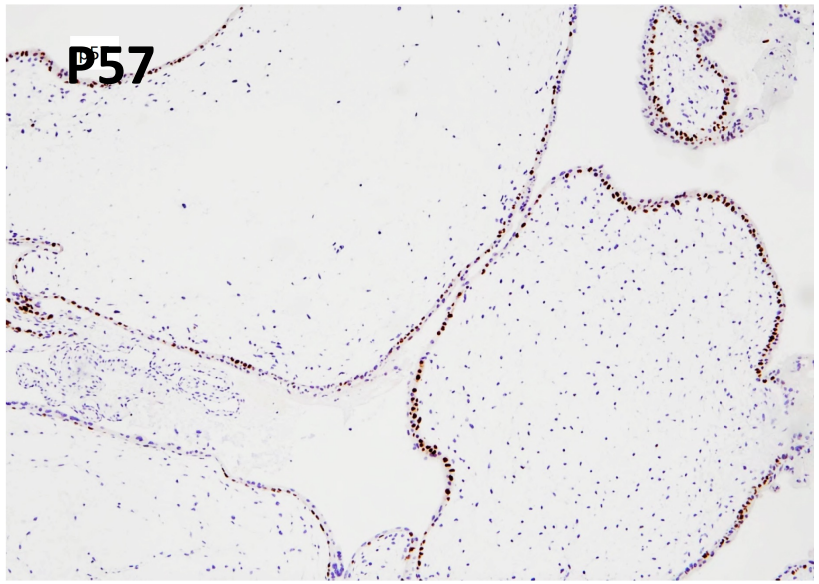
37-year-old woman presented with missed abortion.

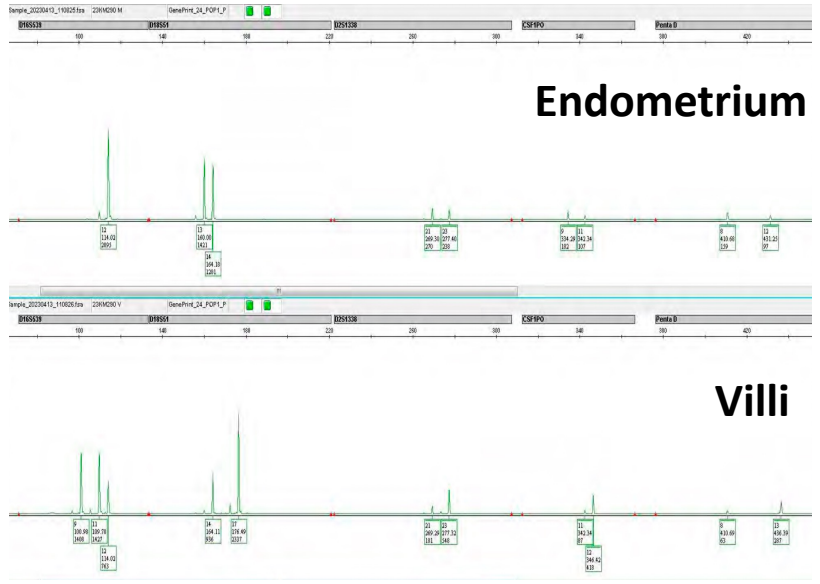






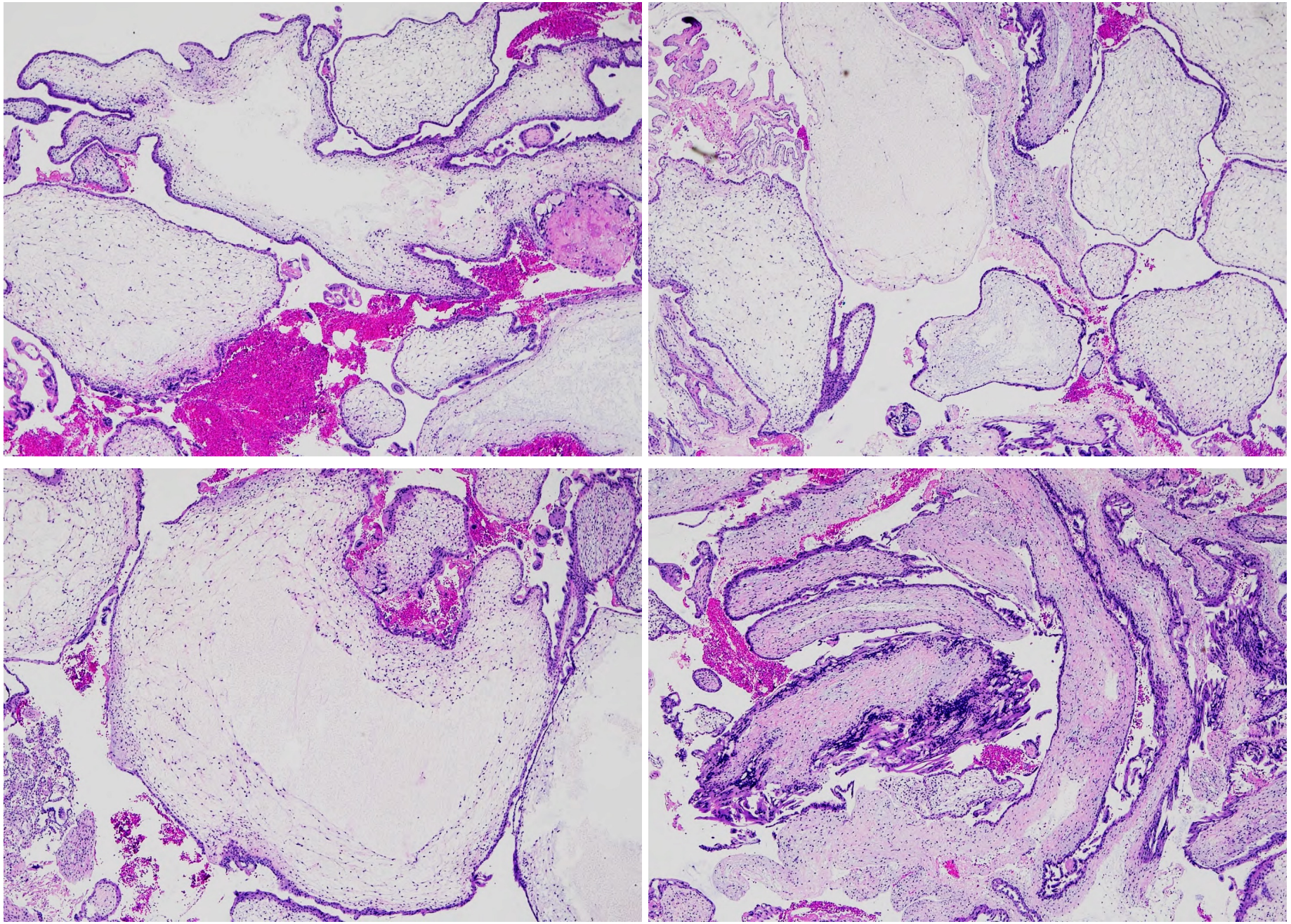



P57

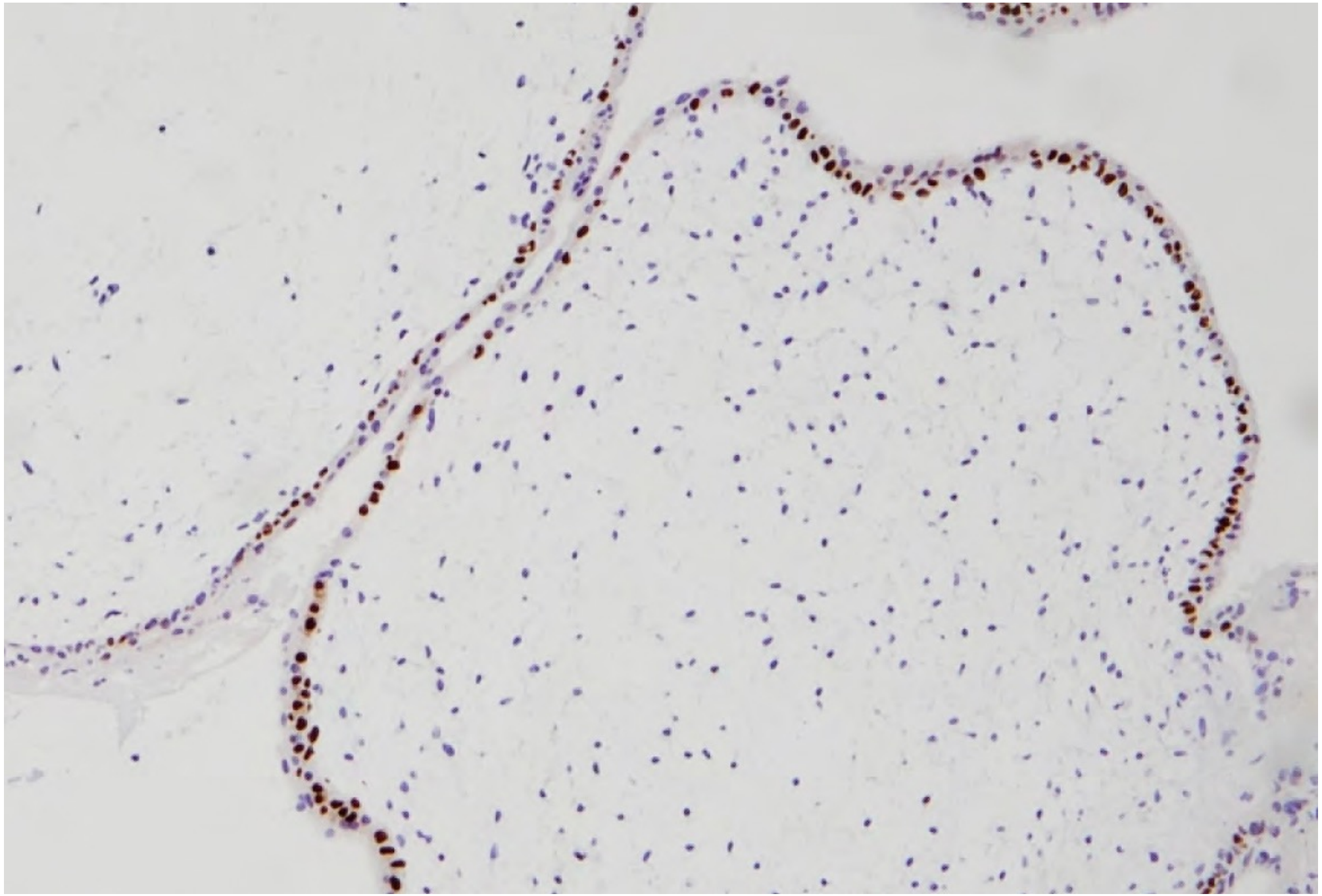

Endometrium
Villi

Diagnostic Options

A: Dispermic complete mole
B: Monospermic complete mole
C: Dispermic partial mole
D. Androgenetic biparental mosaic gestation

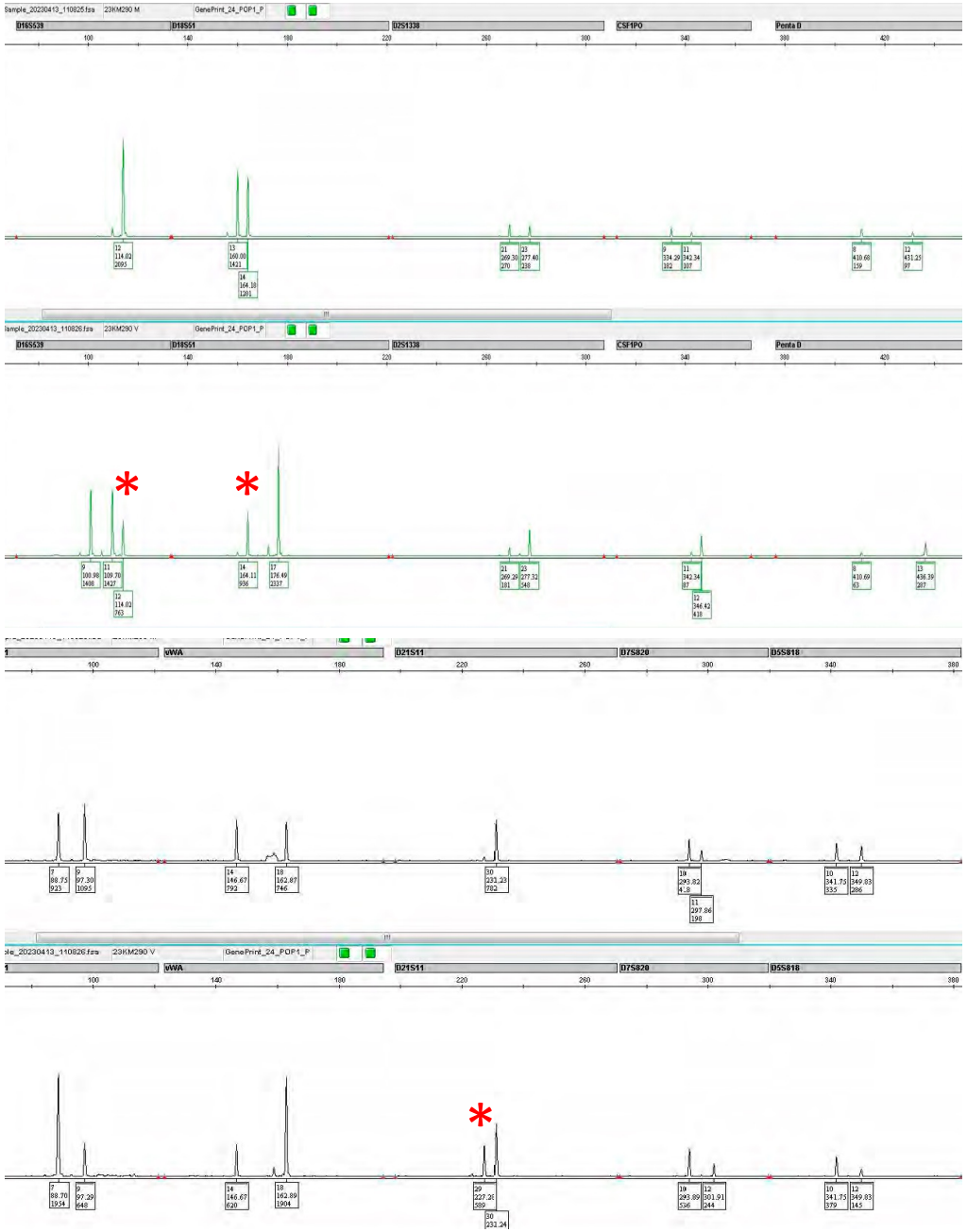


Additional images



P57 IHC

Complete STR Genotype Panel



Case Summary

Most chorionic villi show hydropic changes including cistern formation, abnormal configuration and size. The stroma of some villi is hypercellular and myxoid with prominent karyorrhectic debris. Subset of chorionic villi are fibrotic with the presence of nucleated RBCs. Immunostain shows loss of nuclear expression of P57 in the villous stromal cells but retained expression in the cytotrophoblast (discordant P57 expression). STR genotyping demonstrates certain informative loci consisting of heterozygous paternal alleles and one maternal allele (asterisks) with paternal:maternal (P:M) allelic ratio of >2:1, indicating enrichment for paternal alleles due to admixed androgenetic (villous stroma) and biparental (cytotrophoblast) cells.

Case contributed by Dr. Yeo Yen Ching at KK Women's and Children's Hospital in Singapore.

Final Diagnosis: Androgenetic Biparental Mosaic Gestation