## **CORE** DIAGNOSTICS<sup>™</sup>

## **FINAL DIAGNOSIS:**

Metastatic poorly differentiated adenocarcinoma with mucin production and signet ring cells, consistent with colorectal origin.



SATB2

## CK20

CDX2

MUC5AC

CK7

## DISCUSSION

Regional lymph nodes and liver are the most common metastatic sites of involvement by colorectal carcinomas. Other relatively common metastatic sites include peritoneum, lung, and ovaries<sup>1</sup>. Apart from local pelvic tumor extension, metastatic cancer to the cervix are extremely rare, as shown in one of the studies, accounting for 0.3% of all patients who die of cancer<sup>2</sup>. The symptoms related to primary colorectal carcinoma may remain silent until months and years until the presentation of metastatic disease. It is important to differentiate between primary cervical tumours with intestinal differentiation, and metastatic colorectal adenocarcinomas to cervix, as this has a profound prognostic and therapeutic implications. Colonic adenocarcinoma are known to be CK20 positive and CK7 negative, but some colonic carcinomas express CK7<sup>3</sup>. Additionaly, Carcinoembryonic antigen is a highly glycosylated cell surface protein that is overexpressed in a variety of human tumours, including cervical, colorectal, gastric, pancreatic, ovarian, breast, and non– small cell lung carcinomas<sup>4</sup>. These immunohistochemical stains cannot differentiate between a primary colonic from other metastatic adenocarcinoma. The overlapping histomorphological features warrants the search of more sensitive and specific immunohistochemical stain that can differentiate between these two entities.