What are the common side effects of histone deacetylase (HDAC) inhibitors?

Hi, my name is Donald Harvey, I am director of the phase I clinical trials program and a pharmacist at the Winship Cancer Institute of Emory University. Today I wanted to talk a little bit about some common and serious side effects of a new class of drugs we are using more in myeloma, and those are the HDAC inhibitors. I am frequently asked what are some of the side effects of drugs like vorinostat and panobinostat when used in the treatment of myeloma, typically in clinical trials in combination with drugs that have established track records or activity? The HDAC inhibitors do appear to make, in vitro as well as in vivo, make other drugs to work better and add to the backbone of therapy with proteasome inhibition or immunomodulatory drugs, but they do carry some side effects that patients and clinicians need to be familiar with. The first is diarrhea, certainly patients getting these drugs, these are oral agents and they may cause some degree of diarrhea. Secondly, thrombocytopenia is a common adverse event with the HDAC inhibitors and may occur frequently in combination with other drugs like proteosome inhibitors. Other adverse event which may occur and be prolonged over time and those include nausea and fatigue. Certainly these drugs look to be promising in the treatment of myeloma; however, patients need to understand that they may have some of these adverse events and clinicians need to be aware to be on the lookout for them and treat them accordingly.