## PATIENTS BEING PRESCRIBED 5-FU OR CAPECITABINE (XELODA):

## BE AWARE OF THE POTENTIAL FOR AN ADVERSE DRUG REACTION IF NOT PRE-SCREENED FOR DPD ENZYME DEFICIENCY

- The DPD (dihydropyrimidine dehydrogenase) enzyme is essential for metabolizing these chemotherapy agents.
- DPD deficiency is generally asymptomatic and can only be diagnosed with testing, or exposure to 5-FU or capecitabine.
- Undiagnosed DPD deficiency is present in 3-5% of people. People with DPD deficiency have a greatly increased risk for severe or fatal toxicity from 5-FU or capecitabine. Fatal toxicity occurs in up to 10% of patients with undiagnosed DPD deficiency who are treated with 5-FU or capecitabine.
- Screening for DPD deficiency prior to 5-FU or capecitabine can enable treating physicians to identify patients at risk for severe toxicity. Most patients with DPD deficiency can be safely treated with reduced doses of 5-FU or capecitabine, without affecting the efficacy of treatment.
- With increased personalized medicine practices, pre-screening for DPD deficiency is now recommended by health organizations in the United Kingdom, and the European Union. Screening for DPD deficiency is mandatory in France, The Netherlands, and the Province of Quebec.
- The most common test for diagnosing DPD deficiency in the US is genotyping of the *DPYD* gene, using a blood sample. This test is available to doctors and hospitals from several commercial laboratories in the US, Test results may take 7-10 days to be completed.
- Patients with undiagnosed DPD deficiency who develop early onset of severe chemotherapy toxicity after starting 5-FU or capecitabine can be treated with uridine triacetate (Vistogard). Uridine triacetate is an antidote to 5-FU or capecitabine overdose, and 98% effective in preventing fatal toxicity when administered up until 96 hours after the last dose of 5-FU/capecitabine.

## SEE THE FOLLOWING WEBSITES FOR ADDITIONAL INFORMATION:

<u>Oral Chemotherapy: What your Patient Needs to Know</u> <u>Be Alert for Severe Early-Onset Toxicities from 5-FU and Capecitabine</u> <u>Know the Risk of 5-FU Chemotherapy</u> <u>NURSES Play a critical role in preventing DPD complications</u> <u>VISTOGARD - The Antidote for 5-FU Toxicity</u>