## FIGURE 8.

# HEALTHCARE PROVIDER TIP SHEET: PERIPHERAL NEUROPATHY EVALUATION AND MANAGEMENT

## **PRIOR TO START OF THERAPY**

- Baseline neurosensory examination of extremities (based on the use of neurotoxicity assessment)
  - ☐ For preexisting neuropathy, rule out other possible causes.
- Take B-complex vitamins, including B<sub>1</sub>, B<sub>6</sub>, B<sub>12</sub> (based on anecdotal evidence).
- Take folic acid
- Provide patient education on signs and symptoms of peripheral neuropathy.

## MILD SYMPTOMS OR GRADE 1

- Neurosensory examination of extremities (based on the use of neurotoxicity assessment)
- Continue therapy and educate patient to notify clinicians immediately if peripheral neuropathy worsens.

## **MODERATE SYMPTOMS OR GRADE 2**

- Neurosensory examination of extremities based on the use of neurotoxicity assessment
- If symptoms are intermittent, continue therapy.
- If continuous, stop therapy and see if symptoms continue.
- If symptoms resolve, restart therapy at a reduced dose.
- Consider amitriptyline.
- Try using amino acids, such as acetyl-L-carnitine and alpha-lipoic acid, on an empty stomach (based on anecdotal evidence).
- For intermittent symptoms, try gently massaging areas with cocoa butter.

## **SEVERE SYMPTOMS OR GRADE 3**

- Hold therapy until resolution to baseline.
- Perform nerve conduction studies.
- Make sure patient is on amino acids (based on anecdotal evidence).
- Consider using gabapentin or pregabalin.
- Try lidocaine patch on affected area every 12 hours.
- Provide education on decreased sensation in extremities and safety issues.
- Assess need for assistance with ADLs.

## **NEUROTOXICITY ASSESSMENT**

Ask patients to rate the following items on a scale from 0 (not at all) to 4 (very much). Healthcare providers may find discussion of patients' responses helpful in determining the grade of neuropathy as defined by the National Cancer Institute CTCAE. However, there is no direct correlation between assessment scores and toxicity grades.

- I have numbness or tingling in my hands.
- I have numbness or tingling in my feet.
- I feel discomfort in my hands.
- I feel discomfort in my feet.
- I have joint pain or muscle cramps.
- I feel weak all over.
- I have trouble buttoning buttons.
- I have trouble feeling the shape of small objects when they are in my hand.
- I have trouble walking.

  CTCAE GRADING

Peripheral sensory neuropathy

- 1: Asymptomatic; loss of deep tendon reflexes or paresthesia (including tingling) but not interfering with function
- 2: Sensory alteration or paresthesia (including tingling); interfering with function but not ADLs
- 3: Objective sensory alteration or paresthesia; interfering with ADLs
- 4: Disabling or life-threatening
- 5: Death

Neuropathic pain

- 1: Mild pain not interfering with function
- 2: Moderate pain; pain or analgesics interfering with function but not ADLs
- 3: Severe pain; pain or analgesics severely interfering with ADLs
- 4: Disabling; referral to neurology or pain management
- 5: Death

ADL—activity of daily living; CTCAE—Common Terminology Criteria for Adverse Events

Note. Based on information from Calhoun et al., 2003; Cella et al., 1993; National Cancer Institute, 2010.