O

eral agents for cancer (OACs) are a common form of
treatment (Soria et al., 2011; Weingart et al., 2008).
However, the therapeutic outcome of cancer treat-
ment for patients taking OACs depends much on
the patient or caregiver managing treatment in
the home setting (Bassan et al., 2014; Weingart et al., 2008).
Although adherence to OACs is generally used to reflect tak-
ing the correct amount of the OACs prescribed, the concept
of adherence to an OAC regimen also needs to incorporate
other aspects of management in the home setting, including
avoiding taking certain additional medications and consuming
certain foods, as well as monitoring contraindicated drugs
drug-drug interactions. A list of items required for patient
and caregiver training to effectively manage OACs at home are
provided in Figure 1.

Most patients with cancer have comorbid conditions and are
prescribed multiple medications that may be contraindicated,
cause drug-drug interactions, or exacerbate symptoms, further
interfering with the patient’s ability to self-manage OAC treat-
ment (Koroukian, Murray, & Madigan, 2006; Ogle, Swanson,
Woods, & Azzouz, 2000). At least 12 drugs are known to in-
teract with or are contraindicated when OACs are prescribed
(Chan, Tan, Yap, & Ko, 2009). The use of multiple medi-
cations may increase the occurrence of adverse events (AEs)
in patients taking OACs, which ultimately may affect patients’
or caregivers’ ability to manage at home (Lichtman & Boparai,
2008).

In July 2014, the Institute for Safe Medication Practices (ISMP)
issued a medication safety alert regarding OACs following the
death of a patient. A 60-year-old woman with a brain tumor
died after accidentally taking the equivalent of three cycles
(450 mg) of lomustine therapy at one time (ISMP, 2014). She
had previously been taking the OAC temozolomide, which she
had received from the pharmacy as a single dose made up of
several different strength capsules each month. A three-cycle
supply of lomustine (one dose to be taken every six weeks,
pending blood tests) had been dispensed. The woman assumed
that the newly prescribed medication had also been dispensed
as a single dose (150 mg) and took too much of the medication,
which, ultimately, led to her death (ISMP, 2014).

Consequently, an urgent need exists for patient and caregiver
training regarding the self-management of OACs in the home
setting. Adequate training can positively influence the ability
of patients and caregivers to self-manage symptoms related to
the side effects of treatment, adhere to the prescribed regimen,
avoid contraindicated medications and foods, and inquire when