Hypersensitivity reactions (HSRs) may occur with any medication, but the incidence in the literature varies; generally, HSRs are believed to occur in 5% of patients receiving oncology drugs (Weiss, 2001). However, specific agents carry much higher risks and have been associated with fatal reactions (see Table 1). Monoclonal antibodies, in general, are associated with a higher risk for HSRs and are seen increasingly in nononcology settings as well as in the treatment of patients with cancer. Although many of the reactions occur with the first dose of therapy, patients may react in later infusions; therefore, clinicians and oncology nurses must be alert to the possibility of reaction. Patients who develop significant HSRs may not be able to receive necessary therapy because of the risk of worsening reactions or even death (Castells, 2008; Ciesielski-Carlucci, Leong, & Jacobs, 1997; El-Shanawany, Williams, & Jolles, 2008).

Most HSRs occur immediately or shortly after drug administration and are called uniphasic reactions. Uniphasic reactions usually respond to medical management; however, some patients will develop a resurgence of the initial symptoms (i.e., symptoms appear to have improved but redevelop 30 minutes to several hours later) despite treatment of the original reaction, which then is called a biphasic reaction. Several commonly used chemotherapy agents increase the risk for HSRs with continued and repeated use (termed delayed reactions), thus limiting the agents’ effectiveness in specific patients. In particular, platinum agents can cause patients to develop increased incidences of HSRs with multiple courses of therapy (Castells, 2008). Because carboplatin is an effective therapy for ovarian cancers in initial and recurrent disease therapies, patients who develop moderate to severe HSRs may not be able to receive a beneficial therapy. Oxaliplatin, a useful agent in the treatment of patients with colorectal cancer in the adjuvant and metastatic setting, also is known for late-onset HSRs, often occurring after repeated infusions or presenting days to weeks after the original drug administration. For specific patients, a protracted period of anaphylaxis may occur beyond 24 hours. This article describes the proposed pathophysiology for biphasic and delayed HSRs, as well as management strategies for anaphylaxis. Case reports will illustrate patient presentations for biphasic and delayed HSRs. Oncology nurses must be aware of the risk for HSRs and understand the difference in presentation for biphasic and delayed anaphylactic reactions.