

# ASK A PHARMACIST

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## Clinical data on effectiveness of Hawaiian noni fruit are insufficient

**Noni, a Hawaiian fruit, is being marketed to patients with cancer. It is supposedly very high in antioxidants. What data are there to support the use of noni in oncology patients? How can this be incorporated safely with chemotherapy?**

—Maribel Pereiras, PharmD, BCPS, BCOP

Noni has been aggressively marketed to cancer patients, especially on the Internet. The FDA issued multiple warnings to these companies, as these claims are not supported by clinical data. Noni is thought to contain substances that stimulate the immune system or that inhibit growth of cancer

cells in laboratory models.<sup>1</sup> It may have some anticancer activity in certain cancer cell lines when combined with select chemotherapy agents, but not as a single-agent.<sup>2</sup> No clinical data support this claim. Noni was found to reduce the concentrations of certain carcinogens in smokers; however, this has not been shown to prevent lung cancer occurrence. Currently, evidence to suggest the effectiveness of noni as a treatment or preventive for any type of cancer is insufficient.

Although evidence is insufficient for recommending noni to patients being treated for cancer, nurses should encourage patients to report all herbal medications in order to promote their safe use. Noni contains many antioxidants that may decrease the effectiveness of anticancer therapies whose mechanism of action includes free radical generation. This includes radiation, alkylating agents, anthracyclines, and many other chemotherapy agents. Noni may also decrease the efficacy of chemotherapy agents that work through other mechanisms.<sup>2</sup> Patients who are receiving chemotherapy should ask their doctor or pharmacist if noni will interact with their treatment.

Patients with impaired renal function or those taking ACE inhibitors (eg, lisinopril [Prinivil, Zestril, generics]) or angiotensin receptor blockers (eg, valsartan [Diovan]) should not consume noni because of its high potassium content. Patients with diabetes should be

aware that it contains sugar and may affect glucose control. Noni also may inhibit the hepatic enzymes responsible for metabolism of many medications, so the patient's other medications should be reviewed in order to prevent any interactions.<sup>2</sup> Noni has also been associated with decreased warfarin efficacy, so patients taking warfarin who wish to start noni should have their international normalized ratio (INR) monitored closely. Several case reports link noni to hepatotoxicity, so patients receiving other hepatotoxic treatments or medications should not use noni. Patients who develop abnormalities in liver function tests or other symptoms of hepatotoxicity while taking noni also should discontinue its use. ■

### REFERENCES

1. McClatchey W. From Polynesian healers to health food stores: changing perspectives of *Morinda citrifolia* (Rubiaceae). *Integr Cancer Ther.* 2002;1(2):110-120.
2. Santiago K, Gaikwad A, Coffey L II, Smith JA. Evaluation of the safety and activity of noni juice (*Morinda citrifolia* L) in combination with chemotherapy in the oncology setting. Abstract presented at: 5th International Conference Society of Integrative Oncology; November 20-21, 2008; Atlanta, GA.



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