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AMERICAN  
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HERBALGRAM

March 9, 2010

Anthony N. DeMaria, M.D.

Editor-in-Chief

Journal of the American College of Cardiology

c/o JACC Editorial Office

3655 Nobel Drive

Suite 630

San Diego, CA 92122

Sent via email: Email: [JACCSD@acc.org](mailto:JACCSD@acc.org)

**Re: Tachjian A, Maria V, Jahangir A. Use of herbal products and potential interactions in patients with cardiovascular diseases. *J Amer Coll Cardiol*; 2010; 55(6):515-525.**

Dear Dr. DeMaria:

We have deep respect for the mission and activities of ACC. We were both surprised and deeply disappointed by the JACC's publication of the referenced review article. With all due respect we have numerous significant concerns about it.

We offer the following letter below for your consideration for publication in your journal. In addition, we are in the process of completing an editorial or critique detailing many of the copious errors in this paper (the draft is currently almost 3000 words). We would offer such a critique for your possible consideration for publication in JACC. Since our letter below is limited to only 500 words (it is 494 words plus references), we believe a more thorough treatment and critique of the errors of the cited article is warranted.

We are willing to modify this letter to meet the length and style requirements for publication in JACC.

Respectfully,

Mark Blumenthal

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**[For publication]**

**[Text of letter = 495 words + signatures + 4 references (101 words)]**

To the Editor:

The article by Tachjian et al. “Use of Herbal Products and Potential Interactions in Patients with Cardiovascular Diseases” requires considerable comment.[1] This issue deserves the profession’s attention and we support responsible investigations regarding its clinical importance. However, this “state-of-the-art” review is rife with errors and misinterpretations. The authors also demonstrate a lack of familiarity with current regulations.

For example, literature on different species of plants with differing chemistry and pharmacology is inappropriately combined and confounded. The article uncritically cites and misinterprets a widely discredited uncontrolled study on ginseng (*Panax* spp.) and caffeine abuse, the observed adverse effects being more the result of high caffeine levels than ginseng. [2] It inaccurately attributes “death” to a case report of neonatal androgenization associated with a purported “Siberian ginseng” (*Eleutherococcus senticosus*) product containing a substituted herb (*Periploca sepium*) in a different genus; the case *did not* result in death. [3]

Other problems abound: Toxic plants are mistakenly referred to as “commonly used herbs”, e.g., aconite, oleander, lily-of-the-valley, and storphanthus [sic] and “Chan su”, venom from a Chinese toad, incredibly, is listed as an “herb.” To our knowledge, none of these products is “commonly” sold in the U.S.

The authors also confound herbs and the plant-derived compounds isolated from them. “Capsicum” is listed in a table of “herbal products to avoid in patients with cardiovascular disease.” – referring to the US FDA-approved OTC and prescription drug *capsaicin*, the vanilloid compound derived from chili peppers (*Capsicum* spp.). Capsaicin is obviously *not* a dietary supplement and has no place in this article. Tetrandrine and yohimbine, both purified alkaloids from plants, are inappropriately discussed in this paper as if they are herbal supplements.

Grapefruit (and its juice) are conventional foods, neither ingested nor regulated as supplements.

In discussing “Lack of Quality Control,” the authors cite a discredited publication in which the anti-inflammatory alkaloid colchicine was purported to have been found in the placenta of women taking ginkgo (*Ginkgo biloba*).<sup>[4]</sup> Colchicine is found in autumn crocus (*Colchicum autumnale*), not in ginkgo, and subsequent industry and third party analyses of ginkgo extracts and finished products produced no evidence of contamination with colchicine. The paper should not be cited in a “state-of-the art” review except as an example of faulty science.

It is unclear why the authors ignored a recent publication from their own institution. In 2008, researchers at the Mayo Clinic in Rochester, MN published a survey of 1795 patients. <sup>[5]</sup> That survey reported that 369 potential herb-drug interactions were identified among 236 patients. Of those, 107 interactions – including some which were based on the use of cardiovascular drugs (e.g., antithrombotics) -- were considered to have *potential* clinical significance but none of the observed interactions resulted in serious harm (hospitalization, new medical problem or serious bleeding) to any patient during the study.

The plethora of such errors, plus others, requires that this article be retracted. Future publications of this type should be properly reviewed by experts competent in medicinal plants, pharmacognosy, and related fields of science.

Sincerely,

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### **References**

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4. Petty HR, Fernando M, Kindzelskii AL, et al. Identification of colchicine in placental blood from patients using herbal medicines. *Chem Res Toxicol* 2001;14:1254-8.
5. Sood A, Sood R, Brinker FJ, Mann R, Loehrer LL, Wahner-Roedler DL. Potential for interactions between dietary supplements and prescription medications. *Am J Med*. March 2008;121:207-211.