## USE OF ISCADOR, AN EXTRACT OF EUROPEAN MISTLETOE (VISCUM ALBUM), IN CANCER TREATMENT: PROSPECTIVE NONRANDOMIZED AND RANDOMIZED MATCHED-PAIR STUDIES NESTED WITHIN A COHORT STUDY

Ronald Grossarth-Maticek, Prof Dr med, Dr phil, Helmut Kiene, Dr med, Stephan M. Baumgartner, Dr sc nat, and Renatus Ziegler, Dr rer nat

Ronald Grossarth-Maticek is director of the Institute for Preventive Medicine, European Center for Peace and Development, United Nations, in Heidelberg, Germany. Helmut Kiene is director of the Institute for Applied Epistemology and Medical Methodology in Bad Krozingen, Germany. Stephan M. Baumgartner is a researcher at the Institute for Complementary Medicine (KIKOM), University of Bern, Switzerland. Renatus Ziegler is a researcher in the Department of Mathematical Statistics and Actuarial Sciences at the University of Bern, Switzerland.

Context • In anthroposophical medicine, total extracts of Viscum album (mistletoe) have been developed to treat cancer patients. The oldest such product is Iscador. Although Iscador is regarded as a complementary cancer therapy, it is the most commonly used oncological drug in Germany.

Objective • To determine whether Iscador treatment prolongs survival time of patients with carcinoma of the colon, rectum, or stomach; breast carcinoma with or without axillary or remote metastases; or small cell or non-small-cell bronchogenic carcinoma; and to explore synergies between Iscador treatment and psychosomatic self-regulation.

**Design** • Prospective nonrandomized and randomized matched-pair studies nested within a cohort study.

Setting • General community in Germany.

Participants • 10226 cancer patients involved in a prospective longterm epidemiological cohort study, including 1668 patients treated with Iscador and 8475 who had taken neither Iscador nor any other mistletoe product (control patients).

Intervention • Iscador.

Main Outcome Measure • Survival time.

Reprint requests: Inno Vision Communications, 169 Saxony Rd, Suite 104, Encinitas, CA 92024; phone, (760) 633-3910 or (866) 828-2962; fax, (760) 633-3918; e-mail, alternative.therapies@innerdoorway.com.

Results • In the nonrandomized matched-pair study, survival time of patients treated with Iscador was longer for all types of cancer studied. In the pool of 396 matched pairs, mean survival time in the Iscador groups (4.23 years) was roughly 40% longer than in the control groups (3.05 years; P < .001). Synergies between Iscador treatment and self-regulation manifested in a longer survival advantage for Iscador patients with good self-regulation (56% relative to control group; P = .03) than for patients with poor self-regulation. Results of the 2 randomized matched-pair studies largely confirmed the results of the non-randomized studies.

**Conclusion** • Iscador treatment can achieve a clinically relevant prolongation of survival time of cancer patients and appears to stimulate self-regulation. (Altern Ther Health Med. 2001;7(3):57-78)

ancer treatment with Iscador, an extract of *Viscum album* (European mistletoe), was studied as part of a large epidemiological cohort study on 10226 cancer patients. This study was conducted to investigate the influence of psychosomatic self-regulation on the survival of cancer patients and the interactions of psychosomatic self-regulation with therapeutic factors such as surgery, radiotherapy, chemotherapy, and unconventional therapies (eg, Iscador).

The term *self-regulation* applies to intrinsic activities of a human being through which he or she achieves well-being, inner equilibrium, appropriate stimulation, a feeling of competence, and a sense of being able to control stressful situations.<sup>2</sup> Self-regulation influences the incidence and course of cancer. Studies covering a 27-year period and involving 35 814 participants<sup>3</sup> showed a higher incidence of cancer in those with poor self-regulation, revealing detrimental synergies between low self-regulation and other cancerigenic risk factors.<sup>1,3</sup> In patients with manifest cancer, higher self-regulation correlated with longer survival.<sup>1,3</sup> In randomized controlled trials,<sup>4,5</sup> patients with breast cancer and axillary metastases achieved longer survival through