



## CONFERENCE OF RADIATION CONTROL PROGRAM DIRECTORS, INC.

### RESOLUTION

#### Relating to: **Computed Tomography (CT) Scanning**

**WHEREAS:** There are both benefits and potential risks associated with a CT procedure,

**WHEREAS:** CT can be a useful diagnostic tool when a person has signs or symptoms of some particular disease or condition, or in persons diagnosed with a particular disease, CT can be extremely helpful in determining the extent of disease and monitoring the effects of treatment,

**WHEREAS:** Some medical imaging clinics are promoting a new use of CT with partial and whole-body CT scanning, and marketing these exams as a preventive or proactive healthcare measure to individuals who have no symptoms or history of disease,

**WHEREAS:** No scientific studies have demonstrated that CT screening of individuals without symptoms provides a greater probability of benefit than harm,

**WHEREAS:** Many national medical, scientific, and professional societies have reviewed self-referral CT screening of individuals without symptoms for various disease and medical conditions, and have concluded (though in some cases such exams appear promising) the efficacy of such broad CT screening programs has yet to be proven,

**WHEREAS:** The Food and Drug Administration (FDA) has never approved, cleared or certified any CT x-ray system specifically for use in screening (i.e., of individuals without symptoms), because no manufacturer has ever demonstrated to the FDA that their CT scanner is effective for screening for any disease or condition,

**WHEREAS:** The main risks of CT screening scans for an individual are: 1) abnormal test results for a benign or incidental finding, leading to unneeded and possibly invasive follow-up tests that may present additional risks; 2) normal findings that carry the possibility of inaccuracy and false reassurance which may lead the patient to conclude that further routine screening tests such as for breast cancer, cervical cancer, colon cancer, hypertension, diabetes, etc. are unnecessary; and 3) the increased possibility of cancer induction from x-ray radiation exposure,

**WHEREAS:** Diagnostic CT scanning procedures typically yield an effective dose in the range of 1 to 10 mSv, and this dose range is in a range comparable to the 5 to 20 mSv received by some of the Japanese A-bomb survivors,

**WHEREAS:** These survivors are estimated to have experienced a small but increased radiation-related relative risk for cancer mortality,

**WHEREAS:** A CT examination with an effective dose of 10 mSv is associated with an increase in the possibility of fatal cancer of approximately 1 in 2000 compared to the natural incidence of fatal cancer in the United States population of about 1 in 5;

**WHEREAS:** This small increase in radiation-associated cancer for an individual can become a public health concern if large numbers of the population undergo increased numbers of CT screening procedures of uncertain benefit, or if the same person undergoes repeated CT screens during that individual's lifetime, and

**WHEREAS:** The estimated annual number of CT examinations and procedures in the US (both adult and pediatric) was 58,000,000 in 2000, and growing, and sales of multi-slice CT which facilitate screening examinations are expected to peak at more than \$2.4 billion by 2007, increasing the availability of CT procedures in every area of the country.

**NOW, BE IT FURTHER RESOLVED:**

That the Members of the CRCPD hereby express their growing concern with the use and marketing of CT scans to screen healthy people,

**BE IT FURTHER RESOLVED:**

That CRCPD members should actively discourage self-referral CT screening through the application of individual state authority, and require all CT scans be specifically ordered and authorized by a physician after a medical consultation, and

**BE IT FURTHER RESOLVED:**

That CRCPD support a public information campaign to discourage asymptomatic individuals from obtaining CT screening scans until scientific studies demonstrate that this use of CT is effective in reducing a specific population's disease morbidity and mortality, and

**BE IT FURTHER RESOLVED:**

That the CRCPD support the application of a quality assurance program for every CT machine to ensure that good imaging technique is used to help avoid unnecessary radiation exposure, and

**BE IT FURTHER RESOLVED:**

That the CRCPD membership and staff pay particular attention to ensuring that appropriate technique is used for pediatric patients, and

**BE IT FURTHER RESOLVED:**

That CRCPD post this resolution on their website and issue a concurrent press statement.

Approved by the CRCPD Membership on May 8, 2002



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Paul J. Merges, Ph.D.  
CRCPD Chairperson