

**CONSUMER ALERT: THERE ARE SIGNIFICANT DIFFERENCES BETWEEN ELECTRON BEAM AND CAT SCANNERS WHEN USED TO DIAGNOSE CORONARY ARTERY DISEASE**

ELECTRON BEAM SCANNER	MULTI-SLICE OR SPIRAL CAT SCANNER
GE IMATRON (GENERAL ELECTRIC BOUGHT THE TECHNOLOGY DEC 2001)	GE LIGHTSPEED TOSHIBA PHILLIPS OR MARCONI SIEMENS
COST OF SCANNER \$2.3 TO 3 MILLION	COST OF SCANNER \$400,000 - \$800,000
NO X-RAY TUBES (USES ELECTRONS AT THE SPEED OF LIGHT)	USES X-RAY TUBES (SPEED LIMITED BY CENTRIFUGAL FORCE)
TRUE SPEED: 50-100 MILLISECONDS	TRUE SPEED: 500-700 MILLISECONDS
CAN TAKE IMAGES IN BETWEEN HEART BEATS - FASTEST SCANNER	UP TO 10 X SLOWER - CANNOT TAKE IMAGES WITH EVERY HEART BEAT
OVER 700 RESEARCH PAPERS IN MEDICAL JOURNALS DEFINING THE ROLE OF ELECTRON BEAM SCANNER IN DETECTING HEART DISEASE. CONSIDERED THE GOLD STANDARD IN THE MEDICAL LITERATURE FOR THE NON-INVASIVE DETECTION OF CORONARY ARTERY DISEASE	LESS THAN 10 RESEARCH PAPERS: SHOWING THE HIGHEST LEVEL OF INACCURACIES AT LOWER CALCIUM SCORES WHEN RISK OF HEART ATTACK IS MOST UNSUSPECTED.
OVER 99% ACCURATE IN RULING OUT HEART DISEASE	LESS THAN 30% ACCURATE IN RULING OUT HEART DISEASE (70% INACCURATE)
CONSISTENT RESULTS WITH REPEATED STUDIES	30% -70% DIFFERENCE IN REPEAT STUDIES (EVEN IF STUDY IS REPEATED 5 MINUTES LATER)
RECOGNIZED BY AMERICAN COLLEGE OF CARDIOLOGY AND AMERICAN HEART ASSOCIATION	NOT RECOGNIZED
ELECTRON BEAM SCANNER SPECIFICALLY DESIGNED AND APPROVED FOR CORONARY ARTERY SCANNING BY FDA	CT SCANNERS ARE MULTIPURPOSE UNITS AND HAVE NOT BEEN APPROVED BY FDA SPECIFICALLY FOR CALCIUM SCORING IN THE DETECTION OF HEART DISEASE
ZERO SCORES ( NO HEART DISEASE) ARE OVER 99% ACCURATE	ZERO SCORES MOST PRONE TO ERROR (UP TO 70% ERROR RATE)
HIGHEST LEVEL OF REPRODUCIBILITY : REPEAT STUDY IS ALWAYS CONSISTENT WITH ORIGINAL FINDING	SCORES ARE INCONSISTENT FROM ONE STUDY TO NEXT ON THE SAME PERSON
AVERAGE OF ONLY 35 IMAGES TAKEN	OVER 400 IMAGES TAKEN (EQUIVALENT TO 10 CT SCANS)
AN IMAGE IS TAKEN WITH EVERY HEART BEAT ALWAYS CAPTURING THE HEART IN A MOTIONLESS STATE	RANDOM COLLECTION OF IMAGES HOPING TO CATCH THE HEART IN-BETWEEN BEATS
100% OF ALL IMAGES ARE UTILIZED	ONLY 10% OF IMAGES ARE USED BUT 90% OF IMAGES ARE IGNORED OR WASTED ALONG WITH THE RADIATION EXPOSURE
LEAST RADIATION EXPOSURE (SIMILAR TO DENTAL X-RAY)	MOST RADIATION EXPOSURE: UP TO 8 TIMES MORE DEPENDING ON MODEL OF CT SCANNER
LOW LEVELS OF RADIATION EXPOSURE IS APPROPRIATE FOR A SCREENING POPULATION	HIGH LEVELS OF RADIATION EXPOSURE ARE NOT APPROPRIATE FOR A SCREENING POPULATION
CAN BE USED AS A REFERENCE POINT FOR JUDGING RESPONSE TO TREATMENT	CANNOT BE USED TO JUDGE TREATMENT RESPONSE BECAUSE REPEAT STUDIES ARE NOT CONSISTENT
A NEGATIVE OR ZERO SCORE RULES OUT HEART DISEASE	CANNOT RELIABLY RULE OUT HEART DISEASE WITH A NEGATIVE SCORE
CAN BE DEPENDED ON TO RULE OUT HEART DISEASE AS A CAUSE OF CHEST PAIN AS PROVEN BY MAYO CLINIC AND NUMEROUS OTHER STUDIES.	CANNOT BE USED TO EVALUATE CHEST PAIN