CT-Expo v2.1

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All scanners

All age groups

Dose assessment

Benchmarking
CT-Expo

Description:

CT-Expo is an MS Excel application written in Visual Basic to calculate patient dose values resulting from CT examinations. CT-Expo is based on computational methods which were used to evaluate the data collected in the German surveys on CT practice. A comprehensive description of the underlying methods is given in the book ‘Radiation Exposure in Computed Tomography’.

CT-Expo allows the calculation of the following dose quantities:

- Weighted CTDI
- Volume CTDI
- Dose-length product
- Organ doses
- Effective dose (ICRP 60 and ICRP 103)

Special features:

In contrast to similar programs for CT dose assessment, CT-Expo offers a number of unique features:

- Dose calculation for all age groups (adults, children, infants)
- Separate calculation for each gender
- Applicable for all existing scanner models
- Correction of scanner-specific influences
- Takes into account overbeaming effects of single and multi-slice scanners
- Takes into account overranging effects in spiral scanning mode
- Standardized and free dose assessment
- Simplified organ and effective dose assessment from CTDI\textsubscript{vol} and DLP data (NEW)
- Comparison with results from German survey on CT practice in 1999
- Comprehensive benchmarking section including guidance on dose optimization
- Regular updates of scanner data base

A comprehensive description of the software and its applications has been published (in German)


System requirements:

- PC: Pentium, at least Windows 95, Excel 97
- Mac: PPC, at least OS 7.5, Excel 98

Content:

- CD with CT-Expo application
- PDF manual
- Registration form

Rates:

- Single copy: 50 Euro plus delivery fee
- Five copies: 175 Euro plus delivery fee
- Updates: 10 Euro (five copies:35 Euro)
- Future upgrades with extended functionality at reduced rates for registered users

Available: Since autumn 2001

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A demo version with reduced scanner spectrum, but full functionality is available on request; distribution only per e-mail or download from:

http://www.mh-hannover.de/fileadmin/kliniken/diagnostische_radiologie/download/ct-expo-e.zip