dicomPACS®

Software for professional digital image processing

in radiology and hospital



Now with AI

CE 0482 FDA 510(k) application has been cleared by the FDA No. K070618 Health Canada MDSAP Certification QMS ISO13485

OR Technology



Innovative

dicomPACS®

image management for the highest demands

in radiology and in hospitals

dicomPACS® is a sophisticated, **high-tech image management solution** based on vendor neutral archive technology (VNA) and **ideally suited for private practices and hospitals**. With *dicomPACS*®, all images generated by digital X-ray, CT, MRI and ultrasound devices, as well as diverse documents (e.g., doctors' letters, medical findings, medical history, faxes) are stored in a digital patient folder and readily accessible.

Our carefully designed archive and backup solutions guarantee **quick access to all data and high security standards** (in keeping with the German Medical Devices Act). Furthermore, the software can easily be integrated into all common information management systems (e.g., KIS, RIS and EPA).

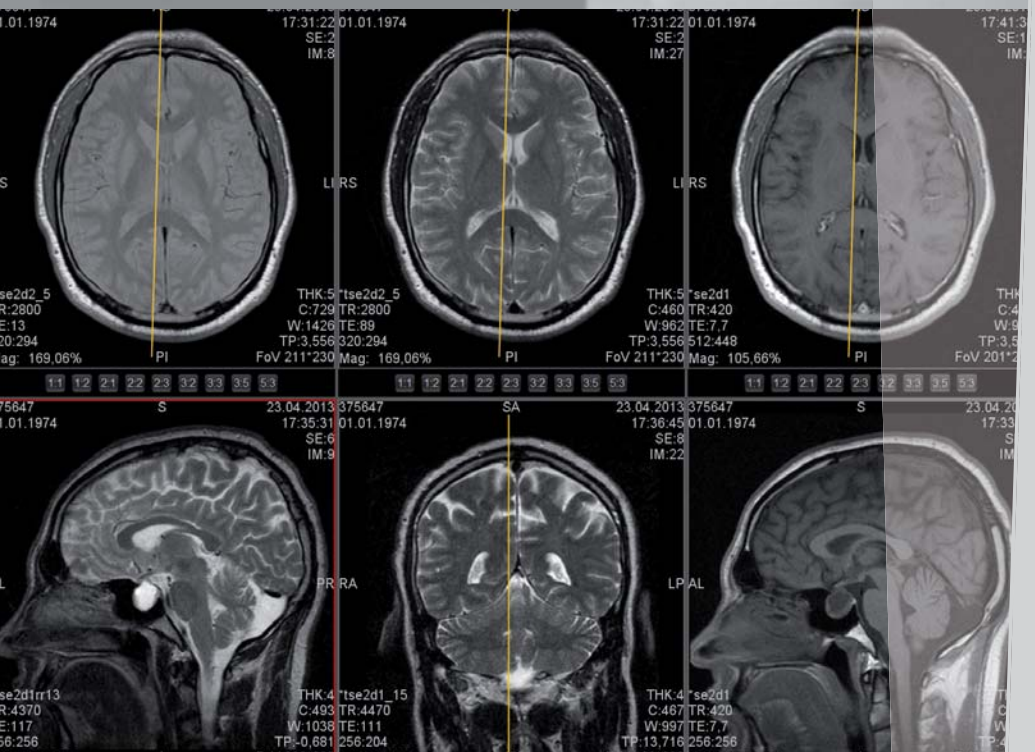
dicomPACS® is a smart choice for today and a wise investment for the future. The system is standardised, modular, and can be expanded as well as updated. Your data and archives are structured according to DICOM standards.

Further information about ***dicom****PACS*® is available here:





OR Technology is your partner in digital radiography for innovative image management and customised solutions for ambulatory and inpatient care – **tried and trusted worldwide**



Many excellent reasons

for the PACS system of OR Technology in the modern medical practice

→ Developed by doctors for doctors

→ Easy handling

→ Flexibility as a result of individual customisation

→ Very cost effective

→ Images available worldwide with web-based cloud solution *ORCA*® [optional]

→ Data security thanks to the excellent *dicomPACS*® security concept

→ Many specialised measuring functions

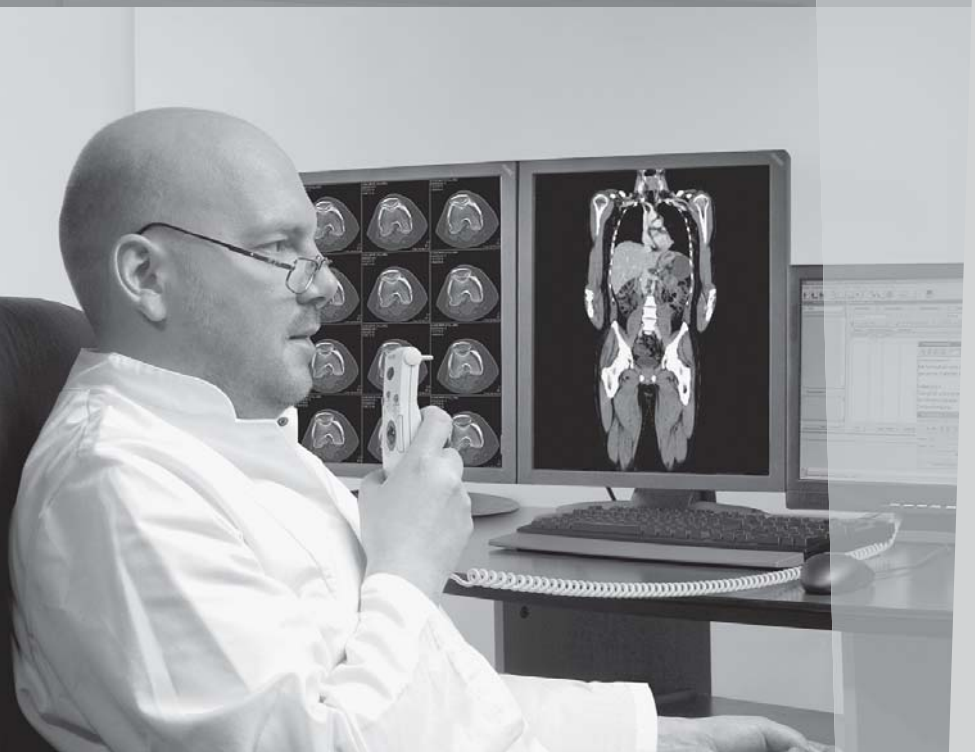
→ Integrated MIP/MPR function [optional]

→ Integrated pre-operative planning [optional]

For more detailed information
please see: **www.or-technology.com**







With **several thousand installed image processing systems** nationally and internationally, *dicomPACS*® has consistently proved itself (as of 09/2026)

Benefits

of ***dicom****PACS*® at one glance

- *dicomPACS*® can communicate in accordance with all common standards, such as **HL7 or other internationally recognised standards**.

- All data is archived in DICOM format in an SQL database. In addition, the **cloud-based archive solution *ORCA*®** is available, which can also be used for long-term archiving.

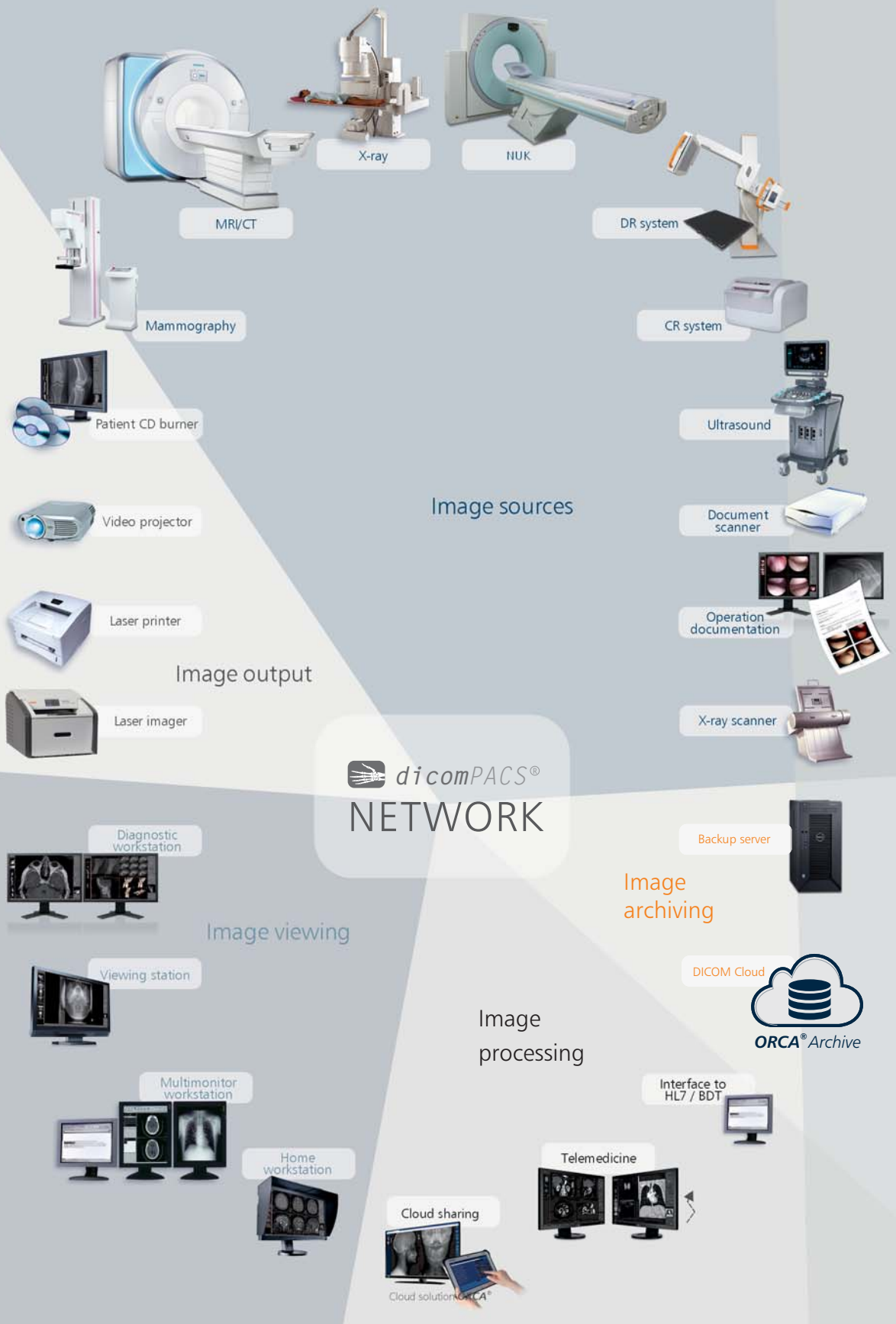
- The DICOM format enables you to exchange your data worldwide **via internet, e-mail or telephone**. With our *dicomPACS*® system, you gain independence from separate and incompatible solutions.

- ***dicom****PACS*®***MobileView* is a web-based viewer** that contains all the basic functions for viewing images. Images can be viewed virtually independently of the browser on mobile devices, such as an iPad.

- *dicomPACS*® allows the **integration of nearly all digital or analogue modalities** into your administration system. Data from the modalities can be transferred easily and archived comfortably in DICOM format.

- *dicomPACS*® **displays cutlines of CT or MRI slices** in overview images, generating the necessary data itself, and provides a number of further useful slice image tools.

For more detailed information
please see: **www.or-technology.com**



Connectivity
The diversity of ***dicom**PACS*®

Structure

Professional workflow with ***dicom**PACS*®

dicomPACS® encompasses the **acquisition, processing, communication and archiving of image material**.

Thanks to its versatility and many specialised features, *dicomPACS*® allows you to customise each workstation perfectly to your individual needs. Our software has been conceived and developed in close consultation with specialist doctors, which enables us to offer you a **versatile and easy-to-use tool for daily diagnosis**. Its success up to now has given us something to be proud of.

With several thousand workstations installed nationally and abroad, our system has proved itself over and over and has shown every day what it is capable of doing.

dicomPACS® masters simple image processing requirements as competently as it does those of complex radiological networks.

Thanks to its modular design, a *dicomPACS*® network can grow as needed. It can be expanded and amended to incorporate special features such as **telemedicine, pre-operative planning or 3D reconstruction** into your system.

For more detailed information
please see: **www.or-technology.com**



Information systems

Electronic patient file

RIS

HIS

Interfaces

DICOM

HL7

or others ...

Interaction

HIS / RIS interface

One of the areas with the biggest scope for economies in the healthcare system is the optimisation of the operational procedure.

The use of fully automated documentation, as well as the permanent availability of data, accelerates the daily workflow enormously and extensively contributes to saving costs.

The precondition: All systems need to merge smoothly, because only then a raise in effectiveness could be materialised. **To ensure that all software components like HIS and RIS work perfectly together, sophisticated and optimal structured interfaces are required.**

If you want to be sure that everything matches, you should decide in favour of *dicomPACS*®. It **supports all standard interfaces like HL7, DICOM or others**. We can also integrate individual interfaces on request.

And because *dicomPACS*® is not only standardised, but also modularly expandable and open for many things, it represents an intelligent and secure investment in the future.

For more detailed information
please see: **www.or-technology.com**







Costs and depreciation of *dicom*PACS®

- Can be built up over time to meet changing needs - thanks to its modular structure
- Has extremely favourable price-performance ratio - depreciation takes a very short time
- Help is at hand at any time via remote maintenance

Overview

about structuring, features and other excellent advantages of ***dicom**PACS*®

Modular structure

- Easy to adapt to any size of practice or hospital
- User-friendly, clearly laid out structure, low training expenses and short training periods
- Individual customisation of the user interface in accordance with your specialisation and requirements
- Flexible allocation of hotkeys for many functions enables the user to work fast without a mouse

Flexibility and user orientated features

- Specially geared to the needs of radiologists, orthopaedists and surgeons
- Parallel processing (possibility of continuing work while, for instance, a CD is being burnt)
- „Perfect memory" - repeated opening of an image with all the previous markings and settings, incl. zoom and alignments
- Parallel compiling of diagnostic reports for several patients is possible - any number of program windows may be opened without loss of speed (depending on the size of the working memory)

Integration

- Easy integration into existing HIS or RIS
- Storage of all images and documents exclusively in the international DICOM standard

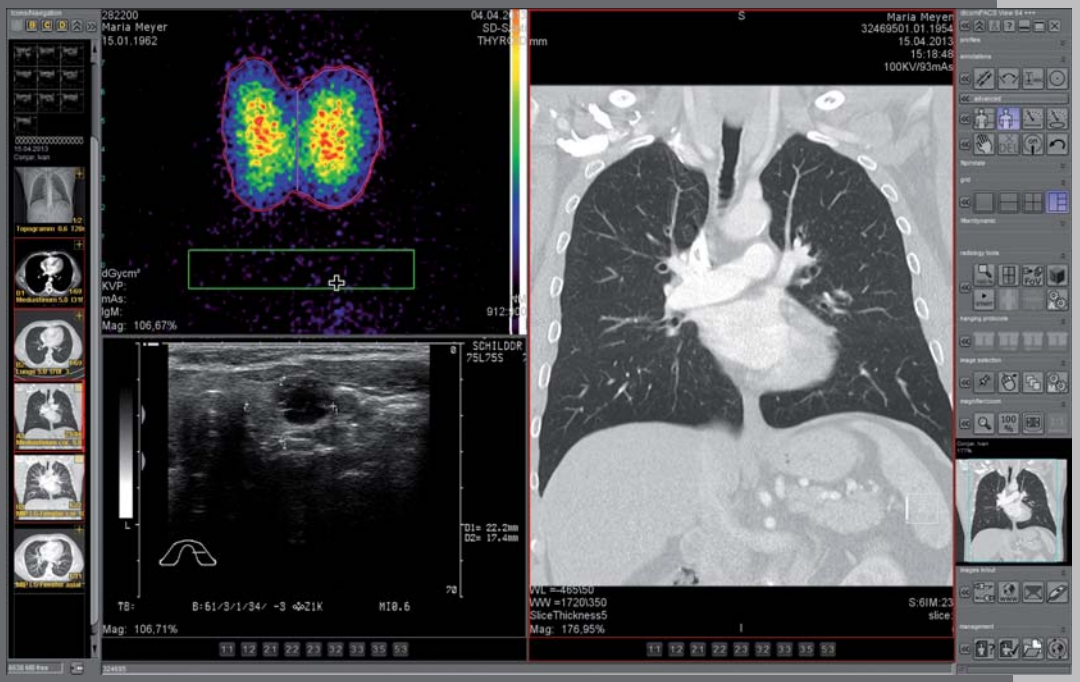
Variety

- Wide range of tools, features and add-ons e.g.:
  - Windowing, zoom, filters
  - Integration of web server
  - Optional AI-assisted diagnostic service provided by a qualified third-party provider
  - Operation reports
  - Special measurement functions
  - Pre-operative planning
  - Integration of dictation and speech recognition systems etc.

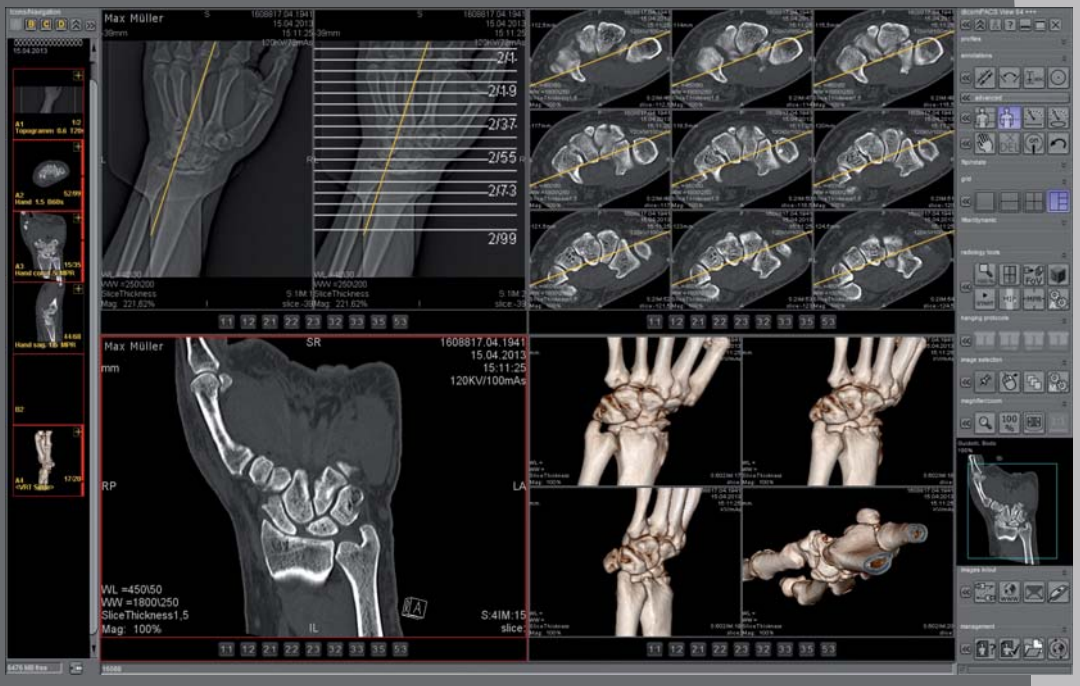
For more detailed information
please see: **www.or-technology.com**



The user-friendly, clearly laid-out structure requires only low training expenses and short training periods.



Parallel compiling of diagnostic reports for several patients is possible - any number of program windows may be opened without loss of speed.



The system enables fast and easy customisation of the operating interface for individual customer preferences.

Value

Professional operating concept of ***dicom****PACS*® leaves nothing to be desired

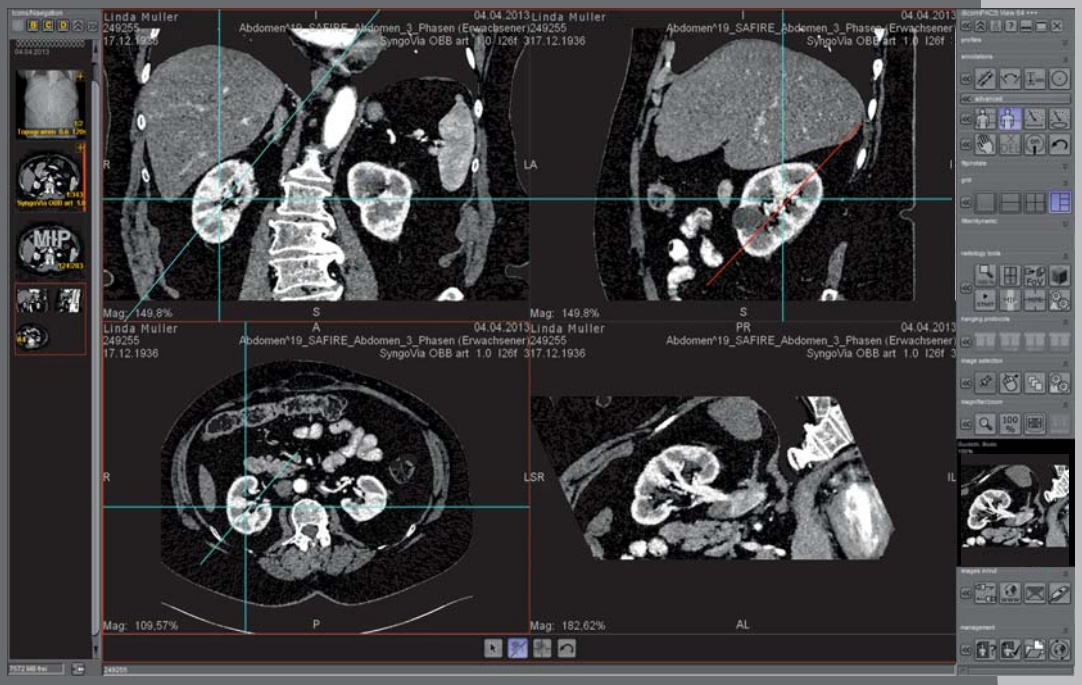
dicomPACS® is a so-called "Picture Archiving and Communication System" (PACS), and it performs many different, at times highly complex tasks. **It connects, controls and manages everything related to your images: from the acquisition of images and the compilation of diagnostic reports to the archiving and transfer of image data.**

It ensures that the images can be distributed quickly and without complications and viewed e.g. via the web server. In addition, the system is extremely flexible and open for many applications.

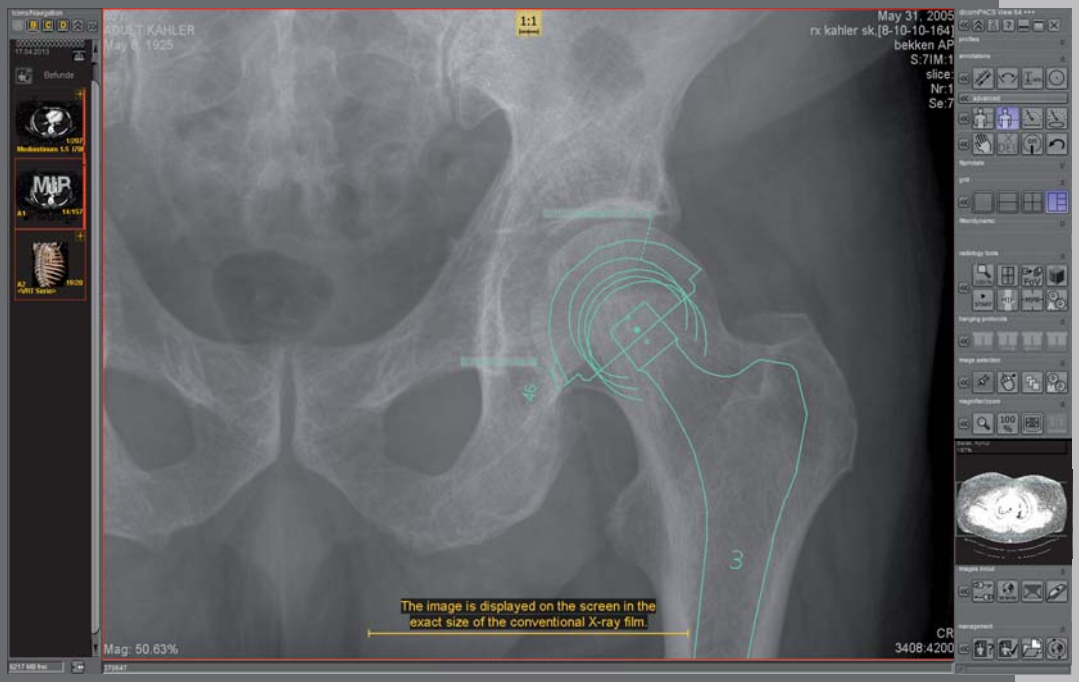
The operating concept is based on an interface that can be freely configured down to the smallest detail. **Depending on your needs and demands** – based on your field, specialisation, or specific use of the system – **you can arrange your PACS software user interface yourself.**

Fast access to the most important tools can be customised easily – just click on the selection menu. The selection will remain in place when you re-start your PC.

For more detailed information
please see: **www.or-technology.com**



MPR (Multi planar reconstruction)



Prosthesis documentation



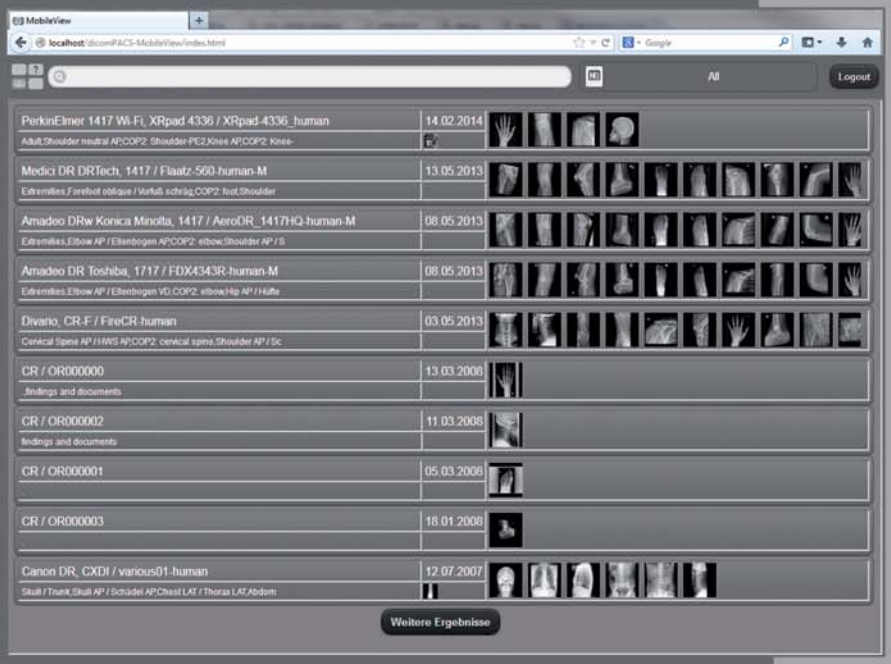
Statistics and evaluation options for the entire database (optional), report generation and much more

Value

Features of the image management solution ***dicom****PACS*® (optional)

- **Prosthesis documentation** – enables the user to plan operations with digital prosthesis templates by one or more manufacturers
- **Report Module** – for easy preparation of different reports (e.g. operation reports, ultrasound reports etc.) incl. Word macros with images and a digital dictation system
- **Statistics Module** – enables freely configurable analysis of the complete database
- **Video Modules** – enable standard and non-standard video signals to be recorded as single images and video sequences
- The software also supports diagnosis through an optional **AI-assisted diagnostic service** provided by a qualified third-party provider.
- ***dicom****PACS*®***MobileView*** – distributes images within a hospital and displays the images in a web browser
- **Cloud based telecommunication solution and data archiving *ORCA*®** – intelligent cloud solution for images, documents and diagnostic evaluations
- **Processing of CT and MRI series** – *dicomPACS*® includes professional tools such as MPR and MIP to evaluate cross section series
- **Upper Cervical (NUCCA) Chiropractic tool set** – Tools for accurate diagnosis and planning of further chiropractic treatment
- **Hanging protocols**
- **Special function for mammography analysis**
- **Integration of speech processing systems**
- **Telemedicine**
- **Special solution for multiple archives**

For more detailed information
please see: **www.or-technology.com**





The main advantages at a glance:

- The web-based viewer offers an important range of functions of a professional PACS viewer:
  - Draw annotations
  - Measurements
  - Registration of diagnostic findings
  - Attach documents
  - Draw lines and arrows (multi-coloured)
  - Compare images in different grids
  - Flip and rotate images
  - Adjust brightness / contrast
  - Invert, zoom in / out
  - Full-screen, fit image
  - PAN
  - Scroll through image series
  - Cine loop for multi frame series and CT / MRI
  - Export images and documents
  - Print images and documents
- High flexibility through the use within various internet browsers, including Microsoft Internet Explorer, Mozilla Firefox, Google Chrome, Safari 5, Safari for iPad and Android browser
- Intuitive operation
- Supports the multi-touch operating technology (e.g. zoom in and out with two-fingers)
- Supports full screen mode
- Allows access to the *dicomPACS*® database without any additional modules
- Allows playing series (e.g. ultrasound)
- High loading speed with modern streaming technology

Modules & Features

Web-based viewer solution ***dicom**PACS®**MobileView*** for mobile or stationary devices (optional)

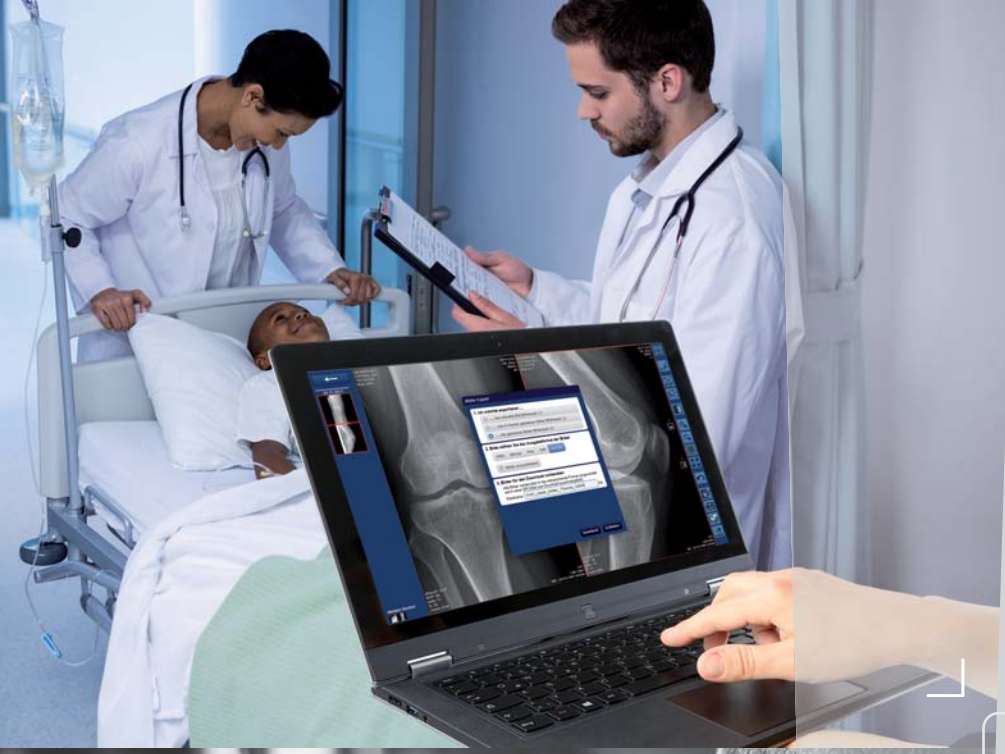
The web-based viewer *dicomPACS®MobileView* counts among the many extension modules of *dicomPACS®* diagnostic software. **Virtually browser-independent, it allows images to be viewed on mobile devices, including outside a clinic or practice.** The doctor or the nursing staff can access all image material from the *dicomPACS®* system worldwide via a network connection.

In addition to mere diagnostic evaluation of images, the *dicomPACS®MobileView* viewer **allows diagnostic reports to be captured and exported**. Documents may be attached and exchanged. All diagnostic reports of a patient are always displayed. Individual diagnostic reports of a patient may be selected for exporting and formatted.

There are many applications. On-call hospital doctors can promptly make an initial diagnostic assessment thanks to *dicomPACS®MobileView*. This saves the patient a lot of time and additional visits. But also during a ward round, further treatment can be discussed together with the patient or colleagues directly at the bedside using a mobile device.

dicomPACS®MobileView can be installed alongside existing *dicomPACS®* diagnostic modules (diagnostic workstations). It can be used on a network PC as a dedicated viewing workstation, on a mobile device, or on both. Worldwide access to all image material is available via a network connection, for example through VPN access over the internet, connecting the device to the central *dicomPACS®* system in the practice or clinic.

For more detailed information
please see: **www.or-technology.com**







Benefits of Cloud archiving through *ORCA*®

Minimal expenditure: *ORCA*® does not require investing in expensive infrastructure such as server and data cables.

Scalability: The storage capacity required when using *ORCA*® is determined by the demand.

Long-term security: *ORCA*® archives data on many individual European servers in professional and air-conditioned data centres. Server technology is continuously updated.

Accessibility: *ORCA*® stands out by being highly accessible. Since data is saved with multiple redundancy, *ORCA*® guarantees more continuity than a mere server solution.

Environmentally friendly: *ORCA*® is sustainable – through the optimised use of resources and their distribution.

Location-independent: *ORCA*® guarantees access to archived patient data – worldwide.

Simplicity: *ORCA*® allows easy access to data from any computer – from your place of work, from the comfort of your home or from any other computer or tablet PC.

Stress-free: *ORCA*® deals with everything – no need to struggle with loose network cables, removed hard drives or software problems.

Modules & Features

ORCA® – Cloud-based telecommunication solution and data archiving for images, documents and diagnostic evaluations for stationary and mobile applications

Even for state-of-the-art practices and hospitals, the rapidly growing volume of data of digital images, diagnostic reports and other documents is becoming increasingly challenging. Current legislation demands safe and long-term storage of patient data which generally requires investing in expensive hardware infrastructure as well as maintenance and corresponding staff costs.

To this end, we developed the *ORCA*® Cloud archiving solution, thus paving the way for cost-effective and safe Cloud-based data archiving in practices and clinics. *ORCA*® offers two application options:

→ ***ORCA*® *Archive:*** Safe, long-term archiving of patient data with intelligent usage of internal databases



→ ***ORCA*® *Share:*** Communication platform (exchange of images and diagnostic reports) with colleagues and specialists or as an easy way to forward image data to patients (an alternative to creating patient CDs)



Data is exclusively archived on European servers with the relevant security certificates.

For more detailed information
please see: **www.or-technology.com**



Standard Chiropractic Tools
The Chiro Tools offer great possibilities for diagnosing accurately as well as for planning further treatment.

Depending on the tool used, automated centre lines and points, defined curves, angle measurements etc. are generated after the manual selection of the points of interest.


Dr Jeff Scholten

Dr. Jeff Scholten is a past president of the ICA Council on Upper Cervical Care and the clinic director and owner of The Vital Posture™ Clinic in Calgary, Canada. He was recognized as the Upper Cervical Chiropractor of the Year in 2015. In addition to other responsibilities he is President of the National Upper Cervical Chiropractic Association (NUCCA).

He works with the *dicomPACS*® Upper Cervical Chiropractic Tools developed by OR Technology:

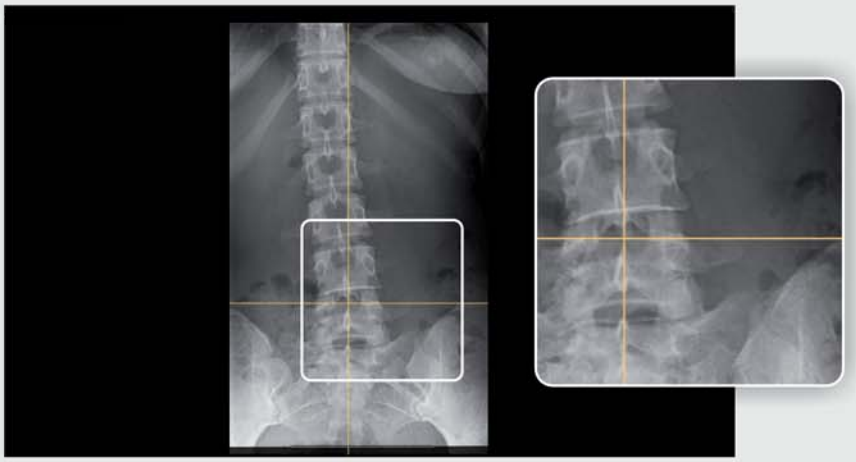
„I was very impressed that the software has evolved into a complete analysis tool for ALL diagnostic image requirements, including MRI and CT images. I appreciate the simplicity of working with the tools integrated into the standard image processing software to analyse and calculate the adjustment to be made, which increases the precision of the therapeutic measures."

Modules & Features

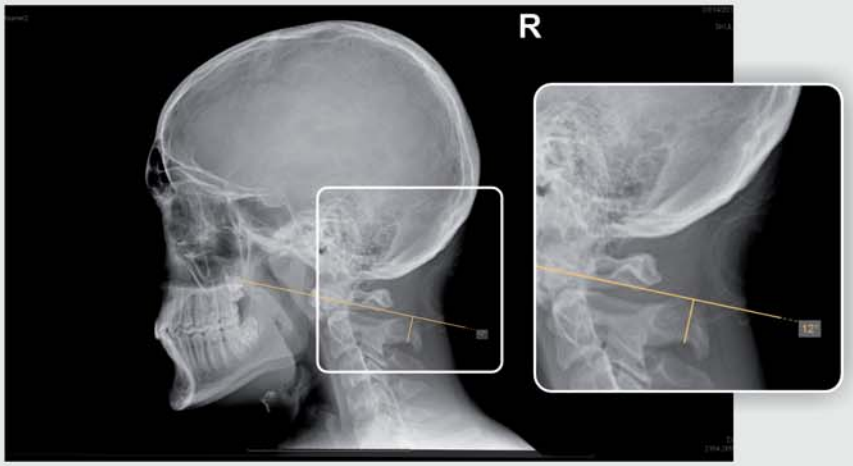
*dicom*PACS® Standard Chiropractic Tool Set – Diagnostic tools for optimal treatment [optional]

The Chiro Tools have been developed in cooperation with leading experts from the USA and Canada and offer great options for accurate diagnosis as well as for planning further treatment.

Axis line
The tool creates a vertical or horizontal axis, depending on the direction in which the mouse pointer is moved.



Orthogonal line
This tool is used to mark perpendicular lines on existing or yet to be drawn baselines. The divergence of the base line from the closer axis (horizontal or vertical) is displayed by default.



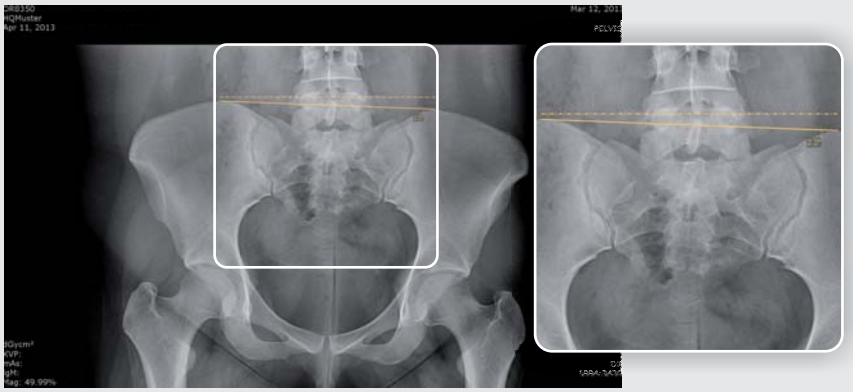
For more detailed information please see: **www.or-technology.com**

Examples
*dicom*PACS® Standard Chiropractic Tools

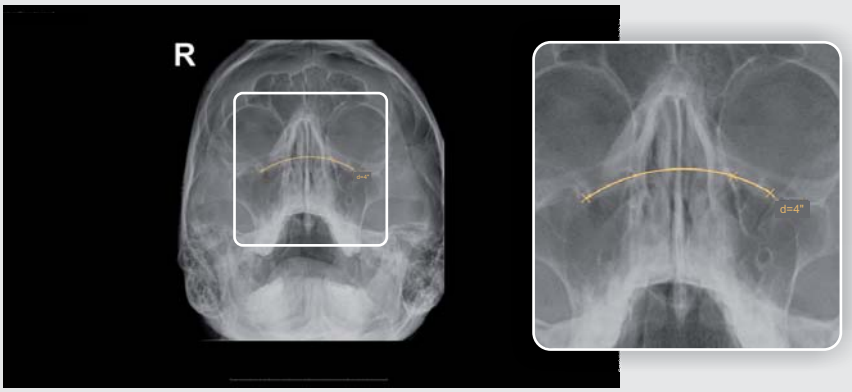
George's line
This tool is used to draw lines on each vertebra along the spine in a lateral view and to detect their distances (in mm or inches).



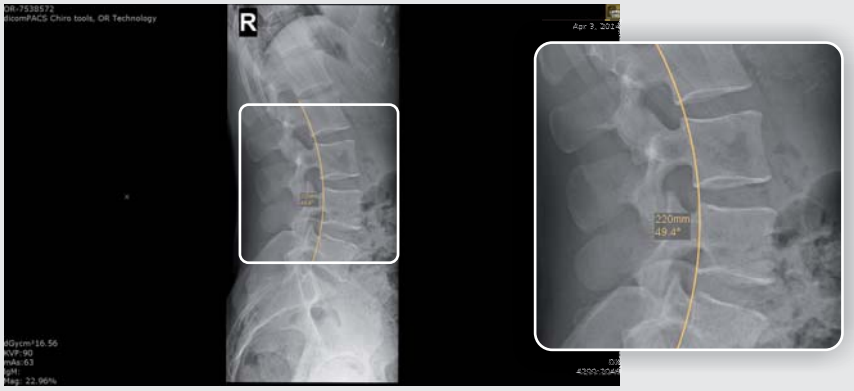
Horizontal or vertical level
This tool calculates the horizontal or vertical level. By default the nearer axis is used for calculation.



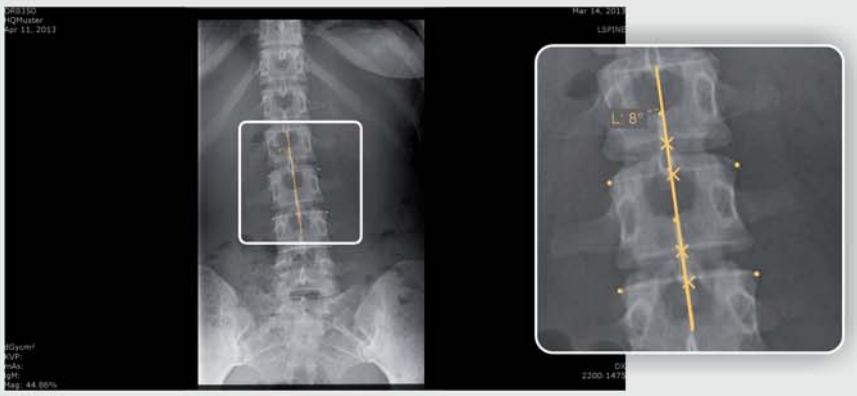
Circumscale
An arc is drawn through three defining points and the diameter of the corresponding circle is displayed by default.



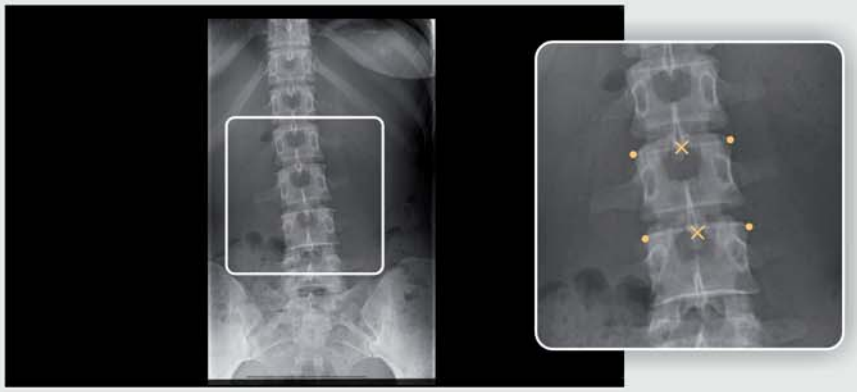
Spinal curve
This tool is used to draw an arc in the lateral view of the spine. The annotation uses a fixed radius set by default to 220 mm. Radius or degree can be adjusted.



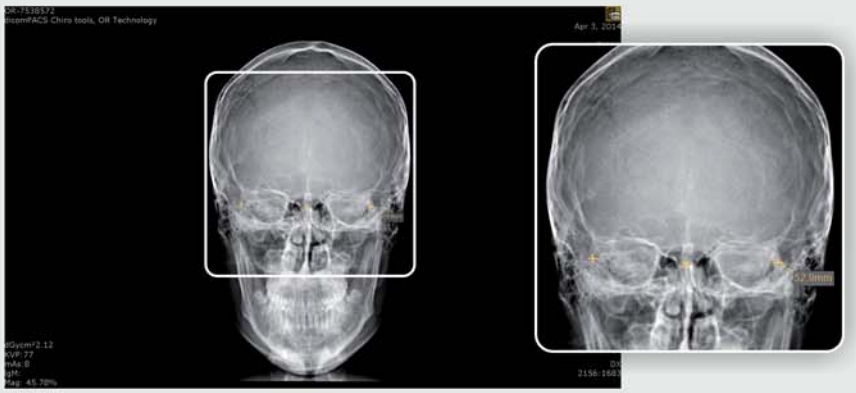
Vertebrae line
The vertebrae line is generated from the center points of 2x3 manually set points along the spinal canal and displays the side of laterality and the lateral divergence in degrees.



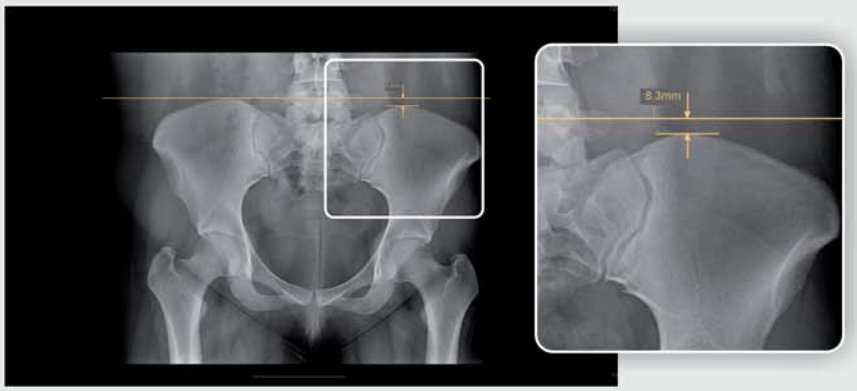
Centre point
This tool calculates the center point between two points.

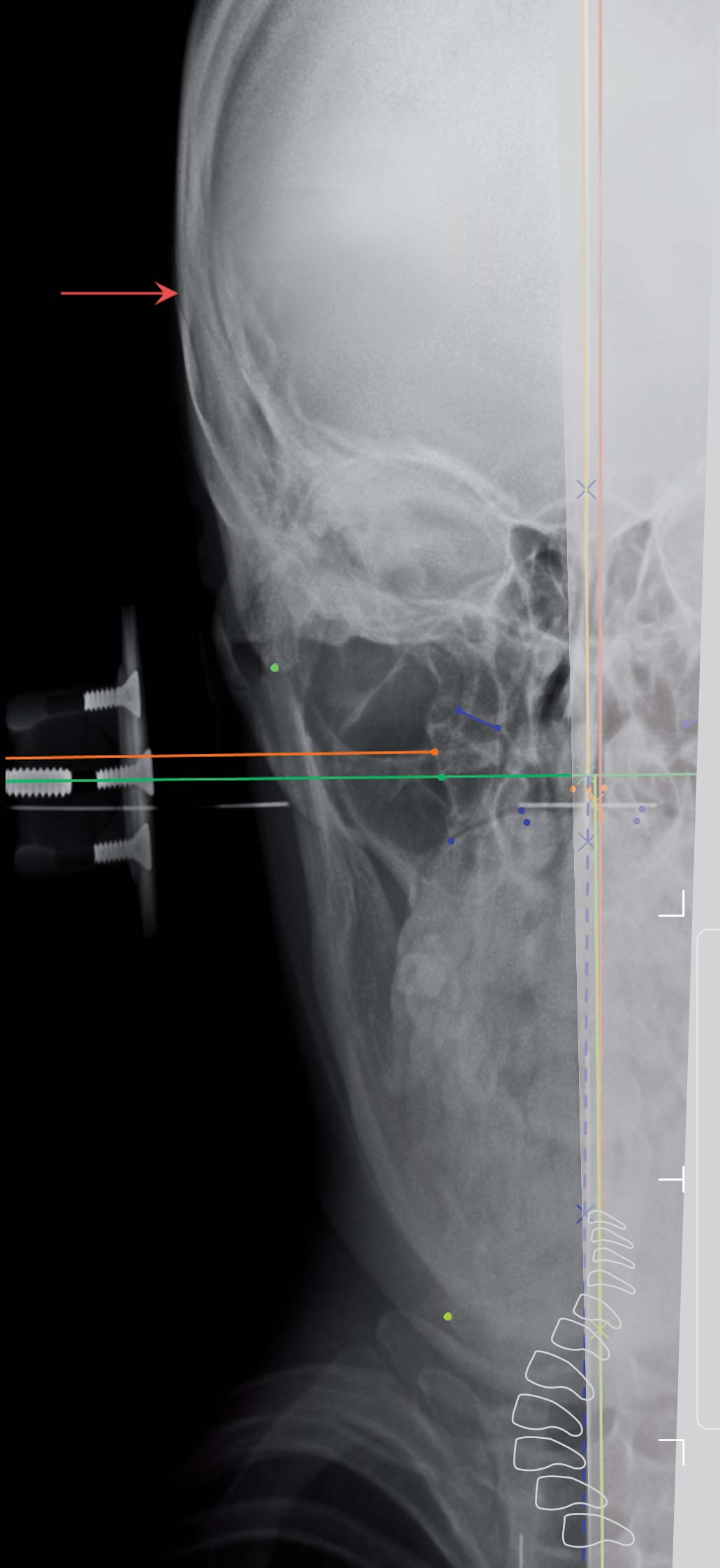


Distance comparison
This tool compares the distances between three set points (between point 1 and point 2 and between point 2 and point 3) and shows the longer distance.



Pelvic obliquity
This tool is a measurement that is calculated automatically after two simple clicks which generate two horizontal lines showing the distance between these two axes.





Upper Cervical Chiropractic (NUCCA)

The Upper Cervical Chiropractic tool set has been created in cooperation with leading experts from the US and Canada. It offers a variety of ways to reach a fast and accurate diagnosis. Our NUCCA tools offer all the advantages of digital working and provide you the security of your usual work routine.

Modules & Features

*dicom*PACS® Diagnostic Tools for Upper Cervical Chiropractic (NUCCA) [optional]

On the following pages we give you an overview of our NUCCA tools. In addition, we will use examples to demonstrate how individual tools work.

NUCCA procedure – main tools and measurements:

Nasium View	Vertex View
- Atlas Plane Line	- Odontoid Center
- Atlas Check Line	- C2 Spinous Tools (Axial Canal and Vertex Square)
- Squamous Sutures	- Vertex Atlas Line
- Central Skull Line	- Vertex Skull Line
- Plane Line	- Vertex Check Lines
- Condylar Circle & Axial Circle	
- Center of Odontoid	
- Intermastoid Line	
- C2 Spinous Tool	
- Inferior Point Tool	
- Four Elements and Listing Information	

Other measurements and tools:

- Interactive templates: Cephalometer, Circumscale, Grid, Relatoscope
- A Raw Data Box with all measured values is visible on each view
- Laterality, Skull Tippage, APL/ACL, Body Center, IML/CSL, Lower Angle, Angular Rotation, Atlas Rotation …
- Tools and measurements for the Lateral View: S-Line, Hard Palate Line, Contacts

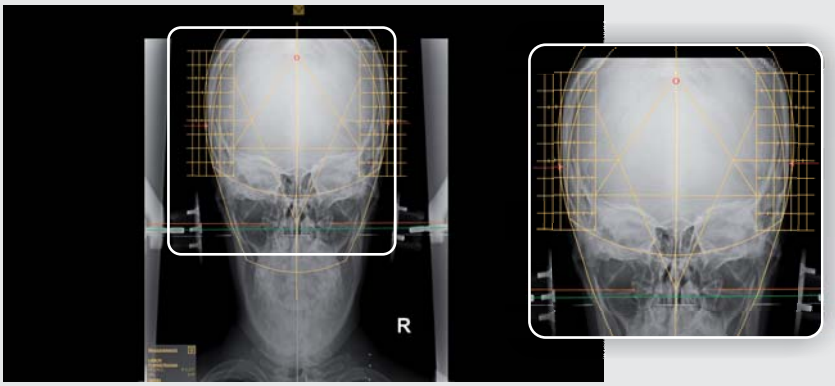
General features:

- Progress bar for each view
- Points, lines, values and templates are editable and configurable
- Colours and points are customizable
- A help menu is available for each tool. It provides keyboard shortcuts and guides you through the use of each tool step by step.

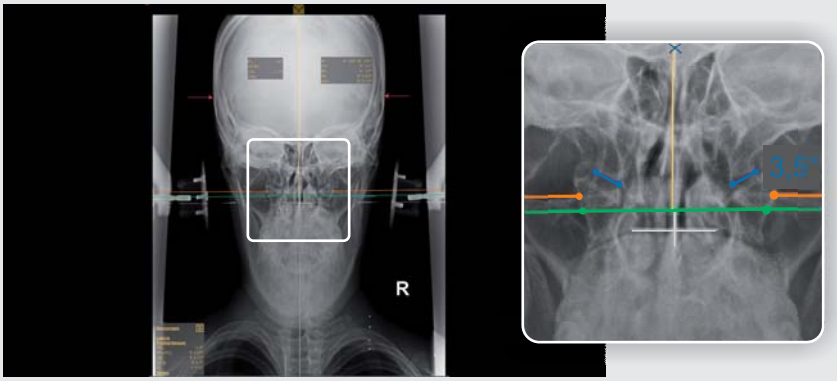
Examples

*dicom*PACS® Diagnostic Tools for Upper Cervical Chiropractic

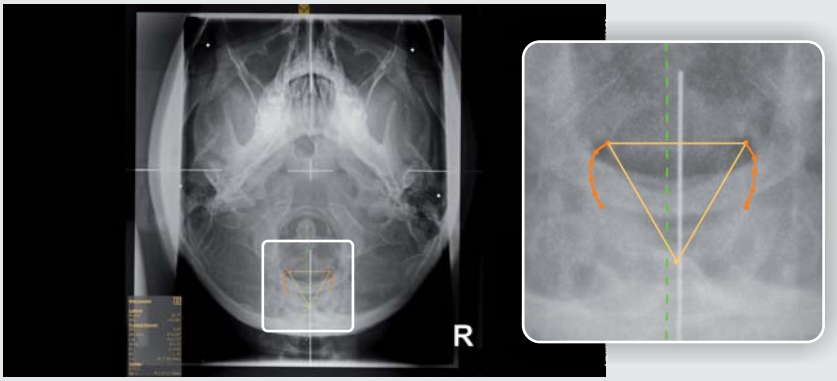
Cephalometer and Central Skull Line
Use the Cephalometer to draw the Central Skull Line. Laterality and Skull Tippage will be calculated automatically. The four elements and listing information will be inserted.



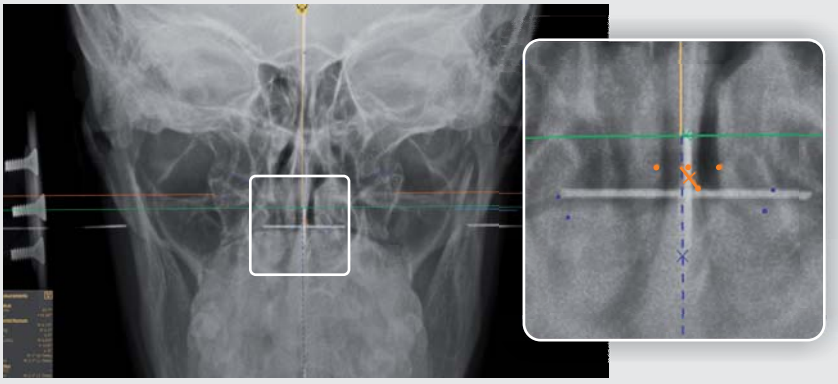
Condylar Circle
Choose between the three point and four point Condylar Circle. The middle point will be shown. You can set the calculated measurement manually to the value you prefer. The Relatoscope will use the shown value.



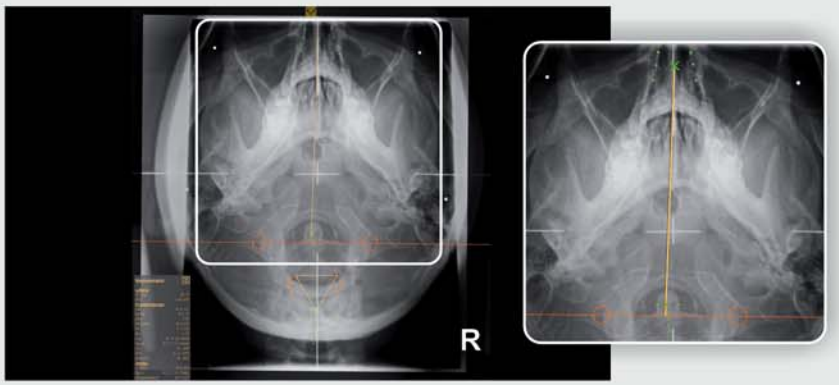
Odontoid Center and Vertex Square
Mark the lateral aspects of the dens and the Odontoid Center Line will be inserted. After marking the C2 canal, the Vertex Square will be inserted and the Spinous value will be calculated depending on the Condylar Circle.



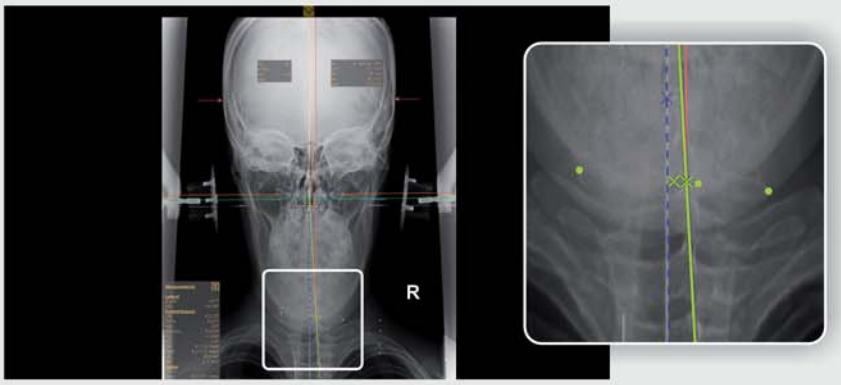
Odontoid, Spinous and Relatoscope
Use the Relatoscope to apply the Spinous value from Vertex to Nasium View. Mark the lateral aspects of the dens and the (corrected) Odontoid will be inserted automatically.



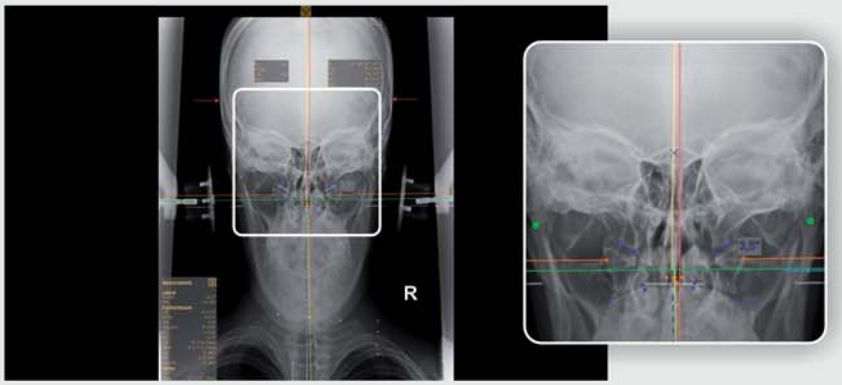
Vertex Skull Line
After marking the nasal structures, click the Inferior Point button. The point will be set automatically depending on the Listing Information value and the Vertex Skull Line will be inserted. Atlas Rotation will be calculated.



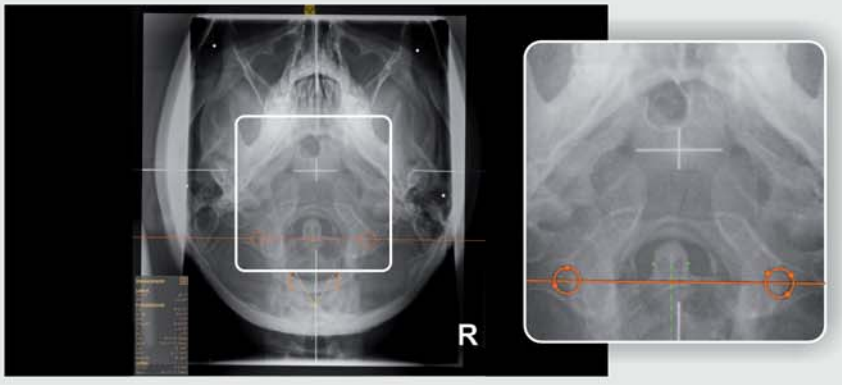
Lower Angle and Angular Rotation
The Lower Angle and Angular Rotation will be calculated automatically after setting the Inferior Point. You can also set a corrected Inferior Point.



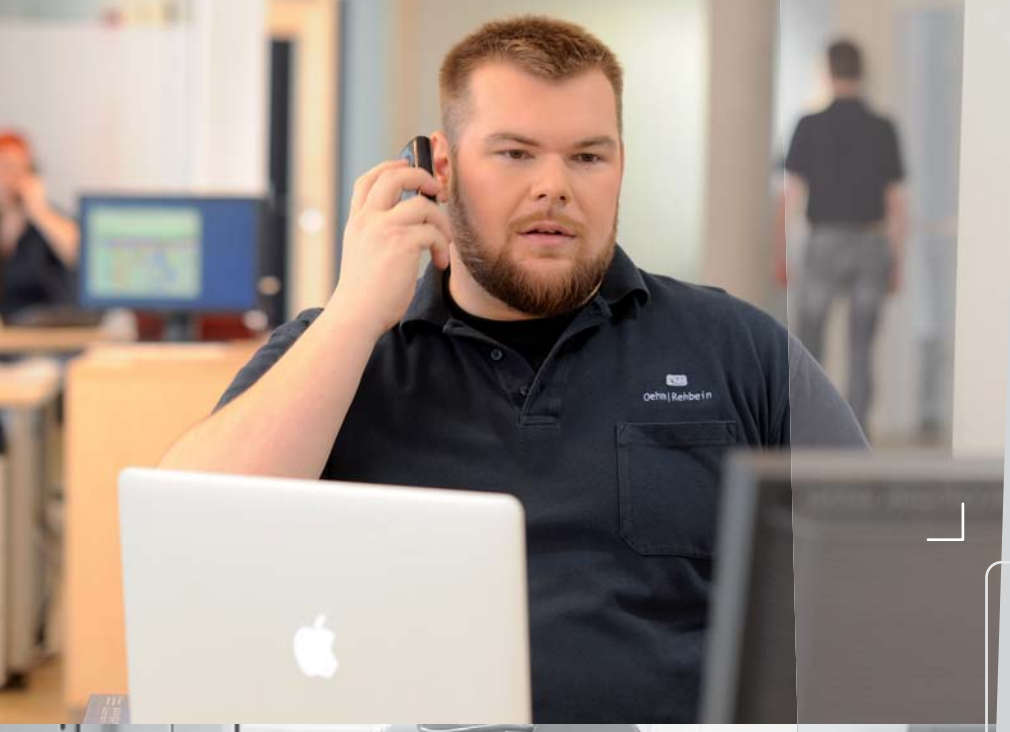
Intermastoid Line
Mark the inferior tips of the mastoid processes. The measured value, its orthogonal divergence from the Central Skull Line, will also appear in the raw data box.



Vertex Atlas Line
After marking the transverse foramina of the atlas with three points each, the Vertex Atlas Line will be drawn and the convergence of C1 and C2 is shown in the raw data box.



For more detailed information please see: **www.or-technology.com**





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*Overview of the countries with **dicom**PACS® systems (as at 9/2026)*

Network

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Version OR001113-007_11_2026

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