

						
<h1>MAGNETOM C!</h1> <p>Small footprint – giant steps</p>						
						
<p>MAGNETOM C!</p>						



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**Competence**  
**Confidence**  
**Comfort**  
**Cost efficiency**

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## 3rd generation Open MRI



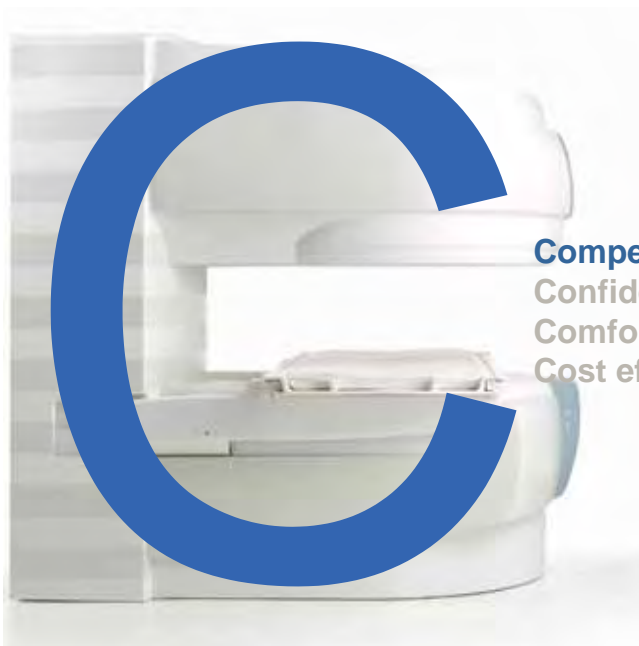
### Small footprint

Most compact C-shaped magnet in mid-field (0.35T)

### Giant steps

True multi channel imaging  
High field technology  
Superior workflow support

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**Competence**  
Confidence  
Comfort  
Cost efficiency

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## Competence High-field RF-system

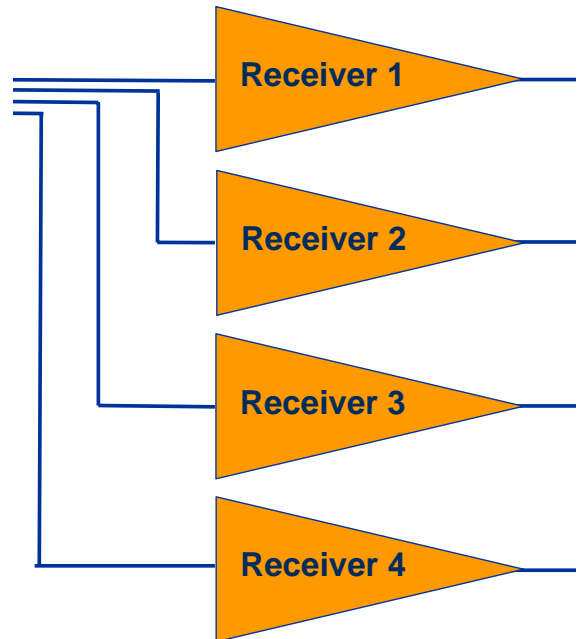
4 element coils work with 4 channels:

# 4

**Flexibility. Accuracy. Speed.**



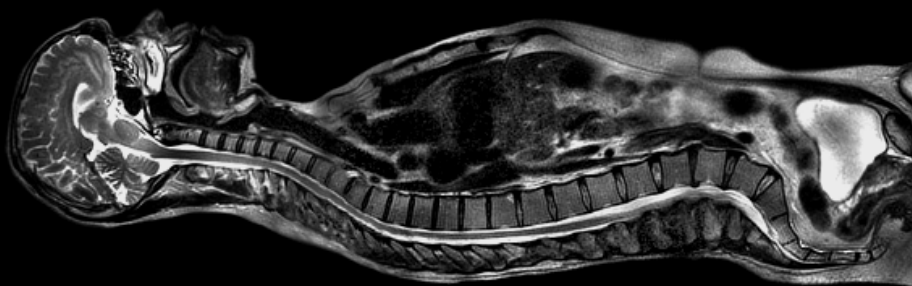
4 element Head Coil



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## Flexibility

Up to 4 coils can be positioned simultaneously



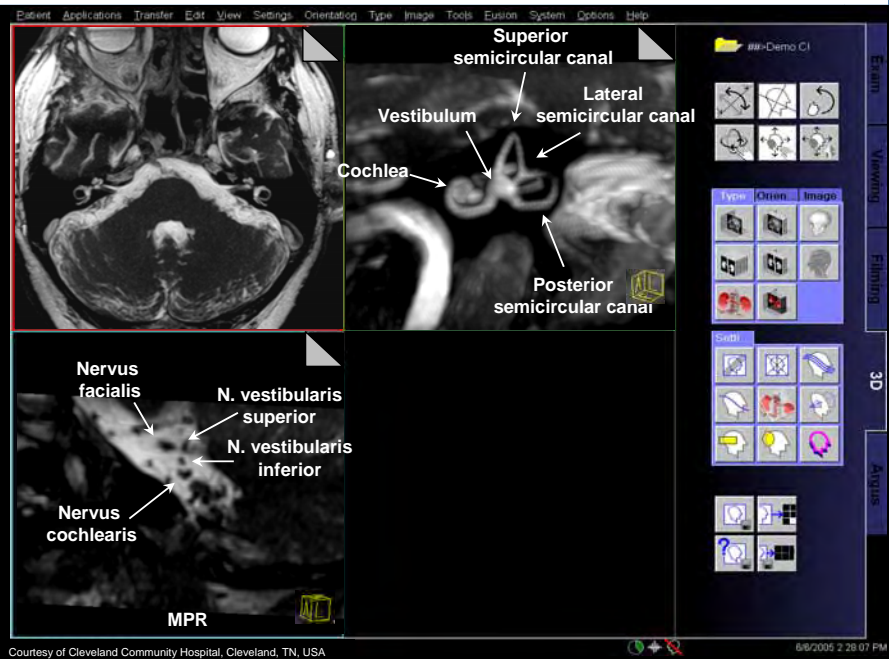
- Easy whole CNS imaging in three steps without repositioning of the patient.
- Three high resolution data sets can be seamlessly combined with the spine composing package.

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## Accuracy

### Complete range of 4 element coils

- 4 element coils for superior signal to noise ratio enable high-resolution imaging
- sub-millimeter isotropic resolution
- facilitates multiplanar reconstruction
- highest diagnostic confidence



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## Speed

### 4 elements and 4 channels enable parallel acquisition techniques



T2 TSE with *syngo* GRAPPA  
 192x256 matrix, FoV 260x260 mm, slice 4.0 mm, TA 81 s

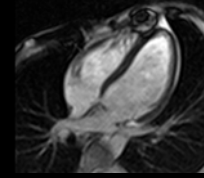
Courtesy of Eduardus Krankenhaus, Cologne, Germany

- iPAT parallel acquisition techniques for faster scans
- larger coverage and higher resolution

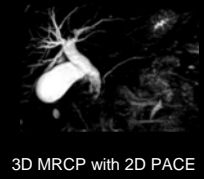
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## Competence High-field technology

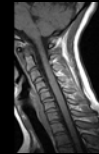
- **Exceptional gradient system**
  - Gradient 24 mT/m
  - Slew Rate 55 T/m/s
- **High field applications and techniques including**
  - 2D PACE – multi-dimensional motion correction algorithm
  - iPAT – for high spatial and temporal resolution



Advanced applications facilitated with strong gradients



3D MRCP with 2D PACE



TIRM dark fluid, PAT2

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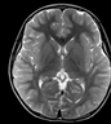
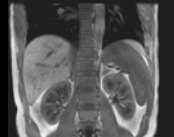
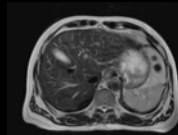
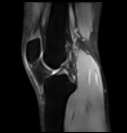
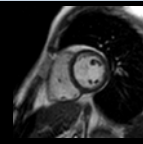
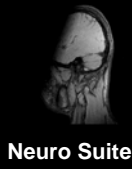


Competence  
Confidence  
Comfort  
Cost efficiency

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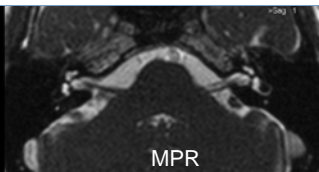
## Confidence

Comprehensive state of the art applications

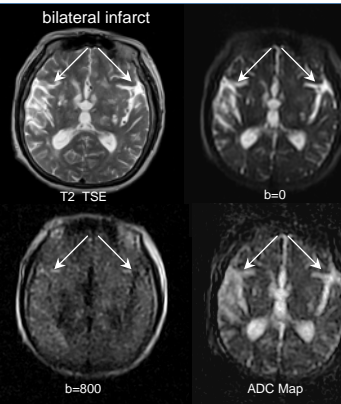


MAGNETOM C!

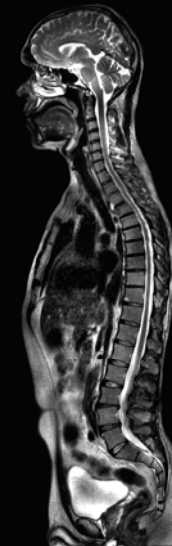
## Confidence Neuro Imaging



3D CISS for inner ear  
1mm isotropic resolution, TA 6:39min  
courtesy of Eduardus Krankenhaus, Cologne,  
Germany



Stroke evaluation with superior HASTE Diffusion  
courtesy of TianJin TCMC 2nd Hospital, TianJin, PRC

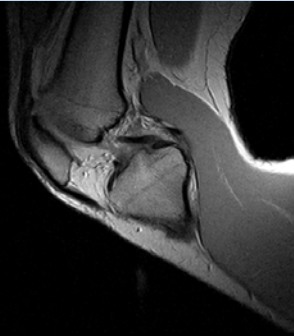


100cm seamless FoV in one exam  
for whole CNS imaging

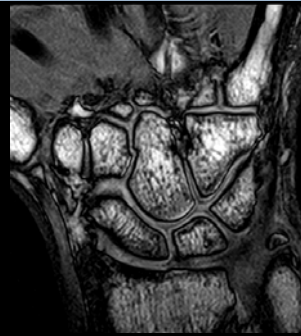
- Comprehensive neuro applications for high-field diagnostic confidence

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## Confidence Ortho Imaging



Kinematic studies facilitated by compact C-shaped magnet



High resolution imaging with good delineation of cartilage with unique 3D DESS

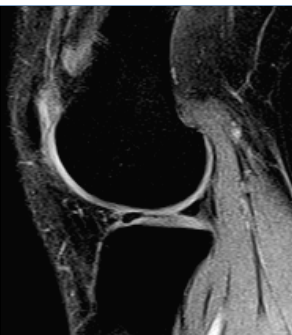


Easy patient setup due to small pole diameter  
courtesy of Prof. Zhang WanShi, Airforce General Hospital, Beijing, PRC

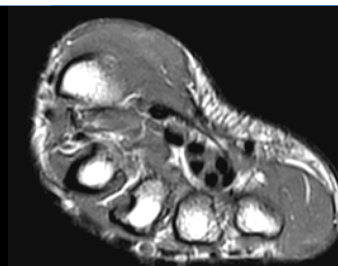
- Superior results in high resolution orthopedic imaging with Siemens unique 3D CISS and 3D DESS

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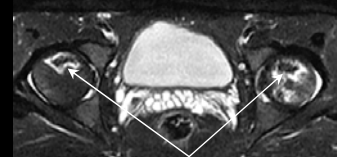
## Confidence Ortho Suite



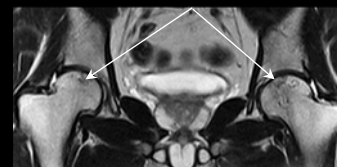
4 Fat Saturation techniques in the standard package  
courtesy of Eduardus Krankenhaus, Cologne, Germany



High resolution imaging in small field of views



Bilateral Avascular Necrosis after SARS treatment

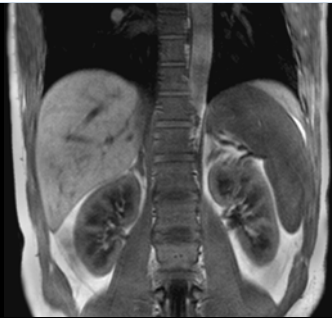


FatSat over large FoVs for bilateral hip imaging  
courtesy of Prof. Zhang WanShi, Airforce General Hospital, Beijing, PRC

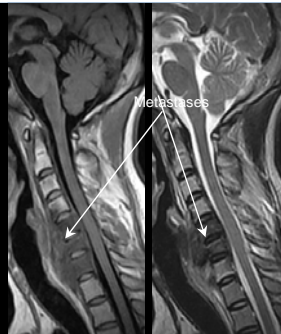
- Including Water Excitation (WE), 3 point DIXON, Inversion Recovery (TIRM), RF Fat Suppression

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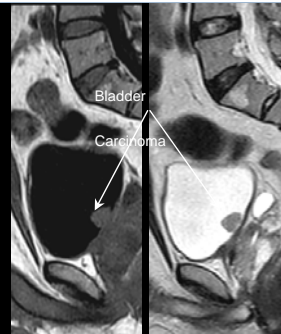
## Confidence Onco Suite



High resolution T1 FLASH at full 40cm field of view



High resolution T2 imaging with and without dark fluid  
courtesy of Dr. Zhang ShiKe, HuiYang People's Hospital, HuiYang, PRC

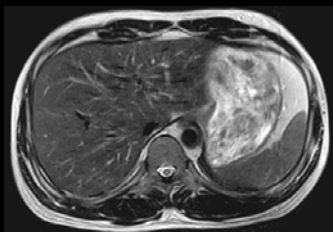


High resolution T1 and T2 TSE imaging with 2D PACE  
courtesy of Dr. Zhang ShiKe, HuiYang People's Hospital, HuiYang, PRC

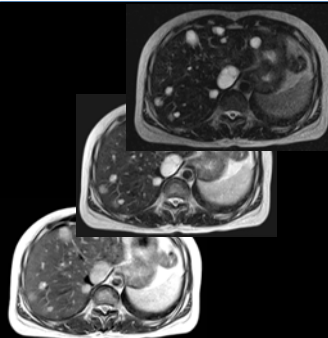
- Comprehensive oncological applications for high-field diagnostic confidence  
Including STIR, TSE, FLASH in/out of phase, 2D PACE

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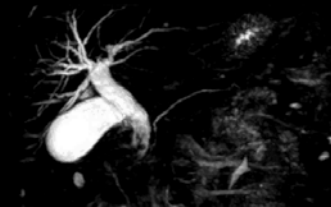
## Confidence Body Suite



Easy abdominal imaging with 2D PACE for respiratory triggering without belt



Triple contrast TSE for evaluation of hemangioma  
courtesy of Dr. Zhang ShiKe, HuiYang People's Hospital, HuiYang, PRC



MRCP with 3D TSE or 3D HASTE with 2D PACE  
courtesy of HaiNan NonKeng Hospital, SanYa, PRC

- Comprehensive kit of applications for quick and easy body imaging  
Including 2D PACE multi-directional motion correction

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## Confidence MR Angiography



**ToF Angiogram of the circle of Willis**  
courtesy of Lonestar Imaging, USA

**ce MRA of the carotids**  
courtesy of Eduardus Krankenhaus,  
Cologne, Germany

**ce MRA of the renal arteries**  
courtesy of Lonestar Imaging, USA

- Comprehensive MRA for high-field diagnostic confidence  
Time of Flight, Phase Contrast, Contrast Enhanced MRA, Care Bolus, Inline Technology

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## Confidence Pediatric Imaging



**12 year old, brain mass**  
courtesy of TianJin TCMC 2<sup>nd</sup> Hospital, TianJin,  
PRC

**13 year old, erosive changes in the cartilage**  
courtesy of Eduardus Krankenhaus, Cologne,  
Germany

**17 year old, liver mass**  
courtesy of Hainan NongKen No1 People's  
Hospital, SanYa, PRC

- Special protocols to match the T1 and T2 values of infants and kids

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## Confidence

### Easy and flexible anatomical coverage

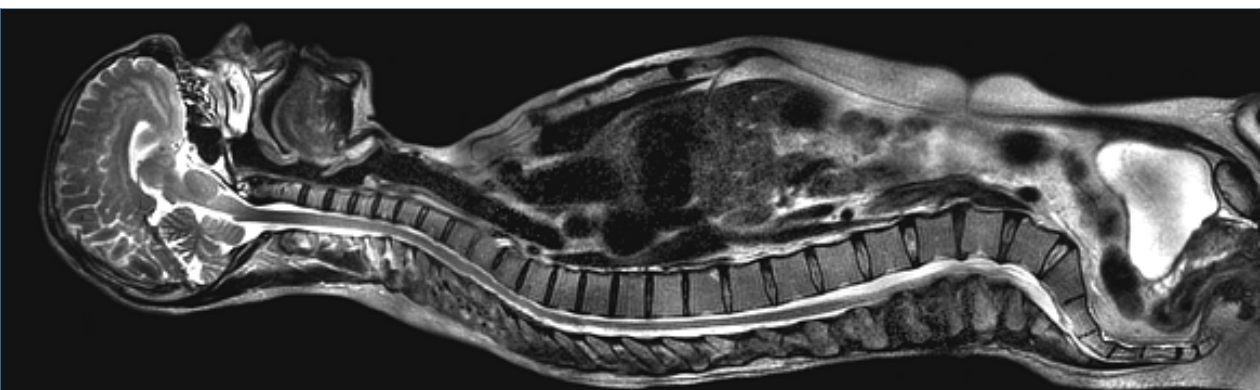


- Up to four coils can be positioned simultaneously for extended field-of-view up to 100cm (25").

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## Confidence

### Easy and flexible anatomical coverage



- Easy whole CNS imaging in three steps without repositioning of the patient.
- Three high resolution data sets can be seamlessly combined with the spine composing package.

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Competence  
Confidence  
**Comfort**  
Cost efficiency

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## Comfort

Most compact C-shaped magnet in mid-field



Smallest pole diameter in mid-field



270° accessibility and side loading



Patient friendly for obese patients

- Even smallest sites leave lots of room for patients and operator
- For 60+% of the exams the patient's head will not go into magnet
- Perfect for obese patients – 69" BodySpine Array, 31.4" Extremity Array

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## Comfort

Most compact C-shaped magnet in mid-field



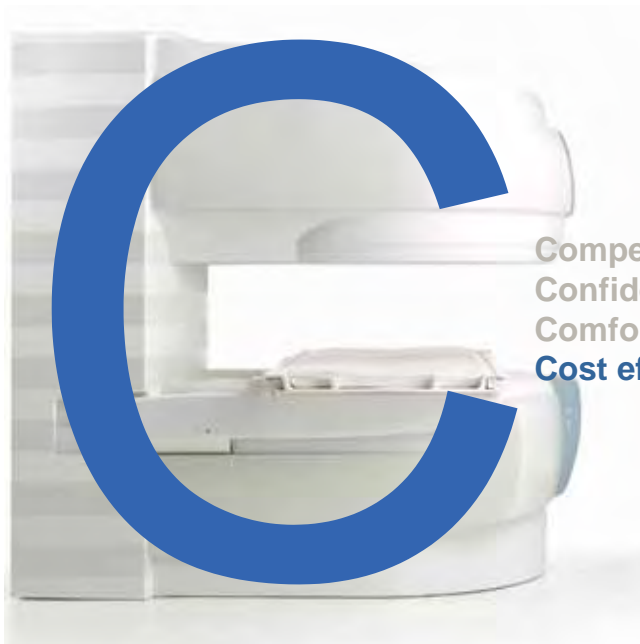
**MAGNETOM**



**other open MRI**

- Patient friendly examinations on the **MAGNETOM C!**

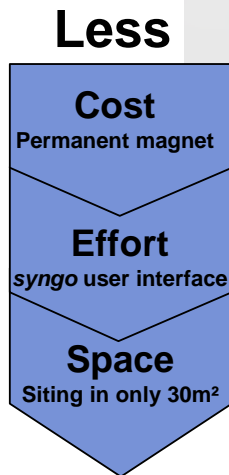
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Competence  
Confidence  
Comfort  
**Cost efficiency**

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## Cost efficiency



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## Experts perspective

**“The image quality is excellent and has surpassed all our expectations. We perform a large amount of orthopedic, spine, and neuro MRI, and the image quality rivals that of our excellent 1.5 Tesla system. I could not be happier with our new magnet. I give it our strongest recommendation.”**

June 21, 2005, Cleveland Community Hospital

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## 3rd generation Open MRI



**Small footprint**  
Most compact C-shaped  
magnet in mid-field (0.35T)

**Giant steps**  
True multi channel imaging  
High field technology  
Superior workflow support

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**Thank you for your  
attention.**