SIEMENS 3T MRI

IMAGING SPECIALISTS ROUSE HILL

MAGNETOM Lumina with BioMatrix















bookings@imagingspecialists.com.au

3 02 8614 8499



www.imagingspecialists.com.au

MAGNETOM Lumina Confidence to deliver

At the core of its impressive acquisition speed lies our exclusive Turbo Suite allowing for up to 50 %1 faster routine scans. And with the further objective to reduce the overall patient time slot in your institution, MAGNETOM Lumina offers additional remarkable innovations to boost workflow efficiency.

Turbo Suite

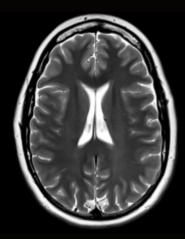
Turbo Suite Essential

Be ahead in scan time and maximize productivity with core MR acceleration technologies

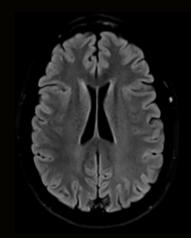
Turbo Suite Essential is our standard acceleration package for MAGNETOM Lumina. This package leverages high element density coils, the parallel imaging techniques GRAPPA and our unique CAIPIRINHA to deliver routine exams in 10 to 15 minutes¹.



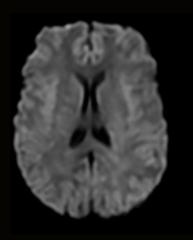
Neuro imaging



T2 TSE 0.6 x 0.6 x 4 mm³, TA 1:30 min

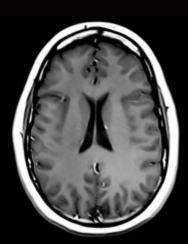


T2 Dark Fluid
0.8 x 0.8 x 4 mm³, TA 1:21 min
2aaa1372

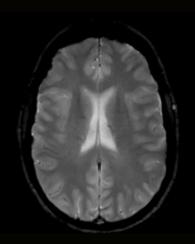


DWI, b50 *b1000* 1.1 x 1.1 x 4 mm³, TA 1:01 min 2aaaa1372

Total exam
10:38 min



T1 SE 0.6 x 0.6 x 4 mm³, TA 1:10 min



T2*
0.8 x 0.8 x 4 mm³, TA 1:27 min
2aaa1372

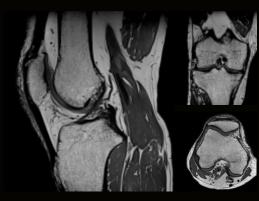


3D TOF 0.3 x 0.3 x 0.6 mm³, TA 4:08 min 2aaaa1372

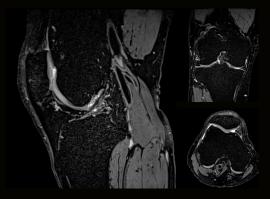
Routine exams in 10–15 minutes¹

Isotropic 3D MSK exams utilize the power of CAIPIRINHA, delivering all clinically relevant contrasts in 10 minutes. For body imaging, up to 50 %¹ shorter breath-holds and high-resolution scans are possible with CAIPIRINHA.

MSK imaging – 3D exam



3D PD CAIPIRINHA SPACE, CAIPIRINHA 4 0.5 mm iso, TA 4:34 min



3D T2 CAIPIRINHA SPACE FS, CAIPIRINHA 4 0.6 mm iso, TA 4:31min

Total exam

9:05 min

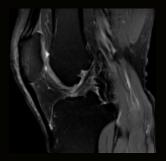
enabled by unique
CAIPIRINHA SPACE

Turbo Suite Excelerate Be up to 50% faster for routine, clinical exams

Turbo Suite Excelerate introduces a paradigm shift in productivity with up to 50%¹ time savings, for all contrasts, orientations, and body regions. Dramatically transform care delivery with cutting-edge acceleration technologies Simultaneous Multi-Slice and planned Compressed Sensing² for static 2D and 3D imaging, covering neurological, orthopedic, and body MRI.

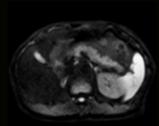
Simultaneous Multi-Slice

Conventional



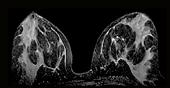
PD TSE FS, PAT 2 0.5 x 0.4 x 3 mm³ TA 2:42 min 2aaa1253

50% reduction



DWI, PAT 3, b50 b800 1.4 x 1.4 x 5 mm³ TA 4:07 min

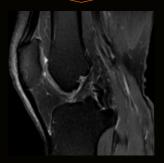
40% reduction



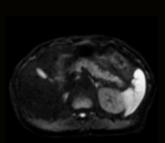
RESOLVE⁸, b50 b800 1.2 x 1.2 x 5 mm³ TA 4:21 min

60% reduction

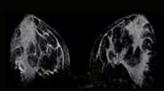
Turbo Suite
Excelerate with
Simultaneous
Multi-Slice and
Compressed
Sensing



SMS TSE, PAT 2 SMS 2 0.5 x 0.4 x 3 mm³ TA 1:21 min



SMS DWI, PAT 2 SMS 2, b50 b800 1.4 x 1.4 x 5 mm³ TA 2:27 min



SMS RESOLVE^{2,8}, SMS 3, b50 b800 1.2 x 1.2 x 5 mm³ TA 1:44 min

Turbo Suite



Allow more time to perform dedicated sequences to target suspected pathology.

In addition to our latest Simultaneous Multi-Slice applications for EPI and TSE, the Excelerate package provides future security with granted access to planned new acceleration techniques including Simultaneous Multi-Slice RESOLVE² as well as Compressed Sensing acceleration for SPACE², TOF² & SEMAC².

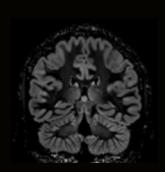
Compressed Sensing



3D TOF Angio⁶, PAT 2 0.4 mm iso TA 4:28 min



3D T2 SPACE MRCP⁶ 0.5 x 0.5 x 1.0 mm³ TA 7:16 min



3D T2 SPACE DIR⁸
1.4 mm iso
TA 6:07 min
3aaaa0784



SEMAC^{8,9}
1.2 x 1.2 x 3 mm³
TA 11:10 min

56% reduction

97% reduction

49% reduction

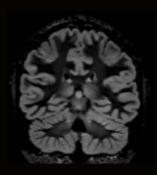
51% reduction



3D CS TOF Angio^{2,8}, CS 10 0.4 mm iso TA 1:58 min



3D T2 CS SPACE MRCP^{2,8}, CS 23 0.5 x 0.5 x 1.0 mm³ TA 0:15 min



3D T2 CS SPACE DIR^{2,8}, CS 7 1.0 mm iso TA 3:07 min



CS SEMAC^{2,8,9}, CS 8 1.2 x 1.2 x 3 mm³ TA 5:30 min 3aaaa1793

Streamline patient handling with BioMatrix technology



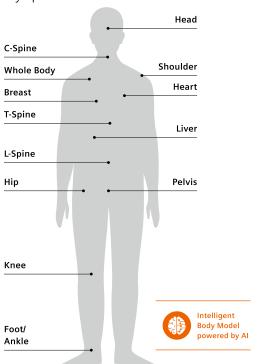
BioMatrix technology overcomes variations by automatically adjusting to the individual patient. BioMatrix Sensors, Tuners, and Interfaces enable you anticipate motion, adapt to any patient's body type and accelerate patient positioning. The result: higher diagnostic confidence, fewer rescans, predictable scheduling and consistent, high quality personalized exams.

Dot Engines



BioMatrix Select&GO

Powered by artificial intelligence – the BioMatrix Select&GO touch display enables patient positioning with one-touch, accelerating patient positioning by up to $30\,\%^1$.



Automated reproducibility with Dot Engines

MAGNETOM Lumina's eight unique Dot Engines tailored to different body regions provide highly automated scan procedures for more than 90% of all MRI exams. Each Dot Engine provides a comprehensive guidance system and predefined scan strategies. AutoAlign, powered by artificial intelligence, delivers automatic placement of imaging slices to ensure reproducible scan results—every time.

Over 90 % of MRI exams covered



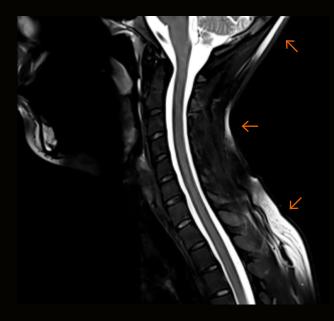


Adapt to challenging anatomies for reliable results with BioMatrix Tuners



BioMatrix Tuners adapt to challenging anatomies, such as the head/neck area, the spine and the abdomen, for reliable exam results. Even for difficult scan regions, our intelligent coil technology consistently delivers excellent homogenity and fat saturation – driving robustness and reproducible high-quality imaging – for every patient, every time.

Significantly improved fat saturation and image quality with BioMatrix Tuner CoilShim





Conventional Shim

With CoilShim

Integrated into the new BioMatrix Head/Neck 20 coil, CoilShim increases diagnostic quality and reduces the need for repeat scans by delivering improved fat saturation and better DWI quality in the neck region. CoilShim technology ensures that the challenging area is automatically and optimally shimmed for reproducible quality in every patient.

Provide more diagnostic confidence to Radiologists.









bookings@imagingspecialists.com.au





