

Philips 3D Smart Quant Neuro

Exploring neuro-radiology with Synthetic MR imaging

3D Smart Quant Neuro¹ allows you to perform MR imaging with an AI-accelerated single quantification scan. The resulting data can be used as input for advanced third party SyMRI processing software² to synthesize MR images with different contrasts, brain parenchyma fraction maps and brain segmentation maps.

Product benefits

- Deliver a synthetic imaging protocol in less than 3 minutes³
- AI powered fast and standardized protocol
- Clinically relevant contrast images and quantitative data in a single scan
- Configurable output per clinical indication for efficient assessment and triage

Field strength	3.0T
Main applications	Brain
Sequence	Single quantification scan with an advanced MR acquisition scheme.
Image types	T1, T2 and FLAIR MR images. Automatic calculation of brain parenchyma fraction maps. Automatic segmentation of brain tissue (grey matter, white matter, CSF). NOTE: All images are synthesized by third party processing software ² , based on Philips MR data.
Speed	Can be combined with the efficient Compressed SENSE or SmartSpeed imaging technology to provide superior speed performance.
Image quality	3D SyntAc will deliver 1 mm isotropic resolution on 3.0T

1. Philips SyntAc used in combination with SmartSpeed, is providing the input for the SyntheticMR software, SyMRI.

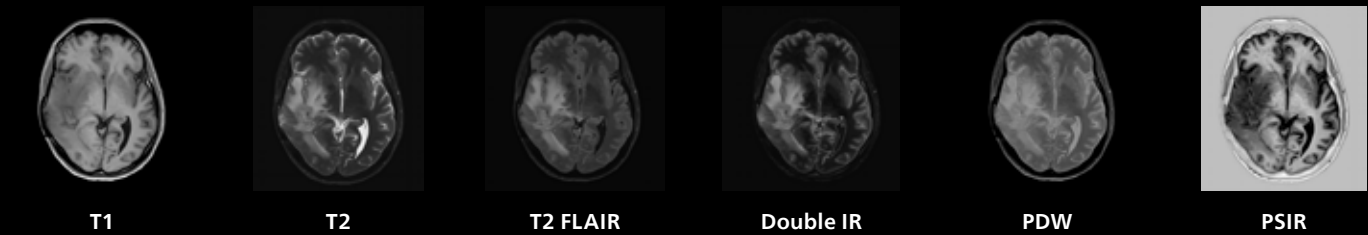
Any quantification reference in the present material is provided solely by SyMRI software.

2. Synthetic MR, AB, Sweden.

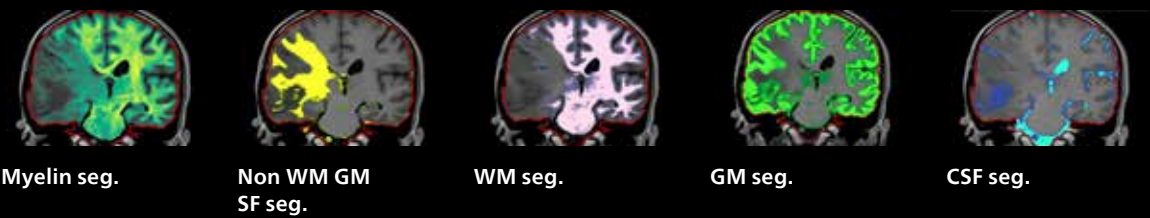
3. With Philips SmartSpeed.

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Standard and advanced contrast images



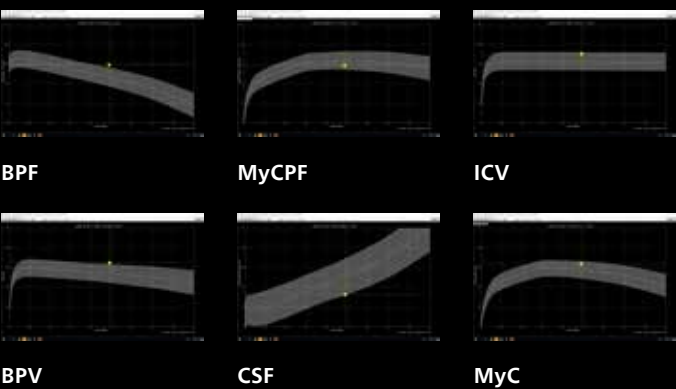
Quantitative segmentation maps



Quantitative maps



Quantitative reference curves



Segmentation table

	WM	GM	CSF	NON	MyC
Sum (ml)	575.0	723.4	128.0	155.7	191.0
% BPV	39.5	49.7	-	10.7	13.1
% ICV	36.3	45.7	8.1	9.8	12.1

BPF: 91.9 % (BPV / ICV)
BPV: 1454 ml
ICV: 1582 ml
Intracranial mask generated by SyMRI NEURO

Courtesy: Mermaid Beach Radiology, Mermaid Beach, Australia | Elition 3.0T

