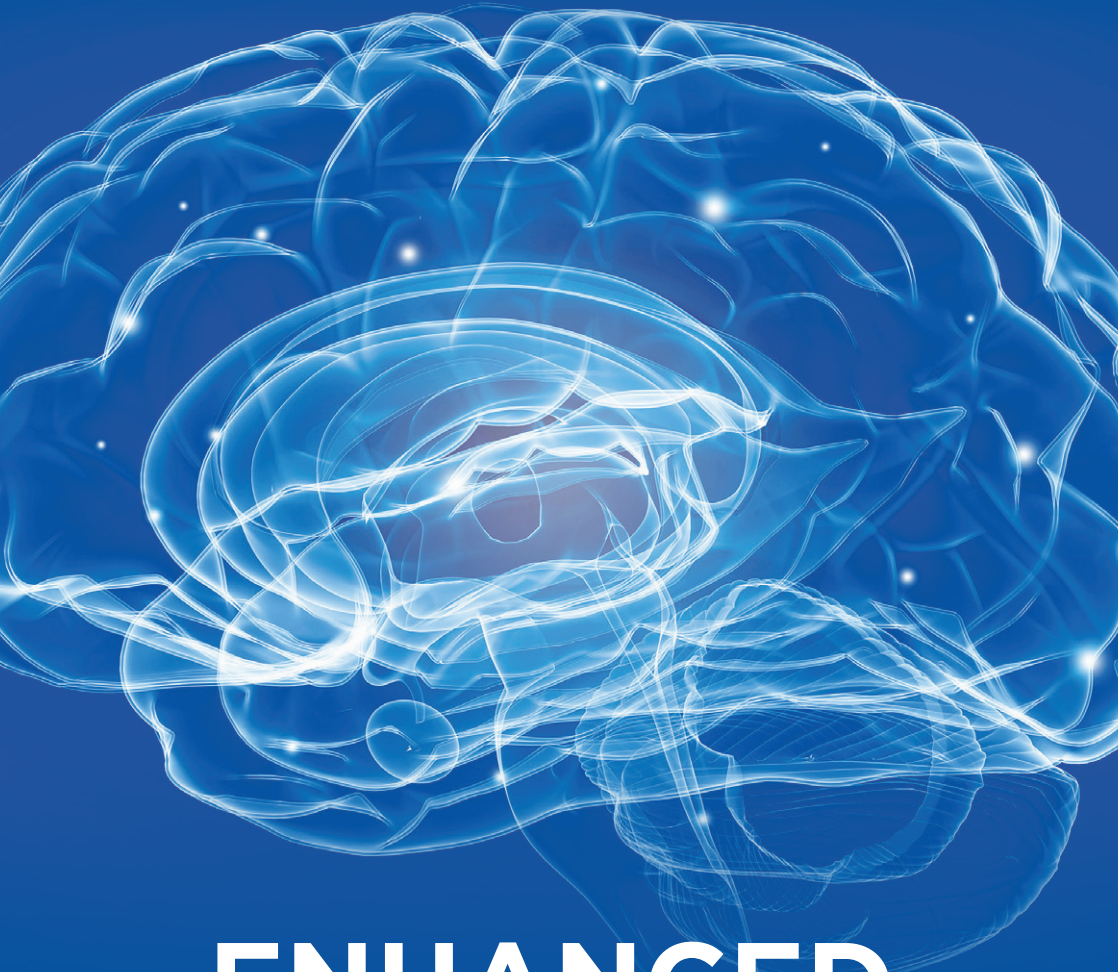


 PIXYL



**ENHANCED  
MRI ANALYSIS**

# Pixyl's solution

Pixyl software provides simple, intuitive and fully integrated MRI data solutions. Benefits for users and patients are:

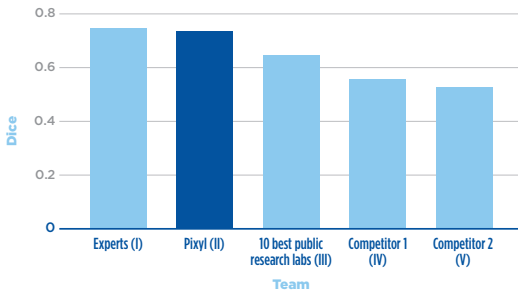
- Time saving (under 5 minutes)
- Reliable analysis
- Advanced tailored results
- Reducing costs

# Pixyl's expertise

Pixyl's software excellence and speed are based on a combination of probabilistic methods (Bayesian), Artificial Intelligence technologies (Deep Learning), and a large network of international scientifics and medical experts.

# References and results

Results that place Pixyl next to the experts!



Average overlap coefficient between a ground truth and : (I) the manual segmentation of experts, (II) the Pixyl.Neuro product, (III) the average of 10 of the best public university labs and (IV&V) other solutions on the market. The dataset comprises two public challenges (MS isbi 2015 and MS Miccai 2016) and Pixyl's personal dataset. All ground truth were performed by trained experts.





# Clinical Routine

## Full and transparent integration in the clinical workflow

- No action required (Zero Click AI)
- Secured and anonymised

ZERO



CLICK

## Under 5 minutes analysis

- AI-based algorithms
- Models trained on images labelled by experts
- Best performances guaranteed



## Automatic integration of the results into your PACS

- Quantitative results in a PDF report
- Qualitative analysis in DICOM format

## A simple, fast and robust solution!

**PIXYL** **MULTIPLE SCLEROSIS REPORT**  
PixylNeuro v1.6.1

**Patient information**

subject10 | Male | 21/10/1967 | 18455  
Visit date: 01/06/2019, prior visit: 08/10/2018

**Disease activity**

T2 FLAIR		T1
New 19	Enlarging 3	With contrast Not available

**Lesion load**

	T2 FLAIR White Matter Hyperintensities		
	Volume (ml)	Change (ml)	Lesion count *
Periventricular	6.87	+1.84	≥ 1
Juxtacortical	0.84	+0.08	≥ 1
Infratentorial	0.02	-0.04	≥ 1
Deep WM	1.42	-0.55	≥ 1
Whole brain	9.14	+1.34	≥ 9 **

\* The lesion count is based on the 2017 revision of the McDonald criteria:  
<https://www.europeanjournalofneurology.com/doi/10.1016/j.eurjnl.2017.05.003>

\*\* The Barkhof MRI criteria for MS diagnosis includes at least 9 lesions on T2-weighted images.

**FLAIR Segmentation**

■ New      ■ Enlarging      ■ Stable

**Quality control**

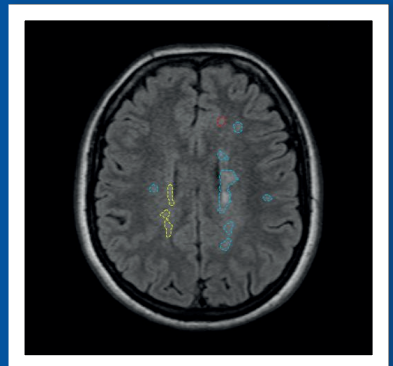
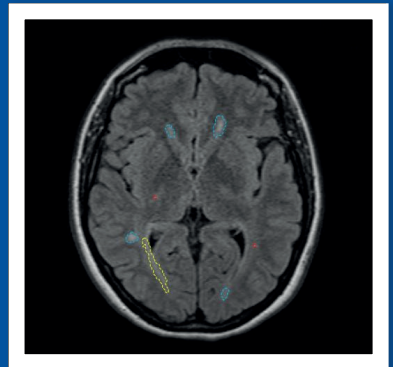
**Warning**

**Observations**

- Image quality does not meet optimal requirements.
- Image quality differs from prior visit.

Images from Lesjak et al. A novel public MRI image dataset of multiple sclerosis patients with lesion segmentations based on multi-rater consensus. Neuroinformatics 2017.

1/1 Generated by Pixyl, on June 25th, 2019 [pixylmedical.com](http://pixylmedical.com)



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*« Put AI in the hands of  
healthcare specialists to  
benefit the patient. »*

**S. Doyle CEO, Pixyl**



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