Smart Soft LTD
113 Gen. Kolev STR, office 7.3
Varna 9000, Bulgaria

Sep 28, 2020

Smart Soft Ltd., is pleased to share the results from the interim report of multi-center clinical trials for CoLumbo - the unique machine learning algorithm, based on fully convolutional neural networks combined with medical domain knowledge which are capable of reading MRI spine images, acquiring a diagnosis and preparing a written report in a matter of seconds.
The results show that CoLumbo can be a valuable partner for MRI lumbar spine reading and reporting.

Disagreements with a majority opinion by:

Diagnosis	Radiologist assisted by Columbo	Radiologist not using the software	Improvement with Columbo*
Herniation	8.30%	10.10%	8.60%
Spondylolisthesis	0.00%	0.60%	2.90%
Bulging	10.90%	12.90%	9.50%
Hypolordosis	3.10%	31.60%	28.50%
Central spinal stenosis	1.00%	6.40%	25.70%

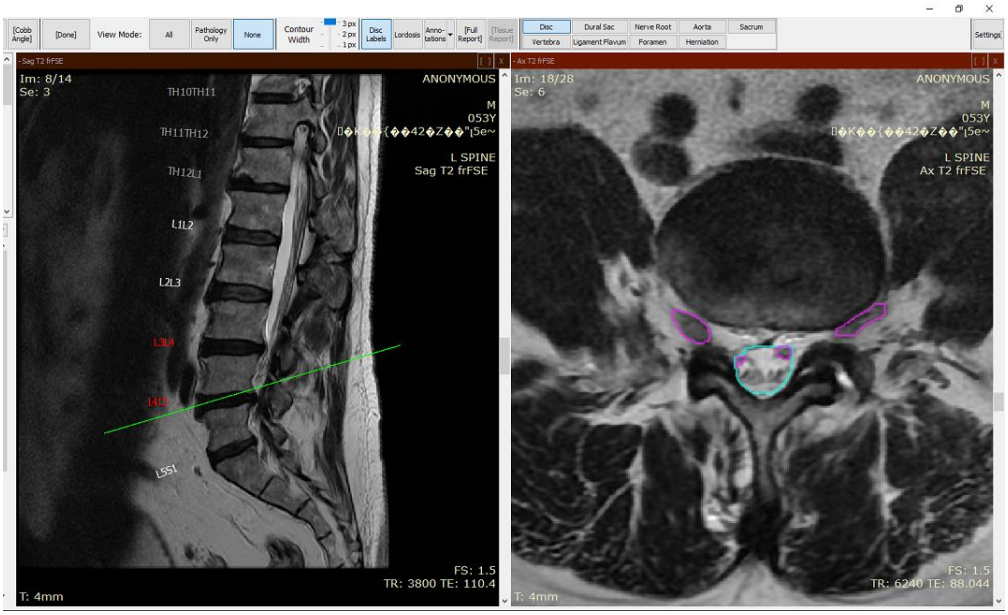
*The improvement is calculated on a per-patient basis

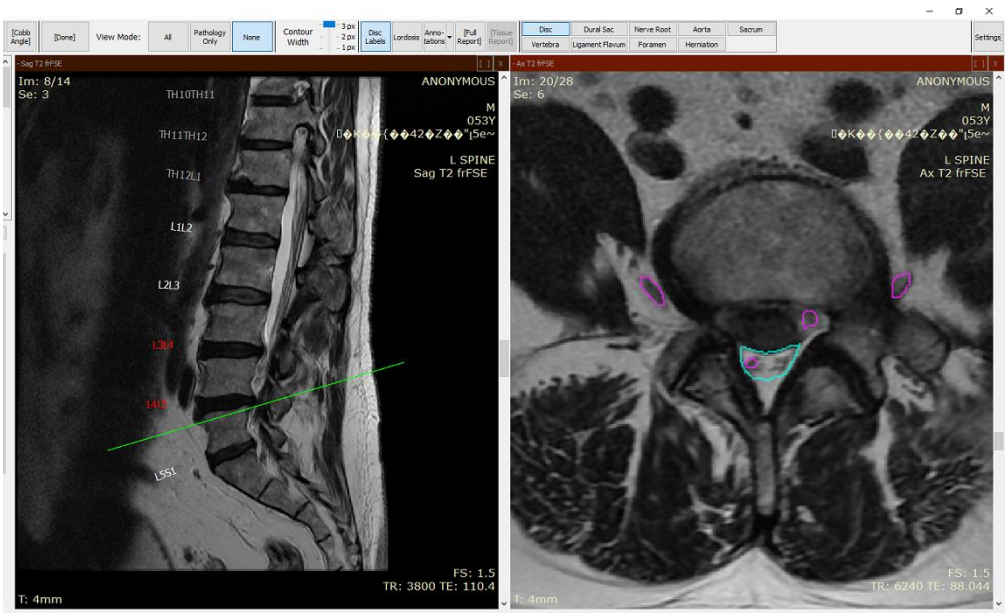
Algorithm accuracy before validation

Stats for pathology:	Sensitivity:	Specificity:
HERNIATION	73.63%	91.45%
HERNIATION_MIGRATION	95.65%	80.00%
BULGING	70.30%	91.07%
SPINAL_STENOSIS	93.75%	98.40%
SPONDYLOLISTHESIS	100.00%	99.83%
LORDOSIS	83.33%	96.39%

Stats for:	Total:	Matches:	Mismatches:
SPINAL_STENOSIS_SEVERITY	45	93.33%	6.66%
SPONDYLOLISTHESIS_SEVERITY	4	100.00%	0.00%

Smart Soft LTD
113 Gen. Kolev STR, office 7.3
Varna 9000, Bulgaria





*In this case the investigator without the software has stated that there is no stenosis, while the investigator using the software has agreed with the software, that there is stenosis. The arbiter has also supported the investigator using the software. In cases like these, either due to faster scrolling through the slices, or the examination only of disk levels, the software can help detect such pathologies. There is no doubt that there is stenosis on the vertebral level because the area of the Dural sac is 42 square mm.

CONTACT:
Smart Soft Ltd.
contact@smart-soft.net

C01009/28.09.2020