

**Release Note**

Product Name: Pixyl.Neuro

Release Date: 15-february-2021

Release Note for Pixyl.Neuro

Version Number

1.7.1

Introduction

Pixyl.Neuro is a web-based software to help diagnosis in neurology and neuroradiology based on brain MRI data. Pixyl.Neuro performs biomarkers extraction for multiple sclerosis, pathologies that affect the white matter in general (Leukoencephalopathy for example), and neurodegenerative diseases (Alzheimer's, Parkinson, etc.). It provides fully automatic brain lesion segmentation, cortical and subcortical structures segmentation, comparison with a normal population, and longitudinal analysis.

Back-end release notes

- Updated base OS (ubuntu 20.04 LTS), libraries (Numpy, Scipy, Nibabel, etc) and third-parties (ITK, ANTs, etc)
- Enhanced Deep Learning architecture for all segmentation and parcellation tasks
- Use the Ants' GenericLabel interpolation option for multi-label images and b-spline for linear images for more accurate interpolation
- Changed SeriesDescription tag in output DICOM images to include the software version, as well as for longitudinal the reference date
- Fixed growing and new lesions characterization in longitudinal analysis

Front-end release notes

- Cybersecurity: Web server log monitoring, vulnerability check and fix, change passwords, settings files backup, IP whitelist setup
- New option for downloading reports in DICOM image format (secondary capture) through APIs
- Technical migration: Upgrade Ubuntu, Node.js and third-parties
- Changed SeriesDescription tag in output DICOM report to include the software version, as well as for longitudinal the reference date

Known issues introducing risks

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Release authorized by

Senan Doyle, CEO

Signature and Date

15-February-2021



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