Ischemic Stroke Lesion Image Segmentation
ISLES Introduction

Ischemic Stroke Lesion Segmentation (ISLES) is a medical image processing challenge¹ aiming to provide a platform for a fair and direct comparison of methods for ischemic stroke lesion segmentation from multi-spectral MRI images. A public dataset of diverse ischemic stroke cases and a suitable automatic evaluation procedure was made available. Researchers working in the field can download the data, apply their methods and then upload the results for an automatic on-line evaluation. A continuously updated table allows to directly compare each algorithms against all other submission.

The challenge comprises of two distinct sub-challenge:

- **SISS**: Sub-acute ischemic stroke lesion segmentation
- **SPES**: Acute stroke perfusion lesion estimation

This third part of the volume contains contributions to the ISLES opening event held at the International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) on October the 5th 2015. The articles describe the methods of 14 teams who submitted to SISS and another 7 who submitted to SPES in detail.

For the ranking table of the participating methods and further information, see the official homepage [http://www.isles-challenge.org](http://www.isles-challenge.org). The data repository, evaluation system and ongoing rankings are hosted at [https://www.smir.ch/ISLES/Start2015](https://www.smir.ch/ISLES/Start2015).

We sincerely hope that our contribution promotes the development of new methods in and general visibility of the clinically important field of stroke lesion segmentation.

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