**A contrario** detection of focal brain perfusion abnormalities based on an Arterial Spin Labeling template

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We presented an automatic *a contrario* approach to detect hyperperfusions and hypoperfusions based on ASL images. Detections in four patients were qualitatively assessed by comparison to DSC CBF maps. This study included four patients and a broader validation on a larger database is ongoing. Current work focuses on a comparison of the *a contrario* detection framework with the general linear model, and a validation based on quantitative criteria.

**Conclusion**

We presented an automatic *a contrario* approach to detect hyperperfusions and hypoperfusions based on ASL images. Detections in four patients were qualitatively assessed by comparison to DSC CBF maps. This study included four patients and a broader validation on a larger database is ongoing. Current work focuses on a comparison of the *a contrario* detection framework with the general linear model, and a validation based on quantitative criteria.