## Cortical folding alterations in fetuses with isolated non-severe ventriculomegaly (Supplementary Material)

Oualid M. Benkarim<sup>a</sup>, Nadine Hahner<sup>b,c</sup>, Gemma Piella<sup>a</sup>, Eduard Gratacos<sup>b,c</sup>, Miguel Angel González Ballester<sup>a,d</sup>, Elisenda Eixarch<sup>b,c</sup>, Gerard Sanroma<sup>a</sup>

<sup>a</sup>DTIC, Universitat Pompeu Fabra, Barcelona, Spain

<sup>b</sup> Fetal i+D Fetal Medicine Research Center, BCNatal - Barcelona Center for Maternal-Fetal and Neonatal Medicine (Hospital Clínic and Hospital Sant Joan de Deu), Institut Clínic de Ginecologia, Obstetricia i Neonatologia, IDIBAPS, Universitat de Barcelona, Barcelona, Spain <sup>c</sup> Centre for Biomedical Research on Rare Diseases (CIBER-ER), Barcelona, Spain <sup>d</sup> ICREA, Barcelona, Spain

In support of cortical parcellation obtained using the neonatal atlas provided by (Makropoulos et al., 2014), we further include Figures 1- 48, displaying cortical surface parcellations of all subjects used in the study. Left and right hemispheres are shown for each subject in lateral, medial and ventral view.



Figure 1: Cortical surface parcellation for a 28.0 GW fetus with left INSVM.



Figure 2: Cortical surface parcellation for a 26.3 GW fetus with left INSVM.



Figure 3: Cortical surface parcellation for a 26.9 GW fetus with bilateral INSVM.



Figure 4: Cortical surface parcellation for a 28.6 GW healthy fetus.



Figure 5: Cortical surface parcellation for a 26.6 GW fetus with right INSVM.



Figure 6: Cortical surface parcellation for a 28.0 GW fetus with left INSVM.



Figure 7: Cortical surface parcellation for a 26.9 GW healthy fetus.



Figure 8: Cortical surface parcellation for a 26.7 GW healthy fetus.



Figure 9: Cortical surface parcellation for a 26.4 GW healthy fetus.



Figure 10: Cortical surface parcellation for a 26.4 GW fetus with right INSVM.



Figure 11: Cortical surface parcellation for a 27.3 GW healthy fetus.



Figure 12: Cortical surface parcellation for a 28.7 GW healthy fetus.



Figure 13: Cortical surface parcellation for a 28.3 GW healthy fetus.



Figure 14: Cortical surface parcellation for a 28.7 GW healthy fetus.



Figure 15: Cortical surface parcellation for a 26.3 GW healthy fetus.



Figure 16: Cortical surface parcellation for a 28.3 GW healthy fetus.



Figure 17: Cortical surface parcellation for a 26.6 GW healthy fetus.



Figure 18: Cortical surface parcellation for a 27.3 GW fetus with bilateral INSVM.



Figure 19: Cortical surface parcellation for a 28.3 GW fetus with right INSVM.



Figure 20: Cortical surface parcellation for a 27.1 GW healthy fetus.



Figure 21: Cortical surface parcellation for a 28.6 GW fetus with left INSVM.



Figure 22: Cortical surface parcellation for a 26.1 GW fetus with bilateral INSVM.



Figure 23: Cortical surface parcellation for a 26.4 GW fetus with right INSVM.



Figure 24: Cortical surface parcellation for a 26.6 GW healthy fetus.



Figure 25: Cortical surface parcellation for a 28.4 GW healthy fetus.



Figure 26: Cortical surface parcellation for a 27.9 GW healthy fetus.



Figure 27: Cortical surface parcellation for a 26.9 GW healthy fetus.



Figure 28: Cortical surface parcellation for a 28.7 GW healthy fetus.



Figure 29: Cortical surface parcellation for a 27.4 GW fetus with right INSVM.



Figure 30: Cortical surface parcellation for a 28.4 GW fetus with bilateral INSVM.



Figure 31: Cortical surface parcellation for a 28.0 GW fetus with left INSVM.



Figure 32: Cortical surface parcellation for a 27.0 GW healthy fetus.



Figure 33: Cortical surface parcellation for a 26.3 GW healthy fetus.



Figure 34: Cortical surface parcellation for a 28.6 GW healthy fetus.



Figure 35: Cortical surface parcellation for a 26.0 GW fetus with right INSVM.



Figure 36: Cortical surface parcellation for a 28.0 GW fetus with left INSVM.



Figure 37: Cortical surface parcellation for a 27.6 GW fetus with bilateral INSVM.



Figure 38: Cortical surface parcellation for a 28.4 GW fetus with left INSVM.



Figure 39: Cortical surface parcellation for a 28.1 GW fetus with right INSVM.



Figure 40: Cortical surface parcellation for a 28.6 GW fetus with right INSVM.



Figure 41: Cortical surface parcellation for a 28.0 GW healthy fetus.



Figure 42: Cortical surface parcellation for a 28.0 GW fetus with right INSVM.



Figure 43: Cortical surface parcellation for a 28.1 GW healthy fetus.



Figure 44: Cortical surface parcellation for a 28.9 GW healthy fetus.



Figure 45: Cortical surface parcellation for a 26.1 GW fetus with right INSVM.



Figure 46: Cortical surface parcellation for a 27.0 GW healthy fetus.



Figure 47: Cortical surface parcellation for a 29.3 GW fetus with left INSVM.



Figure 48: Cortical surface parcellation for a 28.4 GW healthy fetus.

## References

Makropoulos, A., Gousias, I., Ledig, C., Aljabar, P., Serag, A., Hajnal, J., Edwards, A., Counsell, S., Rueckert, D., 2014. Automatic whole brain MRI segmentation of the developing neonatal brain. IEEE Transactions on Medical Imaging 33, 1818–1831. doi:10.1109/TMI.2014. 2322280.