Supplementary Material 1

This supplementary material presents the lists of studies respectively included in the Quantitative Analysis (A) and (B).

I. List of studies included in Quantitative Analysis (A)

Berg, P. et al. (2018) 'Virtual stenting of intracranial aneurysms: A pilot study for the prediction of treatment success based on hemodynamic simulations', *The International Journal of Artificial Organs*, 41(11), pp. 698–705. doi: 10.1177/0391398818775521.

Chong, W. et al. (2014) 'Computational hemodynamics analysis of intracranial aneurysms treated with flow diverters: correlation with clinical outcomes', *American Journal of Neuroradiology*, 35(1), pp. 136–142. doi: 10.3174/ajnr.A3790.

Karmonik, C. et al. (2013) 'Hemodynamics at the ostium of cerebral aneurysms with relation to post-treatment changes by a virtual flow diverter: a computational fluid dynamics study', in *Conference proceedings: ... Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual Conference*, pp. 1895–1898. doi: 10.1109/EMBC.2013.6609895.

Kulcsár, Z. et al. (2012) 'Flow diversion treatment: intra-aneurismal blood flow velocity and WSS reduction are parameters to predict aneurysm thrombosis', *Acta Neurochirurgica*, 154(10), pp. 1827–1834. doi: 10.1007/s00701-012-1482-2.

Li, Y. et al. (2018) 'Numerical simulation of aneurysmal haemodynamics with calibrated porous-medium models of flow-diverting stents', *Journal of Biomechanics*, 80, pp. 88–94. doi: 10.1016/j.jbiomech.2018.08.026.

Mut, F. et al. (2015) 'Association between hemodynamic conditions and occlusion times after flow diversion in cerebral aneurysms', *Journal of Neurointerventional Surgery*, 7(4), pp. 286–290. doi: 10.1136/neurintsurg-2013-011080.

Paliwal, N. et al. (2017) 'Association between hemodynamic modifications and clinical outcome of intracranial aneurysms treated using flow diverters', in Webster, R. J. and Fei, B. (eds). *SPIE Medical Imaging*, Orlando, Florida, United States, p. 101352F. doi: 10.1117/12.2254584.

Paliwal, N. et al. (2018) 'Outcome prediction of intracranial aneurysm treatment by flow diverters using machine learning', *Neurosurgical Focus*, 45(5), p. E7. doi: 10.3171/2018.8.FOCUS18332.

Sindeev, S. et al. (2018) 'Phase-contrast MRI versus numerical simulation to quantify hemodynamical changes in cerebral aneurysms after flow diverter treatment', *PloS One*, 13(1), p. e0190696. doi: 10.1371/journal.pone.0190696.

Xiang, J. et al. (2015) 'High-fidelity virtual stenting: modeling of flow diverter deployment for hemodynamic characterization of complex intracranial aneurysms', *Journal of Neurosurgery*, 123(4), pp. 832–840. doi: 10.3171/2014.11.JNS14497.

Zhang, M. et al. (2017) 'Haemodynamic effects of stent diameter and compaction ratio on flow-diversion treatment of intracranial aneurysms: A numerical study of a successful and an unsuccessful case', *Journal of Biomechanics*, 58, pp. 179–186. doi: 10.1016/j.jbiomech.2017.05.001.

Zhang, Y., Chong, W. and Qian, Y. (2013) 'Investigation of intracranial aneurysm hemodynamics following flow diverter stent treatment', *Medical Engineering & Physics*, 35(5), pp. 608–615. doi: 10.1016/j.medengphy.2012.07.005.

II. List of studies included in Quantitative Analysis (B)

Damiano, R. J. et al. (2015) 'Finite element modeling of endovascular coiling and flow diversion enables hemodynamic prediction of complex treatment strategies for intracranial aneurysm', *Journal of Biomechanics*, 48(12), pp. 3332–3340. doi: 10.1016/j.jbiomech.2015.06.018.

Damiano, R. J. et al. (2017) 'Compacting a Single Flow Diverter versus Overlapping Flow Diverters for Intracranial Aneurysms: A Computational Study', *American Journal of Neuroradiology*, 38(3), pp. 603–610. doi: 10.3174/ajnr.A5062.

Janiga, G. et al. (2015) 'An automatic CFD-based flow diverter optimization principle for patient-specific intracranial aneurysms', *Journal of Biomechanics*, 48(14), pp. 3846–3852. doi: 10.1016/j.jbiomech.2015.09.039.

Li, Y. et al. (2018) 'Numerical simulation of aneurysmal haemodynamics with calibrated porous-medium models of flow-diverting stents', *Journal of Biomechanics*, 80, pp. 88–94. doi: 10.1016/j.jbiomech.2018.08.026.

Ma, D. et al. (2014) 'Enhanced aneurysmal flow diversion using a dynamic push-pull technique: an experimental and modeling study', *American Journal of Neuroradiology*, 35(9), pp. 1779–1785. doi: 10.3174/ajnr.A3933.

Uchiyama, Y. et al. (2018) 'Hemodynamic Change In A Cerebral Aneurysm Treated By Double Stenting Technique', in *2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC). 2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, Honolulu, HI: IEEE, pp. 1343–1346. doi: 10.1109/EMBC.2018.8512461.

Ugron, A., Szikora, I. and Paál, G. (2014) 'Measurement of flow diverter hydraulic resistance to model flow modification in and around intracranial aneurysms', *Interventional Medicine & Applied Science*, 6(2), pp. 61–68. doi: 10.1556/IMAS.6.2014.2.2.

Wang, C. et al. (2016) 'Flow diverter effect of LVIS stent on cerebral aneurysm hemodynamics: a comparison with Enterprise stents and the Pipeline device', *Journal of Translational Medicine*, 14(1), p. 199. doi: 10.1186/s12967-016-0959-9.

Xiang, J. et al. (2014) 'Increasing flow diversion for cerebral aneurysm treatment using a single flow diverter', *Neurosurgery*, 75(3), pp. 286–294; discussion 294. doi: 10.1227/NEU.0000000000000409.

Xiang, J. et al. (2015) 'High-fidelity virtual stenting: modeling of flow diverter deployment for hemodynamic characterization of complex intracranial aneurysms', *Journal of Neurosurgery*, 123(4), pp. 832–840. doi: 10.3171/2014.11.JNS14497.

Zhang, M. et al. (2017) 'Haemodynamic effects of stent diameter and compaction ratio on flow-diversion treatment of intracranial aneurysms: A numerical study of a successful and an unsuccessful case', *Journal of Biomechanics*, 58, pp. 179–186. doi: 10.1016/j.jbiomech.2017.05.001.