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Dr. Alain Beaudet, Chair  
Scientific Expert Panel on CCSVI and Multiple Sclerosis  
Canadian Institutes of Health Research  
160 Elgin Street, 9<sup>th</sup> floor  
Ottawa, ON  
K1A 0W9

Dear Alain:

I am pleased to submit the fourth report from the Canadian CCSVI Systematic Review Group, summarizing the CCSVI literature to date. This report includes new literature published between March-September 2012.

The papers that have been published since our last report in June, 2012 do not substantially change what we know about the diagnosis and endovascular treatment of CCSVI.

Four small studies using ultrasonography to diagnose CCSVI were published between March-September 2012. Their addition to the meta-analysis does not change the previously described association between CCSVI and multiple sclerosis substantially, and there continues to be a huge amount of heterogeneity in the results. It is notable that in the two new studies with the strongest methodology, CCSVI was found in 0 and 19% of MS patients, which is much lower than described in Zamboni's initial study and some other studies.

There are still no published results of randomized trials of the treatment of CCSVI in patients with MS.

We are aware that a large Italian study evaluating the frequency of CCSVI diagnosed by ultrasonography in MS patients, healthy controls and patients with other neurological diseases has been presented in abstract form. However, this study has not been included in our report since an inclusion criterion for our systematic review is that the research has to be published in a peer-reviewed journal.

If you have any questions or concerns, please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Andreas Laupacis', with a long horizontal flourish extending to the right.

Andreas Laupacis MD, MSc, FRCPC  
Executive Director, Li Ka Shing Knowledge Institute

on behalf of the Canadian CCSVI Systematic Review Group

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