

Letters to the Editor**TO THE EDITOR****Progress: Measuring the Benefit****Re: The Numbers Needed to Treat for Neurological Disorders***M. Bussière, S. Wiebe*

Can J Neurol Sci. 2005; 32:440-9.

We want to congratulate Drs. Bussière and Wiebe for their innovative article compiling estimates of benefit for various neurotherapeutic interventions, presented in terms of the number needed to treat (NNT).<sup>1</sup> This template should serve as a valuable resource for clinicians.

We would just like to point out one minor oversight in this initial compilation, situated in the Secondary Stroke Prevention section. The calculated control event rate (CER), experimental event rate (EER), absolute risk reduction (ARR), and NNT given for perindopril, based on the perindopril protection against recurrent stroke study (PROGRESS),<sup>2</sup> is actually a representation of the benefit of combined therapy with perindopril plus indapamide. In PROGRESS, treatment with perindopril monotherapy provided no detectable benefit, although the ambiguous presentation of the trial's results has fostered a widespread misunderstanding of this fact.<sup>3,4</sup>

Applying the formulae to the perindopril alone arm of the PROGRESS trial yields a CER of 0.87, an EER of 0.88, an ARR of 0.006, and a NNT of 167. The 95% confidence interval for the NNT with perindopril is (-50.8, 31.6), which means that the effect of the intervention to prevent recurrent stroke, based on the evidence gathered to date, is not statistically significant.

*Richard Wennberg, Camilla Zimmermann  
Toronto, Ontario*

**REFERENCES**

1. Bussière M, Wiebe S. The numbers needed to treat for neurological disorders. Can J Neurol Sci. 2005; 32: 440-9.
2. PROGRESS Collaborative Group. Randomised trial of a perindopril-based blood-pressure-lowering regimen among 6,105 individuals with a previous stroke or transient ischaemic attack. Lancet. 2001; 358: 1033-41.
3. Wennberg R, Zimmermann C. The PROGRESS trial three years later: time for a balanced report of effectiveness. BMJ. 2004; 329: 968-70.
4. Wennberg R, Zimmermann C. Perindopril monotherapy and PROGRESS in Europe. BMJ. 2005; 331: 235-6.

**REPLY****Re: The Numbers Needed to Treat for Neurological Disorders**

We thank Dr. Richard Wennberg for his pertinent comments. The intervention listed in the sixth item in the Secondary Stroke Prevention section of the Table, relating to the PROGRESS trial,<sup>1</sup> should read "perindopril + indapamide". As Dr. Wennberg correctly points out perindopril alone did not provide a statistically significant benefit for stroke prevention in this study.

*Miguel Bussière  
London, Ontario*

*Samuel Wiebe  
Calgary, Alberta*

**REFERENCES**

1. PROGRESS Collaborative Group. Randomized trial of a perindopril-based blood-pressure-lowering regimen among 6,105 individuals with previous stroke or transient ischaemic attack. Lancet. 2001; 358: 1033-41.