**SUPPLEMENTARY METHODS**

Sample size calculation

The number of subjects was calculated from unpublished data from our group of healthy volunteers for whom we compared the measurement of thigh thickness using magnetic resonance imaging (MRI) with that using ultrasound (US). A mean difference of 0.07±0.33 cm was found between the 2 techniques. N was calculated from an estimation of the 95% confidence interval (95% CI) of the mean difference observed between both techniques (limit of agreement). Thus, the upper boundary of this CI is estimated from the following formula: of the mean difference (1). We assumed that a difference of 0.25 cm between techniques was clinically relevant, and was the upper boundary of the CI. The number of patients to be included was 38.

**SUPPLEMENTARY REFERENCE**


*Supplementary material to article by C. Tourel et al. et al. “Reliability of standardized ultrasound measurement of quadriceps muscle thickness in critically ill neurological patients: comparison with computed tomography measures”*