

Errata

The authors of Rivera *et al.* (2005) would like to publish the following clarification: in our review, we emphasized the fact that using Cs⁺ as an internal cation in whole-cell recordings results in a profound dysfunction of the neuronal K⁺–Cl[–] cotransporter, KCC2. This is because Cs⁺ is a very poor substrate of this ion transporter, with a maximum transport rate (V_{\max}) for Cs⁺ that is < 20% of the value for K⁺ (Williams & Payne, 2004). On page 29, we stated that ‘Unfortunately, the kinetic data in the only published model of neuronal K⁺–Cl[–] cotransport in neurones (Staley & Proctor, 1999) were obtained using Cs⁺ in whole-cell experiments – and hence, in the absence of functional KCC2!’ Since the publication of our review, it has been brought to our attention that both K⁺ and Cs⁺ were used by the authors, with essentially similar results. This is true and, if anything, it strengthens our concerns about the validity of the above modelling study which yielded a value of V_{\max} for Cs⁺ that is *higher* than for K⁺ (about 7 mmol l^{–1} s^{–1} for Cs⁺ and about 5–6 mmol l^{–1} s^{–1} for K⁺).

The authors of Zhang & Paterson, (2005) would like to correct an error on page 858. In line 7 of the first paragraph, a value of 361 ± 83 ms is given for the control. This value should have read 661 ± 83 ms. In addition, in the title ‘guinea-pig’ should be ‘guinea-pig’.

The authors of Capote *et al.* (2005) would like to correct the affiliation of Carlo Caputo; the affiliation should be the Instituto Venezolano de Investigaciones Cientificas IVIC.

References

Capote J, Bolanos P, Schuhmeier RP, Melzer W & Caputo C (2005). Calcium transients in developing mouse skeletal muscle fibres. *J Physiol* **564**, 451–464.

Rivera C, Voipio J & Kaila K (2005). Two developmental switches in GABAergic signalling: the K⁺–Cl[–] cotransporter KCC2 and carbonic anhydrase CAVII. *J Physiol* **562**, 27–36.

Staley KJ & Proctor WR (1999). Modulation of mammalian dendritic GABA_A receptor function by the kinetics of Cl[–] and HCO₃[–] transport. *J Physiol* **519**, 693–712.

Williams JR & Payne JA (2004). Cation transport by the neuronal K⁺–Cl[–] cotransporter KCC2: thermodynamics and kinetics of alternate transport modes. *Am J Physiol Cell Physiol* **287**, C919–C931.

Zhang Y & Paterson W (2005). Excitatory purinergic neurotransmission in smooth muscle of guinea-pig taenia caeci. *J Physiol* **563**, 855–865.