

Erratum

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Human ES cell-derived neural rosettes reveal a functionally distinct early neural stem cell stage

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In the above-mentioned paper, the authors missed a reference (Lazzari et al. 2006) relevant to the current manuscript. On page 161, in the left column, the second paragraph should read as follows:

The prospective isolation of Forse1⁺/N-cad⁺ R-NSCs enabled us to demonstrate respecification of anterior BF1⁺ neuroectodermal cells toward caudal fates including spinal motoneurons and midbrain dopamine neurons. Forse1 could become a powerful tool to isolate NSC populations with anterior CNS bias at various stages of development to probe developmental competency. Default acquisition of anterior neural fate observed in R-NSCs is reminiscent of the anterior neural default model postulated in classical studies of *Xenopus* CNS development. These studies showed that anterior CNS fates are established first and are followed by caudal transformation in response to secreted signals (for review, see Sasai and De Robertis 1997). Forse1⁻/N-cad⁺ R-NSCs correspond to posterior regions of the neuroepithelium with the capacity to generate neural crest lineages. Neural crest differentiation potential reflects the early developmental stage and broad differentiation potential of R-NSCs, as neural crest specification in vivo occurs at the neural plate stage (Yamada et al. 1993; LaBonne and Bronner-Fraser 1999). Interestingly, differentiation toward putative neural crest derivatives has been reported previously in a culture system where neural rosettes are derived directly from cloned bovine blastocysts (Lazzari et al. 2006). The isolation of Forse1⁻ R-NSCs provides a novel strategy for studying early human neural crest development in vitro. Neural crest potential of R-NSCs also points to the importance of monitoring neural crest fates in studies aimed at the generation of defined CNS derivatives. Forse1⁺ cells lack neural crest markers but retain the plasticity toward neural crest fates upon exposure to caudalizing cues that suppress anterior CNS identity.

In addition, the following reference should have been added to the Reference section:

Lazzari, G., Colleoni, S., Giannelli, S.G., Brunetti, D., Colombo, E., Lagutina, I., Galli, C., and Broccoli, V. 2006. Direct derivation of neural rosettes from cloned bovine blastocysts: A model of early neurulation events and neural crest specification in vitro. *Stem Cells* **24**: 2514–2521.

The authors regret this omission.