MSC Biology and Clinical Use: Opinion Matters 2

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In the June issue of Telegraft (1), I commented on a publication earlier this year by Bianco et al. in Nature Medicine (2). Spurred by concerns over a controversial MSC-based therapy being administered in Italy, Bianco et al. were highly critical of the MSC field. The MSC committee of the ISCT has since responded to these criticisms in a piece published in the July 2013 issue of Nature Medicine (3). Other comments from the MSC community as well as a response from Bianco are also included in the July issue of Nature Medicine. Recent comments by Dr. Pamela Robey calling for increased rigor in the field have sparked continued debate among prominent MSC researchers (4). A long-time section chief at NIDCR, Dr. Robey, along with several members of the ISCT MSC committee, is involved in efforts by NIH and other international experts to develop stricter guidelines for publishing in the field and to establish several reference MSC lines against which researchers can assess the purity and quality of their preparations. The working group met for the first time in March at NIH and the group’s efforts and challenges have been recently described in the July 25 issue of Nature (4). Importantly, ISCT has actively pursued the establishment of stricter MSC standards for several decades through sponsorship of scientific meetings and workshops on MSC isolation, characterization, and clinical manufacturing and the publication of position papers on these topics, including two this year (5, 6, 7). While the rapid commercialization of unproven and untested MSC-based therapies poses a serious danger to the entire field, it is imperative to separate opinion and commentary from scientific achievement in order to keep the field moving forward.

References