

## ESPS Peer-review Report

**Name of Journal:** World Journal of Methodology

**ESPS Manuscript NO:** 7544

**Title:** Adult Stem Cell-based Apexogenesis

**Reviewer code:** 02445858

**Science editor:** Qi, Yuan

**Date sent for review:** 2013-11-24 14:46

**Date reviewed:** 2013-11-28 20:11

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input checked="" type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input checked="" type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

This manuscript entitled "Adult Stem Cell-based Apexogenesis" is the compilation about stem cell-based and authors brought different areas of development in this research. However, this review article is still lacks several criteria to make it complete. No clear explanation with figures. There should be some tables to compare important aspects of stem cells from different researcher. Authors need to include the background history about stem cell developments. Discuss about first and earlier reports. Diagrammatic explanation about stem cells is needed. Typo need to be corrected in several places. Basically, need thorough revision.

## ESPS Peer-review Report

**Name of Journal:** World Journal of Methodology

**ESPS Manuscript NO:** 7544

**Title:** Adult Stem Cell-based Apexogenesis

**Reviewer code:** 02445847

**Science editor:** Qi, Yuan

**Date sent for review:** 2013-11-24 14:46

**Date reviewed:** 2013-12-02 22:46

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	BPG Search:	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

This interesting review article entitled "Adult Stem Cell-based Apexogenesis" proposes to use mesenchymal stem cells (MSCs) as a regenerative tool to treat pulpitis or periapical periodontitis in young patients. Albeit many properties ascribed, more or less rigorously, to MSC seems to provide a rationale for this novel approach, several issues are still unresolved in order to design a detailed and precise therapy protocol. First, the right source of MSCs has to be chosen. It might be useful to take into account and discuss the different embryologic developmental sheet originating MSCs in the bone marrow (mesoderm) and in the dental annexes (neuro-ectoderm). This might explain the discrepancies observed in the differentiation potential of MSCs from different sources and help to pick the optimal ones for the aimed goal. Second, the choice of the right MSCs is essential to pair them with the most compatible inductive material, a match that can be easily performed in preliminary in vitro experiments. Regarding the key expression of CD 146 by MSCs, at least two manuscripts have to be cited: Self-renewing osteoprogenitors in bone marrow sinusoids can organize a hematopoietic microenvironment. Sacchetti B, Funari A, Michienzi S, Di Cesare S, Piersanti S, Saggio I, Tagliafico E, Ferrari S, Robey PG, Riminucci M, Bianco P. Cell. 2007 Oct 19;131(2):324-36. A perivascular origin for mesenchymal stem cells in multiple human organs. Crisan M, Yap S, Casteilla L, Chen CW, Corselli M, Park TS, Andriolo G, Sun B, Zheng B, Zhang L, Norotte C, Teng PN, Traas J, Schugar R, Deasy BM, Badylak S, Buhring HJ, Giacobino JP, Lazzari L, Huard J, Péault B. Cell Stem Cell. 2008 Sep 11;3(3):301-13.