



**University of  
Zurich**<sup>UZH</sup>

**Zurich Open Repository and  
Archive**

University of Zurich  
Main Library  
Strickhofstrasse 39  
CH-8057 Zurich  
[www.zora.uzh.ch](http://www.zora.uzh.ch)

---

Year: 2006

---

**Reply to the letter by C. Chauveau et al. on our publication “A comparative analysis of phenotype expression in human osteoblasts from heterotopic ossification and normal bone”**

Handschin, Alexander E

DOI: <https://doi.org/10.1007/s00423-006-0061-5>

Posted at the Zurich Open Repository and Archive, University of Zurich

ZORA URL: <https://doi.org/10.5167/uzh-156139>

Journal Article

Published Version

Originally published at:

Handschin, Alexander E (2006). Reply to the letter by C. Chauveau et al. on our publication “A comparative analysis of phenotype expression in human osteoblasts from heterotopic ossification and normal bone”. *Langenbeck’s Archives of Surgery*, 391(4):440.

DOI: <https://doi.org/10.1007/s00423-006-0061-5>

Alexander E. Handschin

## Reply to the letter by C. Chauveau et al. on our publication “A comparative analysis of phenotype expression in human osteoblasts from heterotopic ossification and normal bone”

---

Received: 9 May 2006  
Accepted: 9 May 2006  
Published online: 4 July 2006  
© Springer-Verlag 2006

A. E. Handschin (✉)  
Department of Surgery,  
Research Division  
University Hospital of Zurich,  
Raemistrasse 100,  
Zurich 8091, Switzerland  
e-mail: Alexander.handschin@usz.ch  
Tel.: +41-1-2552213  
Fax: +41-1-2554741

Dear Editor:

Thank you for the comments and remarks concerning our study “A comparative analysis of phenotype expression in human osteoblasts from heterotopic ossification and normal bone” [1]. We are aware that the group from Chauveau et al. [2] has not investigated the expression of the phenotype markers in an in vitro assay. To emphasize this, we have clearly stated in the discussion that the “diverging results (of the studies) may be caused by...different methods and also by the origin of heterotopic ossification.” The phrase relating to “cell culture types” refers to the work of Sell et al. [3] who did use an in vitro experiment.

We agree that the type I collagen expression was actually upregulated in the Chauveau paper, a result which was not observed in the study from Sell et al. nor in our experiment.

Nevertheless, our conclusion is confirmed by other studies, including the work of Chauveau et al.: The genesis of HO seems to involve a disturbed equilibrium between osteoblast and osteoclast activity with a pathological shift towards osteoblast-controlled bone formation.

---

### References

1. Handschin AE, Egermann M, Wedler, V, Trentz O, Hemmi S, Trentz OA (2006) A comparative analysis of phenotype expression in human osteoblasts from heterotopic ossification and normal bone. *Langenbecks Arch Surg* (Epub ahead of print) DOI <http://dx.doi.org/10.1007/s00423-005-0021-5>
2. Chauveau et al (2004) *Exp Mol Pathol* 76(1):37–43
3. Sell et al (1998) *Calcif Tissue Int* 62:51–59