

# CORRIGENDUM

## Wnt/ $\beta$ -catenin signaling stimulates matrix catabolic genes and activity in articular chondrocytes: its possible role in joint degeneration

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Following the publication of this article, the author has made corrections in the legend of Figure 4 and in Tables 1 and 2 as follows:

Figure 4 Histological and immunohistochemical analysis of guinea pig knee joints. Longitudinal sections of tibial medial plateau from 4-month-old (a–d), 8-month-old (e–h) and 12-month-old (i–l) Hartley guinea pigs were stained

with H&E (a, e, i), safranin-O (b, f, j), and anti- $\beta$ -catenin antibody (c, d, g, h, k, l). (d, h, l) Enlarged images of the squared area in (c), (g) and (k), respectively. Note that 4-month-old specimens exhibit a healthy articular cartilage structure and are negative for  $\beta$ -catenin chondrocyte staining, whereas 8- and 12-month-old specimens exhibit both strong staining and degeneration changes (fissures and loss of matrix). Bars represent 0.5 mm (a–c; e–g; i–k) and 0.1 mm (d, h, l).

There are the values switched the other way around between negative and positive in Tables 1 and 2.

**Table 1 Relationship between age-related osteoarthritic changes and positive  $\beta$ -catenin immunostaining in Hartley guinea pig knee joint articular cartilage**

| Age (average of scores) | $\beta$ -catenin staining |          |            | Total |
|-------------------------|---------------------------|----------|------------|-------|
|                         | Negative                  | Positive | Positive % |       |
| 4 months (0.6)          | 5                         | 0        | 0          | 5     |
| 6–8 months (4.65)*      | 9                         | 11       | 55         | 20    |
| 10–12 months (6.52)**   | 7                         | 18       | 72         | 25    |

}  $P < 0.05$  }  $P < 0.01$

Serial sections from medial tibial plateau of 4-, 6-, 8-, 10- and 12-month-old Hartley guinea pig knee joints were stained with H&E and safranin-O and evaluated by a modified Mankin's score by three independent investigators. The average of scores was significantly different between the 4-month-old and 6- to 8-month-old groups ( $*P < 0.05$ ), and between 6- to 8-month-old and 10- to 12-month-old group ( $**P < 0.05$ ) as determined by a Student's *t*-test. Companion sections were stained with  $\beta$ -catenin antibodies, and degree of staining was evaluated by independent investigators and set to the following three levels: negative, threshold or positive. Only sections judged positive by all investigators were counted as positive.  $\chi^2$ -tests indicated lack of independence between age and  $\beta$ -catenin-positive results.

**Table 2 Relationship between severity of joint changes and positive  $\beta$ -catenin staining**

| Grading score | $\beta$ -catenin staining |          | Total |
|---------------|---------------------------|----------|-------|
|               | Negative                  | Positive |       |
| 0–2           | 11                        | 0        | 11    |
| 3–5           | 6                         | 6        | 12    |
| 6–8           | 3                         | 20       | 23    |
| 9–11          | 0                         | 4        | 4     |

}  $P < 0.01$   
}  $P < 0.05$

The results of  $\beta$ -catenin immunostaining in Table 1 were regrouped according to osteoarthritic grading score (normal, grade 0–2; slight, grade 3–5; moderate, grade 6–8 and severe, grade 9–11). Values were analyzed by  $\chi^2$ -tests.