## CORRIGENDUM

## Integrins in cancer: biological implications and therapeutic opportunities

Jay S. Desgrosellier & David A. Cheresh

Nature Reviews Cancer 10, 9-22 (2010)

On page 17 of this article, in the section  $Targeting \, \alpha v \beta 3$  and  $\alpha v \beta 5$  the sentence at the start of the second paragraph that reads "Cilengitide is an inhibitor of both  $\alpha\nu\beta3$  and  $\alpha\nu\beta5$  integrins, and it was selected in our laboratory by screening a library of cyclic RGD peptides in a cell-free receptor assay for their capacity to inhibit integrins  $\alpha \nu \beta 3$  and  $\alpha \nu \beta 5$  but not  $\alpha IIb \beta 3 \ (REF.\ 130)." \ was incorrectly phrased. The corrected sentence with additional references is given below.$ 

"Cilengitide is an inhibitor of both  $\alpha v \beta 3$  and  $\alpha v \beta 5$  integrins. We had shown that  $\alpha v \beta 3$  and  $\alpha v \beta 5$  integrins were important  $regulators\ of\ angiogenesis\ and\ tumour\ growth^{49,51,191,192}\ and\ developed\ a\ cell-free\ receptor\ assay\ to\ select\ for\ antagonists$ of integrins  $\alpha \nu \beta 3$  and  $\alpha \nu \beta 5$  that did not effect integrin  $\alpha IIb \beta 3$  (REF. 130). This assay was used to screen a library of integrin binding cyclic RGD peptides designed and synthesized by H. Kessler and colleagues for  $\alpha v \beta 3$  activity and selectivity  $^{193-19}$ from which cilengitide was developed 1967

- 191. Cheresh, D. A. Human endothelial cells synthesize and express an Arg Gly Asp-directed adhesion receptor involved in attachment to fibrinogen and von Willebrand factor. *Proc. Natl. Acad. Sci. USA* 84, 6471–6475 (1987).
  192. Brooks, P. C. *et al.* Integrin ανβ3 antagonists promote tumor regression by inducing apoptosis of angiogenic blood
- vessels. *Cell* **79**, 1157–1164 (1994).
- 193. Aumailley, M. et al. Arg Gly Asp constrained within cyclic pentapeptides. Strong and selective inhibitors of cell adhesion to vitronectin and laminin fragment P1. FEBS Lett. 291, 50-54 (1991).
- 194. Gurrath, M. et al., Conformation/activity studies of rationally designed potent anti-adhesive RGD peptides; Eur. J. Biochem., 210, 911–921 (1992).
- 195. Pfaff, M. *et al.*, Selective Recognition of Cyclic RGD Peptides of NMR Defined Conformation by  $\alpha$ IIb $\beta$ 3,  $\alpha$ V $\beta$ 3 and  $\alpha$ 5 $\beta$ 1 Integrins. J. Biol. Chem., 269, 20233–20238 (1994).
- 196. Dechantsreiter, M. A. et al. N-Methylated cyclic RGD peptides as highly active and selective  $\alpha_v \beta_z$  integrin antagonists. J. Med. Chem. 42, 3033-3040 (1999).