Supplementary material 1. Flow cytometry methodology used to analyse megakaryocytes and platelets.

(a-c) Analysis of fresh platelets from platelet-rich plasma (PRP). (d-h) Analysis of cultured megakaryocytes and *ex vivo*-produced platelets. (a) Normal platelets derived from PRP were first used to set the analytical platelet region “P2” in the FSC and SSC window. (b) In an independent dot-plot window, platelet events from the P2 region were analysed for their retention of PI, which was null for normal platelets. (c) PI-negative platelet events (P2*P4) were then analysed for the expression of CD41 and CD42b. (d) FSC and SSC analysis window of cell cultures that were acquired on a logarithmic scale to identify both megakaryocytes and platelet-sized cells (PLT). The cell region “P1” is drawn around the second population. The cell and platelet events from regions P1 and P2 were then analysed for their retention of PI. (e and g) The PI-negative selection regions for the cells (P3) and platelets (P4) are shown in plots e and g, respectively. (f and h) The PI-negative cells and platelet events (P1*P3 and P2*P4, respectively) were analysed for CD41 and CD42b expression in plots f and h, respectively.
Supplementary material 2. Immunofluorescent anti-tubulin staining of proplatelet-forming megakaryocytes co-treated with dTMP and rhGH.

Human cord blood-derived CD34+ cells were cultured with dTMP (20 ng/ml) in the presence or absence of rhGH (100 ng/ml) for 10 days. The cells were stained with anti-β1-tubulin (green) and Dapi (blue) and visualised by confocal microscopy at low magnifications. Arrows indicate typical proplatelet formations.
Supplementary material 3. The in vivo bioactivity of dTMP-GH

Normal BALB/c mice were subcutaneously injected with dTMP-GH (60 μg/kg, 120 μg/kg, or 250 μg/kg) or dTMP (20 μg/kg or 100 μg/kg) once a day for 7 days. Peripheral platelet counts were determined by haemacytometer. Each group contained 10 animals.