

Fig. S1 Significant GO term enrichment histograms.

Fig. S2 (A) qPCR analyses showed that *SOX2*, *ABCG2* and *PAX6* were significantly more upregulated in the adherent 3D group than in the suspension 3D group, whereas *OCT4*, *NANOG* and *KLF4* were not significantly different in these two groups. (\*,  $P < 0.05$ ; \*\*,  $P < 0.01$ ; \*\*\*,  $P < 0.001$ ; \*\*\*\*,  $P < 0.0001$ ).

Fig. S3 qPCR analyses showed the expression of *SOX2*, *ABCG2* and *PAX6* in suspended 3D spheroids, adherent 3D spheroids and adherent 2D cells with or without blebbistatin treatment. (\*,  $P < 0.05$ ; \*\*,  $P < 0.01$ ; \*\*\*,  $P < 0.001$ ; \*\*\*\*,  $P < 0.0001$ ).