Journal Name

Systemic in vivo delivery of siRNA to tumours using combination polyethyleneimine and transferrin- polyethyleneimine conjugates

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Supplementary Material



Figure \$1 Correlation between size of tumour and bioluminescence in the MGLVA1 bioluminescent xenograft model



Figure S2. Effect of transfection reagents on cell metabolic activity. Percentage cell metabolic activity as a proxy for viability, using an MTT assay, was calculated relative to untransfected cells for a) HCT116 or b) MGLVA1 cells 48 hrs after transfection with siRNA using PEI, TfPEI:PEI (1:4) or TfPEI:PEI(1:15) at N:P ratios of 8 or 12. Error bars represent standard deviations.



Figure S3 Vascularisation of MGLVA1 xenografts. MGLVA1 xenograft stained for blood vessels using an antibody to CD34 (a and b); the transferrin receptor, CD71 (c and d); or stained with a negative control antibody. Magnification x10 (a,e), x20 (b,c,d).



Figure S4 Effect of siRNA administration on tumour growth and interferon response. TfPEI-complexed luciferase or control siRNA (TfPEI:PEI ratio of 1:4) was administered via the intra-peritoneal routes (n=7 and 8 respectively) and tumour x-section was measured at 24hrs before and 24, 72 and 144 hrs after injection (a). OAS (b) STAT (c) and luciferase (d) gene expression were measured at end-point (shown as Tukey box and whiskers plot).

Table S1

| Primer | Primer sequence $(5' \rightarrow 3')$ |
|---------|---------------------------------------|
| OAS1 F | CAAGCTCAAGAGCCTCATCC |
| OAS1 R | TGGGCTGTGTTGAAATGTGT |
| STAT1 F | AAATTCCTGGAGCAGGTTCA |
| STAT1 R | TGGCCCCAAGTCACTTAATC |
| Luc F | GGTGGGTGAGGCTGTGGCAA |
| Luc R | GCCCACAGCACCAGGCTTGT |
| HPRT F | GACCAGTCAACAGGGGACAT |
| HPRT R | CGACCTTGACCATCTTTGGA |