analysed as described[10], with a final FIXa concentration of 1 nM. All data presented is the mean ± s.e.m. for at least three independent experiments.

Enzyme assays

Factor VIII (Hemophil M, Baxter Healthcare) was activated with thrombin, then the FVIIIa solution was added to factor IXa and phospholipid vesicles (lipids purchased from Avanti Polar Lipids and vesicles prepared as in ref. 28) and allowed to form the FIXa–FVIIIa enzyme complex. Factor X and aptamer were then added, and factor X activation measured with a chromogenic substrate (Pefachrome fXa, Centerchem Inc.). Final concentrations were: factor IXa, 0.2 nM; factor VIIIa, 0.7 nM; lipid, 40 μM; factor X, 135 nM; and factor Xa substrate, 1 mM. The rate of factor Xa generation was determined by a second-order fit to the data. The %FX cleavage activity is 100 times the rate of FXa generation in the presence of aptamer divided by rate in the absence of aptamer.

Clotting assays

Activated partial thromboplastin time (APTT) assays were performed using a model ST4 mechanical coagulometer (Diagnostica Stago Inc.). Aptamer in binding buffer (5 μl) without BSA or binding buffer without BSA alone was added to pooled normal human plasma (50 μl) (George King Biomedical), and incubated for 5 min at 37 °C. MDA platelin (50 μl) (bioMerieux) was then added and allowed to activate the plasma for 5 min, followed by the addition of 25 mM $CaCl_2$ (50 μl) to initiate the clotting reaction. Data is expressed as the relative change in clot time; the clot time in the presence of aptamer divided by the clot time in the presence of buffer alone. All reactions were performed in duplicate, and only duplicates differing by <10% were used in analysis.

Prothrombin time (PT) clotting assays were performed as previously described[7] except that 5 μl of aptamer was added to 50 μl of normal pooled human plasma, and all reactions were carried out at 37 °C.

Antidote assays

Antidote oligonucleotides were synthesized and purified by Dharmacon Research, Inc. Antidote activity was measured 10 min after antidote addition to plasma containing aptamer in APTT clotting assays. Briefly, human plasma was anticoagulated with aptamer, antidote oligonucleotide (5 μl) was added and the incubation continued for 5 min before the addition of MDA platelin. Antidote activity is expressed as the per cent residual anticoagulant activity T of the aptamer, which is:

$$[1 - (T_{\text{aptamer alone}} - T_{\text{aptamer+antidote}})/(T_{\text{aptamer alone}} - T_{\text{baseline}})] \times 100.$$

For measuring the kinetics of the onset of antidote activity, the incubation time of the plasma following MDA platelin addition was reduced to 1 min to allow for shorter timepoints to be measured. This increased the baseline APTT from 30.2–32.5 s to 34.2–36.8 s.

Gel shift assays were performed essentially as described[29]. Aptamer 9.3t (50 nM with trace ^{32}P-labelled) was incubated for 10 min with varying concentrations of antidote oligonucleotide in binding buffer without BSA before loading on a 12% polyacrylamide gel containing 2 mM $CaCl_2$. Gels were run for 3 h at 300 V and visualized using a Storm 840 Phosphorimager (Molecular Dynamics).

Patient samples

Plasma samples from six patients with HIT were studied. Clinical criteria for the diagnosis of HIT included thrombocytopenia and/or new or recurrent thrombosis after five or more days of heparin therapy[5]. Serologic criteria included a positive heparin-induced platelet aggregation assay and/or elevated heparin/platelet factor 4 antibody levels detected by enzyme-linked immunosorbent assay (ELISA) (GTI Inc.). Five patients met both clinical and serologic criteria; one patient fulfilled clinical criteria but had negative serologic studies. The Institutional Review Board at Duke University Medical Center approved these studies, and informed consent was obtained from all patients.

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Competing interests statement

The authors declare competing financial interests: details accompany the paper on *Nature*'s website (http://www.nature.com/nature).

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corrigendum

Sub-ångstrom resolution using aberration corrected electron optics

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For this Letter the disclosure form for the declaration of competing financial interests was incorrectly filled out because of a misunderstanding. The statement should have read: 'The authors declare competing financial interests: details accompany the paper on *Nature*'s website (http://www.nature.com/nature).' The details on the website should have read: 'O.L.K. and N.D. have a personal financial interest in Nion, R&D.'. We (the authors) had no intention of misrepresenting the origin of the work. □