molecule seems to be a potential new anticancer agent.

4 Shuhong, W. *et al.* (2004) Induction of apoptosis and down-regulation of Bcl-XL in cancer cells by a novel small molecule, 2[[3-(2,3-Dichlorophenoxy)propyl] amino]ethanol. *Cancer Res.* 64, 1110–1113

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Neuroscience

Allevation of Alzheimer's disease pathology in mice by a small heparin

The accumulation of β-amyloid plaques and the immune response and antibodies directed against them is thought to exacerbate the pathology of Alzheimer's disease (AD) through a variety of distinct mechanisms, including activation of the contact and complement systems. Using a transgenic mouse model overexpressing human amyloid precursor protein$_{751}$ (typically present with numerous extensive plaques in the cortex and hippocampus from five months in age onwards), Bergamaschini and colleagues have shown that chronic peripheral injection of the small heparin enoxaparin (ENO) alleviates AD-related pathology [5].

Specifically, immunocytochemical analysis revealed that the drug reduced the number, size and concentration of plaques observed in the neocortex, and diminished the degree of activation of astrocytes immediately surrounding the plaques. Preliminary analyses suggested that these effects were specific, and were without appreciable side-effects. Parallel *in vitro* work showed that ENO had no effect on Aβ fibrillarity, but reduced the cytotoxic effects of Aβ(1-40) and Aβ(1-42) (as indexed by cell viability) and, in contrast to other glycosaminoglycans, attenuated the activation of the complement and contact systems (as indexed by the percentage cleavage of C4 and HK, respectively).

The authors suggest two possible sites of action for ENO, the CNS (where it might protect against soluble Aβ neurotoxicity or elute cell-bound Aβ) or the blood (where it could affect the brain-plasma dynamics of circulating Aβ). Whatever the mechanism of action, the study suggests that ENO represents a potentially valuable therapeutic for AD through limiting brain Aβ accumulation and deposition, and through decreasing the associated immune response.

5 Bergamaschini, L. *et al.* (2004) Peripheral treatment with enoxaparin, a low molecular weight heparin, reduces plaques and β-amyloid accumulation in a mouse model of Alzheimer's disease. *J. Neurosci.* 24, 4181–4186

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Business

Merger

Agreement between Sanofi-Synthelabo and Aventis to create Sanofi-Aventis

Sanofi-Synthelabo (http://www.sanofi-synthelabo) have announced an improved offer for Aventis (http://www.aventis.com), which has been unanimously approved by the Board of Directors and principal shareholders (Total and L'Oreal) of Sanofi-Synthelabo and by the Management and Supervisory Boards of Aventis, who have recommended that Aventis shareholders tender their shares into Sanofi-Synthelabo's offer.

The combination of the two companies will create Sanofi-Aventis, the third largest pharmaceutical group in the world, and the number one in Europe. The management team will be drawn equally from both groups and will be chaired by Jean-Francois Dehecq, Chairman and CEO of Sanofi-Synthelabo.

Collaboration

MedImmune and Cerus to co-develop therapeutic vaccine

The biotechnology company MedImmune (http://www.medimmune.com) have reached an agreement with Cerus Corporation (http://www.cerus.com) to develop and commercialize a novel therapeutic vaccine against breast, colon, prostate and metastatic melanomas.

Cerus will participate in the development of the vaccine whereas MedImmune will be responsible for clinical testing and commercialization of any product resulting from the collaboration. Commenting on the collaboration, Peter Kiener, Vice President of Research at MedImmune, said: 'Cerus Corporation's therapeutic vaccine technology greatly complements MedImmune's existing program targeting the EphA2 protein in cancer…Because EphA2 is overexpressed by many types of human cancers, we believe Cerus' technology may be employed to develop a vaccine that can stimulate the immune system to attack cancerous cells expressing EphA2.' Stephen Isaacs, President and CEO of Cerus Corporation, said 'We are excited to enter into a collaboration with MedImmune, a leading biotechnology company with a track record of developing successful products and an important new cancer target in EphA2.'

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1359-6446/04/$ – see front matter PII: S1359-6446(04)03082-X