Promising developments bringing prion diseases closer to therapy and prophylaxis.

Prion diseases are fatal, infectious, neurodegenerative disorders, and there are no available therapeutic or prophylactic regimens. The potential of immune system components in combating peripheral prion infection has long been underestimated, but recent studies have suggested that such molecules could be effective. For example, promising results have been reported from a passive vaccination study in prion-infected mice. In addition, elegant transgenic mouse studies have shown the inhibitory effect on prion propagation of a soluble immunoglobulin G (IgG)-like dimeric prion protein. This type of molecule might represent a new class of anti-prion compounds.