

Introduction—Current Concepts in Thrombosis Management: Focus on Factor Xa Inhibition

Edith A. Nutescu, Pharm.D.

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Venous thromboembolism (VTE) remains a major public health problem in the United States. Recently developed guidelines recommend the use of antithrombotic agents for both prophylaxis and treatment of VTE. The most commonly used agents in the prevention and treatment of VTE include unfractionated heparin, low-molecular-weight heparin, and warfarin. Despite the availability of these traditional anticoagulants, however, limitations exist to their use in practice, and the rates of new and recurrent cases of VTE remain high. In recent years, new classes of antithrombotic agents have been developed that may offer benefits over traditional agents in the treatment and prevention of VTE. The selective factor Xa inhibitors are emerging as a novel class of anticoagulants with significant clinical potential for the prevention and management of thrombotic disorders.

This supplement provides a review of fondaparinux, the first synthetic factor Xa inhibitor, and its role in clinical practice. In the

From the Department of Pharmacy Practice, College of Pharmacy, University of Illinois at Chicago, Chicago, Illinois.

Address reprint requests to Edith A. Nutescu, Pharm.D., University of Illinois at Chicago, College of Pharmacy, 833 South Wood Street, MC 886, Room 164, Chicago, IL 60612; e-mail: enutescu@uic.edu.

first article, Dr. David Hawkins reviews the limitations in practice of traditional anticoagulants and outlines why we need new agents. In the second article, Dr. Bob Lobo discusses emerging options for thromboprophylaxis in patients undergoing orthopedic surgery and highlights the clinical data and benefits of fondaparinux for these indications. Next, Dr. Paul Dobesh highlights various options for extended prophylaxis after orthopedic surgery. In the fourth article, Dr. Cathy Helgason and I review the role and limitations of traditional anticoagulants in the treatment of VTE and discuss emerging data with fondaparinux and its potential role for this indication. In the fifth article, Drs. William Dager, Judith Anderson, and I address special considerations with fondaparinux such as wound healing and heparin-induced thrombocytopenia. Finally, Dr. David Hawkins reviews pharmacoeconomic issues in thrombosis management.

After many years of being limited to only a few anticoagulants for treatment of patients with VTE, this field is now undergoing exciting developments. Novel agents with benefits over traditional anticoagulants are now ready to be added to the available agents used for prevention and treatment of VTE.