The lack of a requirement for monitoring may also deny the physician the opportunity for patient education and the earlier detection of problems. It may also make it difficult to determine if the specific therapy has failed. If a patient develops a thromboembolic event on warfarin, the international normalized ratio (INR) is measured to determine if the event is truly a failure of therapy or whether the patient was sub-therapeutic (due to noncompliance or other factors influencing the INR). In the former case, dosing can be adjusted to increase the INR and patient education can be provided if thought to be necessary. With the use of a non-monitored drug such determinations cannot be made.

Other potential disadvantages include dosing adjustment for renal and/or hepatic dysfunction. The absence of an antidote may be problematic for patients who are at a high risk of bleeding or for those who present with a bleed. This may not be as important a problem as some suggest, because rapid reversal of warfarin is not simple and requires infusions of fresh frozen plasma or factor concentrates, the latter of which have been shown to be able to reverse anticoagulation with several of the new agents. Specific antidotes are also being developed for factor Xa inhibitors.

Finally, warfarin is available as a generic medication and is relatively inexpensive. New agents will be significantly more expensive and require NICE prior approval based on pre-specified criteria.

As new agents emerge from Phase 3 studies, and if the studies have positive outcomes, the impact on warfarin prescription may be felt most in patients with AF. Some of these new drugs have completed trials and been approved by NICE for selective patients. Further trials are still ongoing for the treatment of deep vein thrombosis (DVT).

Patients with a condition requiring lifelong therapy, and with minimal to no symptoms, will likely seek out such agents to improve their quality of life by eliminating the need for frequent monitoring and reducing dietary and drug-drug interaction concerns. However, warfarin will remain the mainstay of treatment for patients with mechanical heart valves because studies in this population have not been started. Warfarin may also hold favour with patients who are considered noncompliant with therapy and as an option for those patients who fail or develop an event while on one of the new agents.

For further information about our services please contact our GP Liaison Team on +44 (0)20 7460 5973.