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CLINICAL RESEARCH

Atrial fibrillation

Patient-reported treatment satisfaction and budget impact with rivaroxaban vs. standard therapy in elective cardioversion of atrial fibrillation: a *post hoc* analysis of the X-VeRT trial

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Aims

We compared patient-reported treatment satisfaction and the economic impact of anticoagulation therapy with rivaroxaban vs. vitamin K antagonists (VKAs) in patients with non-valvular atrial fibrillation undergoing elective cardioversion procedures.

Methods and results

The current study is a *post hoc* analysis of the prospective, multicentre X-VeRT (EXplore the efficacy and safety of once-daily oral rivaroxaban for the prevention of cardiovascular events in subjects with non-valvular atrial fibrillation scheduled for cardioversion) trial. Patient-reported treatment satisfaction with anticoagulation therapy was assessed using the Treatment Satisfaction Questionnaire for Medication version II in seven countries (US, UK, Canada, Germany, France, Italy, and the Netherlands). An economic model was also developed to estimate the impact of postponed cardioversions for two countries (UK and Italy). This model estimated the total costs of cardioversion, taking into consideration the costs for drug therapy (including extended treatment duration due to cardioversion postponement), international normalized ratio monitoring of VKAs, the cardioversion procedure, and rescheduling the procedure. These costs were linked to the respective X-VeRT study data to estimate the total costs. Patients receiving rivaroxaban in the delayed cardioversion group had significantly higher scores for Convenience, Effectiveness, and Global satisfaction (81.74 vs. 65.78; 39.41 vs. 32.95; and 82.07 vs. 66.74, respectively; $P < 0.0001$). Based on the total patient population included in the treatment satisfaction substudy ($n = 632$) in the delayed cardioversion group in X-VeRT, the use of rivaroxaban was estimated to result in a saving of £421 and €360 per patient in UK and Italian settings, respectively.

Conclusion

The use of rivaroxaban in the setting of cardioversion resulted in greater patient satisfaction and cost savings, compared with that of VKA.

Keywords

Economic analysis • Costs • Cardioversion • Rivaroxaban • Treatment satisfaction

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What's new?

- Rivaroxaban was associated with significantly higher treatment satisfaction (Convenience, Effectiveness, and Global satisfaction) compared with vitamin K antagonists in patients with non-valvular atrial fibrillation scheduled to undergo cardioversion.
- Application of X-VeRT data using an economic model showed that the use of rivaroxaban in place of warfarin in the delayed cardioversion group could result in a saving of £421 per patient in the UK setting and €360 per patient in Italy.
- Based on the total patient population ($n = 632$) in the delayed cardioversion group in X-VeRT, the estimated cost savings may equate to over £260 000 in the UK and €228 000 in Italy—equivalent to the cost of ~318 and 340 cardioversion procedures, respectively.

Introduction

Atrial fibrillation (AF) is the most frequently encountered sustained cardiac arrhythmia, with a prevalence of ~1.5–2% in the general population.¹ Owing to the well-documented risk of stroke and other complications associated with AF, patients commonly undergo cardioversion to restore sinus rhythm;² however, in the absence of adequate anticoagulation, cardioversion is associated with a 5–7% risk of thromboembolic complications.³ Therefore, at least 3 weeks of effective anticoagulation with a vitamin K antagonist (VKA) has traditionally been recommended before cardioversion, in addition to at least 4 weeks of oral anticoagulation after the procedure. Transoesophageal echocardiogram-guided cardioversion is also recommended by guidelines as an alternative to 3-week pre-procedural anticoagulation; this enables physicians to rule out a left atrial thrombus and thereby expedite cardioversion.¹

Limitations associated with the use of VKAs can be challenging for the physician and impose restrictions on patients' daily activities. Inadequate pre-procedural anticoagulation-related issues are responsible for >50% of cancellations of planned cardioversions, thereby imposing a cost burden.⁴ In addition, the delay in the time taken to achieve adequate pre-procedural anticoagulation with VKAs may also negatively impact patient convenience and the overall treatment satisfaction.

Health economic evaluations, such as budget impact analyses, can assist physicians in making informed decisions regarding the cost-effectiveness of a drug. Although the cost of rivaroxaban exceeds that of warfarin, decision-makers are increasingly interested in the overall budget impact. The main outcome of the X-VeRT (EXplore the efficacy and safety of once-daily oral riVaroxaban for the prevention of cardiovascular events in subjects with non-valvular atrial fibrillation scheduled for cardioversion) study suggests that rivaroxaban provides simple and reliable anticoagulation in this setting compared with VKAs;⁵ this finding could potentially reduce the number of cancelled or postponed cardioversion procedures in clinical practice, thus increasing patient satisfaction and reducing costs.

The aim of this *post hoc* analysis of the X-VeRT trial was to compare patient-reported treatment satisfaction and the economic impact of anticoagulation therapy for rivaroxaban vs. VKAs in elective cardioversion procedures.⁵

Methods

X-VeRT study

X-VeRT explored the efficacy and safety of once-daily rivaroxaban (20 mg, or 15 mg in patients with moderate renal impairment, i.e. creatinine clearance 30–49 mL/min inclusive), compared with dose-adjusted VKA for the prevention of cardiovascular events in patients aged ≥ 18 years with non-valvular AF lasting >48 h, or for an unknown duration, scheduled for elective cardioversion.⁵ X-VeRT was designed to reflect guideline-recommended treatment strategies, with rivaroxaban being investigated in the settings of early cardioversion after prior VKA treatment or with transoesophageal echocardiogram guidance and delayed cardioversion with ≥ 3 weeks of pre-procedural anticoagulation.⁶

Rivaroxaban administered *de novo*, or as ongoing therapy, or as a replacement for VKAs or another anticoagulant agent, was associated with thromboembolic and bleeding risks that were low and similar to those observed with VKA treatment—an observation that applied to both early and delayed cardioversion strategies. Overall, the time between randomization and cardioversion was significantly shorter (delayed strategy) in patients assigned to rivaroxaban, compared with those receiving a VKA [22 (interquartile range: 21–26) days vs. 30 (interquartile range: 23–42) days, $P < 0.001$].⁵

Assessment of treatment satisfaction

Patient-reported treatment satisfaction with anticoagulation therapy was assessed as an exploratory endpoint in the X-VeRT study. The Treatment Satisfaction Questionnaire for Medication version II (TSQM II) is available in seven countries (US, UK, Canada, Germany, France, Italy, and the Netherlands). Patients from these countries completed the questionnaire at the end of the treatment period (i.e. 42 days after cardioversion). Data were analysed in accordance with predefined criteria.⁷ The TSQM II is a widely used generic measure of treatment satisfaction,⁸ and it has been validated in patients receiving anticoagulants for the treatment of acute symptomatic deep vein thrombosis (DVT).⁹ The questionnaire consists of 11 items representing four subscales: Convenience, Effectiveness, Global satisfaction, and Side-effects.^{8,9} Patient-reported outcomes were rated on five- and seven-point Likert scales ranging from 'Extremely dissatisfied' to 'Extremely satisfied'. Scores for Convenience, Effectiveness, Global satisfaction, and Side-effects were between 0 and 100 (see Supplementary material online, Table S1). Higher scores indicate higher convenience, better effectiveness, higher global satisfaction, and fewer side-effects.⁹

Budget impact model analyses

An economic model has been developed to estimate the impact of postponed cardioversions on a hospital budget. This model estimates the total costs per treatment of a cardioversion, and components considered are: costs for drug therapy (including extended treatment duration due to postponing), international normalized ratio (INR) monitoring, cardioversion procedure, and rescheduling. These costs were linked to the respective clinical X-VeRT data (a delayed cardioversion strategy in which patients received pre-procedural anticoagulation for ≥ 3 weeks)⁵ to estimate the total costs. To estimate the budget impact of

rivaroxaban vs. VKA, total costs were then compared between the treatment groups.

Clinical data from X-VeRT

To estimate the cost of drug therapy, the total treatment duration was assessed. According to the protocol, at least 63 days of therapy was required in the delayed strategy arm: 21 days prior to and 42 days after the cardioversion. Because of the higher proportion of postponed cardioversions in the warfarin arm, the median time to cardioversion, and thus the treatment duration, was 8 days longer than for rivaroxaban-treated patients (30 vs. 22 days).⁵ This additional time was considered in the calculation of the total treatment duration. Another component of the therapy costs is the number of INR monitoring visits, estimated by the numbers of INR values per patient pre- and post-cardioversion in the X-VeRT study (see Results).

The model also considers the percentage of cardioversions that are postponed on the scheduled day (day of planned cardioversion). From the overall X-VeRT data (delayed cardioversion strategy), 64% of planned cardioversions ($n = 215$) were not conducted in warfarin-treated patients. In 75% of these, the reason was inadequate anticoagulation.⁵ On the basis of X-VeRT study design, it was assumed that physicians only became aware of the INR values on the scheduled day, i.e. all of these cardioversions were postponed on the scheduled day. In the rivaroxaban group, only 23% of cardioversions were not conducted as planned.⁵ We assumed that 75% of the cardioversions were postponed on the scheduled day in the rivaroxaban group, which is a highly conservative estimate. Overall, of the total planned cardioversion procedures, 48% ($64 \times 0.75\%$) and 17% ($23 \times 0.75\%$) of cardioversions had to be rescheduled on the scheduled day in warfarin- and rivaroxaban-treated patients, respectively.

Unit costs

The clinical results described above were linked to the respective unit costs for drug therapies, INR monitoring, and cardioversion. To be able to compare the budget impact between countries, we selected the UK and Italy for the economic analysis; owing to the lack of data stemming from other countries, the current analysis is focused only on those countries for which robust figures were available. Table 1 lists the unit costs used in the budget impact model for these two countries.

Combining clinical data and unit costs

To estimate the total cost per patient of the procedure, the total treatment duration—including the extended median duration in the warfarin arm—was linked to the respective unit costs for warfarin (it was assumed that warfarin is used at a daily dose of 4.5 mg) and rivaroxaban. International normalized ratio monitoring costs were estimated by

multiplying the estimated frequency with the respective costs for one monitoring visit. The total cost of cardioversion procedures was included. It was assumed that the cost of cardioversions postponed on the scheduled day was a loss to the hospital, because the procedure slot could not be filled with another patient at short notice. In addition, the average costs of the postponed cardioversions, i.e. 48 and 17% for warfarin- and rivaroxaban-treated patients, respectively, were added. The total costs were calculated as the sum of these single components.

Statistical methods

With respect to the quantification of the treatment satisfaction outcomes, all statistical tests were performed at a two-sided 5% type I error level. No adjustments for multiple comparisons were done, and thus, all P -values were considered as nominal P -values.

An exploratory analysis of variance, including for fixed-factors treatment, cardioversion strategy, and their interaction, was performed for each subscale of the TSQM II score (Convenience, Effectiveness, Global satisfaction, and Side-effects). Adjusted means and 95% confidence intervals for rivaroxaban vs. VKA and early vs. delayed cardioversion strategy were calculated.

Results

Demographics and clinical characteristics

Of the 1504 patients who underwent randomization within the main X-VeRT trial, a total of 705 patients were included in the intention-to-treat population and participated in the treatment satisfaction substudy; 472 (67%) of these patients were assigned to receive rivaroxaban and 233 (33%) VKA.

Demographics and clinical characteristics in the overall population and by cardioversion strategy are summarized in Table 2. Overall, 44% of the study population were aged 65 years or under, and >60% of the population had a high CHA₂DS₂-VASc stroke risk score and persistent AF. In general, characteristics were well balanced across both study groups, with the exception of congestive heart failure and hypertension; ~8% more patients with a history of congestive heart failure were in the rivaroxaban group [95 (20.1%) rivaroxaban vs. 29 (12.4%) VKA], whereas ~6% more patients with a history of arterial hypertension were in the VKA group [313 (66.3%) rivaroxaban vs. 168 (72.1%) VKA]. Similarly, slightly more patients in the treatment satisfaction substudy had arterial hypertension than in the overall X-VeRT population (substudy: rivaroxaban

Table 1 X-VeRT delayed cardioversion strategy-based budget impact model inputs for the UK and Italy

	UK		Italy	
	Rivaroxaban	Warfarin	Rivaroxaban	Warfarin
Drug costs (per day)	£2.10 ¹⁰	£0.11 ¹¹	€2.09 ¹²	€0.07 ¹³
INR monitoring	N/A	£21.55 (first monitoring) £24.96 (subsequent monitoring)	N/A	26.09
Cost of cardioversion		£835 ^{10,14}	€676	€662

INR, international normalized ratio; N/A, not applicable. X-VeRT, EXplore the efficacy and safety of once-daily oral riVaroxaban for the prevention of caRdiovascular events in subjects with non-valvular aTtrial fibrillation scheduled for cardioversion.

Table 2 Demographics (intention-to-treat population)

	Total TSQM population by treatment (N = 705)		Early cardioversion (N = 395)		Delayed cardioversion (N = 310)	
	Rivaroxaban (N = 472)	VKA (N = 233)	Rivaroxaban (N = 272)	VKA (N = 123)	Rivaroxaban (N = 200)	VKA (N = 110)
Gender: female, n (%)	125 (26.5)	61 (26.2)	71 (26.1)	38 (30.9)	54 (27.0)	23 (20.9)
Age group (years)						
< 65	202 (42.8)	109 (46.8)	117 (43.0)	52 (42.3)	85 (42.5)	57 (51.8)
65–74	174 (36.9)	82 (35.2)	98 (36.0)	49 (39.8)	76 (38.0)	33 (30.0)
≥ 75	96 (20.3)	42 (18.0)	57 (21.0)	22 (17.9)	39 (19.5)	20 (18.2)
Medical history, n (%)						
Prior stroke/TIA or SE	36 (7.6)	20 (8.6)	19 (7)	6 (4.9)	17 (8.5)	14 (12.7)
Congestive HF	95 (20.1)	29 (12.4)	61 (22.4)	20 (16.3)	34 (17.0)	9 (8.2)
Arterial hypertension	313 (66.3)	168 (72.1)	197 (72.4)	92 (74.8)	116 (58.0)	76 (69.1)
Diabetes mellitus	115 (24.4)	56 (24.0)	72 (26.5)	36 (29.3)	43 (21.5)	20 (18.2)
Atrial fibrillation, n (%)						
First diagnosed	88 (18.6)	38 (16.3)	36 (13.2)	18 (14.6)	52 (26.0)	20 (18.2)
Paroxysmal ^a	76 (16.1)	50 (21.5)	55 (20.2)	35 (28.5)	21 (10.5)	15 (13.6)
Persistent ^a	299 (63.3)	138 (59.2)	175 (64.3)	66 (53.7)	124 (62.0)	72 (65.5)
Long-standing persistent ^a	7 (1.5)	4 (1.7)	5 (1.8)	2 (1.6)	2 (1.0)	2 (1.8)
CHADS ₂ score, n (%)						
Low: 0	100 (21.2)	43 (18.5)	42 (15.4)	16 (13.0)	58 (29.0)	27 (24.5)
Moderate: 1	177 (37.5)	103 (44.2)	107 (39.3)	57 (46.3)	70 (35.0)	46 (41.8)
High: ≥ 2	195 (41.3)	87 (37.3)	123 (45.2)	50 (40.7)	72 (36.0)	37 (33.6)
CHA ₂ DS ₂ -VASc score, n (%)						
Low: 0 (or 1, if female only)	64 (13.6)	25 (10.7)	25 (9.2)	9 (7.3)	39 (19.5)	16 (14.5)
Moderate: 1 (except for female alone)	95 (20.1)	52 (22.3)	56 (20.6)	25 (20.3)	39 (19.5)	27 (24.5)
High: ≥ 2	313 (66.3)	156 (67.0)	191 (70.2)	89 (72.4)	122 (61)	67 (60.9)

CHADS₂, Congestive heart failure, Hypertension, Age (≥ 75 years), Diabetes mellitus, Stroke/transient ischaemic attack; CHA₂DS₂-VASc, Congestive heart failure/left ventricular dysfunction, Hypertension, Age ≥ 75 years, Diabetes mellitus, Stroke/transient ischaemic attack/thromboembolism, Vascular disease (prior myocardial infarction or aortic plaque), Age 65–74 years, Sex category (female); HF, heart failure; SE, systemic embolism; TIA, transient ischaemic attack; TSQM, Treatment Satisfaction Questionnaire for Medication version II; VKA, vitamin K antagonist.

^aThe classification of the different types of atrial fibrillation was made by the investigator, and the decision to proceed with cardioversion was also left at their discretion.

66% and VKA 72% vs. X-VeRT population: rivaroxaban 65% and VKA 68%). It was estimated that the INR of warfarin-treated patients was monitored approximately six times pre-cardioversion (i.e. 5.7 visits) and five times post-cardioversion (i.e. 4.7 visits).

Treatment satisfaction

Overall, patients reported greater satisfaction in the rivaroxaban group compared with the VKA group: TSQM II subscale scores for Convenience, Effectiveness, and Global satisfaction were 80.32 vs. 66.71, 38.76 vs. 34.37, and 81.67 vs. 67.46, respectively ($P < 0.001$ for all interactions) when rivaroxaban was compared with VKA therapy. For Side-effects, rivaroxaban compared favourably with the VKA group (61.37 vs. 58.05, $P = 0.061$; Table 3).

Rivaroxaban patients in the delayed cardioversion strategy group showed significantly higher adjusted means compared with standard therapy for the following subscales: Convenience, Effectiveness, and Global satisfaction (81.74 vs. 65.78, 39.41 vs. 32.95, and 82.07 vs. 66.74, respectively; $P < 0.0001$ for all interactions).

Numerically higher adjusted means for Side-effects were reported in rivaroxaban patients in the delayed cardioversion strategy group compared with those in the early group (61.82 vs. 59.27, $P = 0.3331$; Table 4).

Budget impact model

The total cardioversion procedure cost per patient receiving either rivaroxaban or warfarin in the UK and Italian settings is presented in Table 5. Application of X-VeRT data in the UK setting showed that the use of rivaroxaban in place of warfarin could result in a saving of £421 per patient. This means that for 632 patients (rivaroxaban-treated patients in the delayed cardioversion strategy group),⁵ the use of rivaroxaban in place of warfarin could result in a saving of over £260 000, which is equivalent to the cost of ~318 cardioversion procedures in the UK. Similarly, in Italy, the relevant cardioversion cost saving per patient was shown to be €360, meaning that for 632 patients, €228 000 could be saved, equating to ~340 cardioversion procedures in Italy.

Discussion

This substudy of X-VerT compared patient-reported treatment satisfaction and the economic impact of anticoagulation for patients receiving rivaroxaban as an oral fixed-dose regimen vs. standard of care in elective cardioversion procedures. Results are based on the findings from the X-VerT study and a treatment satisfaction substudy.⁵ For the budget impact simulation model, these results were combined with local cost figures.⁷

The X-VerT study showed that rivaroxaban provided important practical advantages over VKAs, with significantly more patients able to undergo cardioversion as planned and after a significantly shorter duration of pre-cardioversion anticoagulation (delayed strategy group),⁵ thus resulting in higher treatment satisfaction and cost savings.

Utilizing the TSQM II, significantly higher treatment satisfaction (Convenience, Effectiveness, and Global satisfaction) was reported with rivaroxaban, driven by the benefits from the delayed cardioversion group. The X-VerT trial results, combined with the well-characterized limitations associated with the VKA therapy, suggest that use of rivaroxaban in the setting of cardioversion may allow for more prompt cardioversion and improved patient outcomes.⁵

The patient preferences in general for novel oral anticoagulants (including rivaroxaban) over VKAs in AF have been described previously.^{17,18} Lane et al. have recently published a consensus statement on patients' values and preferences for the management of arrhythmias, acknowledging that there is an increased drive towards a patient-centred, symptom-directed management of AF. It urges that patients' values and preferences with regard to the treatment strategy should now be considered as an integral part of the shared decision-making process.¹⁹

The X-VerT study showed that the number of rescheduled cardioversions (delayed strategy) owing to inadequate anticoagulation is significantly higher with VKA treatment,⁵ thus leading to substantially higher costs. The rescheduling of cardioversions owing to INR levels outside the therapeutic range remains an issue in parts of Europe. For example, the British Committee for Standards in Haematology guidelines state that as many as 25% of procedures are postponed for this reason,²⁰ although available data suggest that this could be an underestimate.⁷ Reducing reschedule rates on the scheduled day, in addition to removing the need for INR monitoring, could lead to substantial patient benefits, including a reduction in waiting time for cardioversion, time off work, and travel time. As a consequence, a higher number of patients could be treated per year owing to reduced costs and waiting times and a reduced wastage of cardioversion slots.

A recent non-randomized, single-centre, observational study assessed the potential impact of the use of dabigatran compared with warfarin on the efficiency of an outpatient cardioversion service. A total of 242 cardioversions were performed on 193 patients over a 36-month period. The authors concluded that ~30–40% of the planned cardioversions were postponed, but that up to 5000 cancellations in the UK could be avoided annually with the use of dabigatran.¹⁸

One limitation of the present study was the relatively small study population size; however, the reduction seen in the number of cancelled cardioversions could impact on patient satisfaction and healthcare system efficiency. Moreover, the present analysis was restricted to the UK and Italian settings; therefore, these results cannot be extrapolated to the rest of the world. The TSQM II results indicated that rivaroxaban seems to be associated with a significantly higher treatment satisfaction (Convenience, Effectiveness, and

Table 3 Difference between adjusted means by the TSQM subscale for rivaroxaban vs. vitamin K antagonist (intention-to-treat population)

Subscale ^a	Adjusted mean	95% confidence interval	P-value
Convenience	13.61	10.89 to 16.33	<0.001
Effectiveness	4.39	2.62 to 6.15	<0.001
Global satisfaction	14.22	11.55 to 16.88	<0.001
Side-effects	3.32	−0.16 to 6.81	0.061

TSQM, Treatment Satisfaction Questionnaire for Medication version II.
^aScore scales range from 0 to 100; adjusted means, means adjusted by cardioversion strategy. If questions 4–6 were ticked as 'not applicable', this was recorded as 'missing'.

Table 4 Difference between adjusted means of rivaroxaban and vitamin K antagonist therapy by the cardioversion strategy (intention-to-treat population)

Subscale ^a	Cardioversion strategy	Adjusted mean	95% confidence interval	P-value
Convenience	Early	11.26	7.32 to 15.20	<0.001
	Delayed	15.96	12.35 to 19.57	<0.001
Effectiveness	Early	2.31	−0.14 to 4.76	0.064
	Delayed	6.46	3.93 to 8.99	<0.001
Global satisfaction	Early	13.10	9.34 to 16.87	<0.001
	Delayed	15.33	11.62 to 19.04	<0.001
Side-effects	Early	4.10	−0.62 to 8.82	0.089
	Delayed	2.55	−2.64 to 7.74	0.333

^aScore scales range from 0 to 100; adjusted means, means adjusted by the cardioversion strategy. If questions 4–6 were ticked as 'not applicable', this was recorded as 'missing'.

Table 5 Total procedure cost calculations per patient based on inputs

	UK		Italy	
	Rivaroxaban	Warfarin	Rivaroxaban	Warfarin
Drug cost for 63 days	£132 ¹⁰	£7 (it was assumed that warfarin is used at 4.5 mg) ¹¹	€132 ¹²	€4 ¹³
INR monitoring (63 days)	N/A	£256 ^{a15}	N/A	€271
Cost of cardioversion	£835 ¹⁴	£835 ¹⁴	€676	€662
Additional booked cardioversion procedures per patient—when rescheduled on the scheduled day	0.172	0.477	0.172	0.477
Additional booked cardioversion procedures per patient—when rescheduled prior to the scheduled day	0.058	0.161	0.058	0.161
Cost of nurse specialist per reschedule ^b	£6	£6	N/A	N/A
Cost of rescheduling on the scheduled day	£145 ^c	£401	€116	€316
Cost of rescheduling prior to the scheduled day	£0.35	£0.97	N/A	N/A
Cost of additional waiting time for patients on warfarin	N/A	£33 ^{5,11,14}	N/A	€35
Total procedure cost per patient	£1118	£1539	€924	€1289

INR, international normalized ratio; N/A, not applicable; NHS, UK National Health Service.

^aThe INR monitoring required with warfarin was calculated based on weighted average costs taken from NHS reference costs¹⁵ for 5.7 visits prior to cardioversion and 4.7 visits post-cardioversion.

^bThe cost for a specialist nurse is based on 7 min per patient to review INR levels and check suitability for cardioversion, which will have to be repeated if the procedure is rescheduled for a different date. This information has been provided by clinical teams that schedule and perform cardioversion procedures to calculate cost based on NHS nurse salaries.¹⁶

^cThe value shown corresponds to the unit cost of cardioversion (£835) plus the cost for nurse rescheduling (£6.07) multiplied by the probability of rescheduling on the scheduled day (0.172).

Global satisfaction) compared with VKA therapy. Although the TSQM II is a widely used generic measure of treatment satisfaction, the use of a more specific measure (i.e. the Anti-Clot Treatment Scale) focusing on anticoagulation-specific aspects of treatment satisfaction could potentially lead to a more sensitive evaluation. However, in patients with DVT, the use of rivaroxaban resulted in improved treatment satisfaction compared with enoxaparin/VKA consistently when using both treatment satisfaction measures, TSQM II and the Anti-Clot Treatment Scale.⁹

Nevertheless, X-VeRT included a broad patient population, including oral anticoagulant-naïve/untreated and -experienced patients, in a breadth of clinical situations in the setting of cardioversion in patients undergoing early or delayed cardioversion strategies, mirroring more accurately the range of patients seen in routine clinical practice.

Conclusions

The use of rivaroxaban in the setting of elective cardioversion resulted in greater patient satisfaction and cost savings for the hospital compared with that of VKA, thus offering the opportunity for a simplified treatment that could increase patient compliance and improve efficiency.

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