

**CoaguChek<sup>®</sup>**  
Because it's my life

A decorative graphic element below the CoaguChek logo, consisting of a blue and red wavy line.

**On route to 65...**

*...by optimising warfarin monitoring*



# Warfarin – tried, trusted, underused

## Stroke – significant costs to patients and the NHS

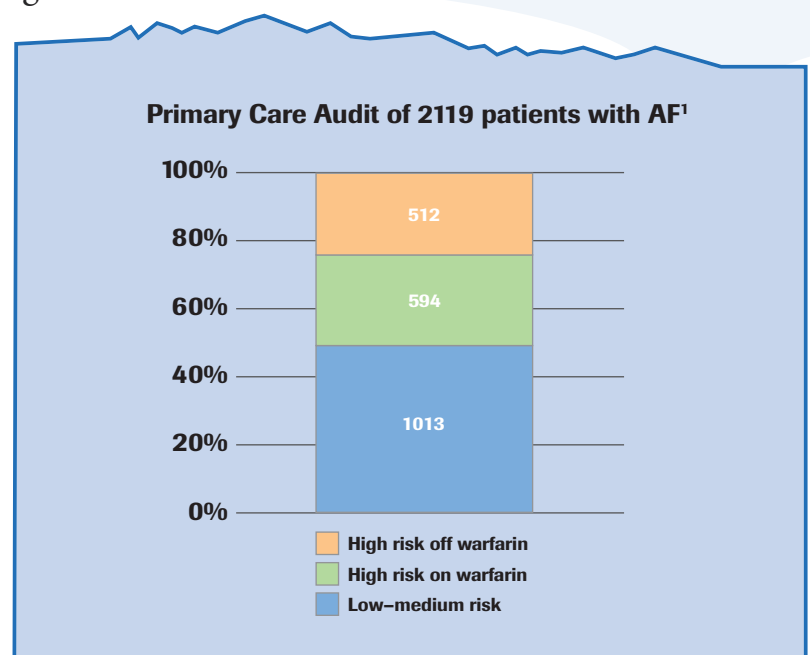
- In the UK, there are 12,500 strokes per year attributable to AF<sup>1</sup>
- The DoH estimates total costs in the 1st year of care for strokes due to AF are £148 million – £11,840 per stroke<sup>1</sup>

## Warfarin – tried, trusted

- Proven by over 50 years of clinical experience
- The number needed to treat (NNT) to prevent stroke on warfarin – primary prevention 37, secondary prevention 12<sup>2</sup>
- NICE estimates the total annual cost of warfarin per patient, including monitoring, is £383,<sup>3</sup> less than half that of some newer products
- Use of warfarin means that treatment is individualised and regularly monitored – flexibility matters in anticoagulation therapy
- New 2011 guidelines provide HCPs with clear guidance on the indications for, and management of, patients on warfarin<sup>4</sup>

## Warfarin – underused

- A recent primary care audit of 151,000 patients in Leeds showed that 44% of those at high risk of stroke were not receiving warfarin<sup>1</sup>
- More appropriate risk stratification and use of warfarin in primary care could prevent up to 6,000 strokes and 4,000 deaths annually<sup>1</sup>
- In another study, in North Dublin, only 32% of patients with known AF and prior stroke were taking warfarin at the time of their recurrent ischaemic stroke<sup>5</sup>



# The importance of Time within Therapeutic Range (TTR)

- TTR is the optimal measure of INR control, and has a significant relationship with adverse outcomes in all studies<sup>6</sup>
- As a result:
  - a 7% increase in TTR → 1 less major haemorrhage/100 patient years
  - a 12% increase in TTR → 1 less thromboembolic event/100 patient years
- A 5% improvement in time in TTR across UK anticoagulation clinics would prevent 400–500 strokes per year<sup>7</sup>
- In international studies, a marked benefit was found against stroke and total vascular events for patients who had mean TTRs  $\geq 65\%$ <sup>7</sup>

## What can lead to low TTR?

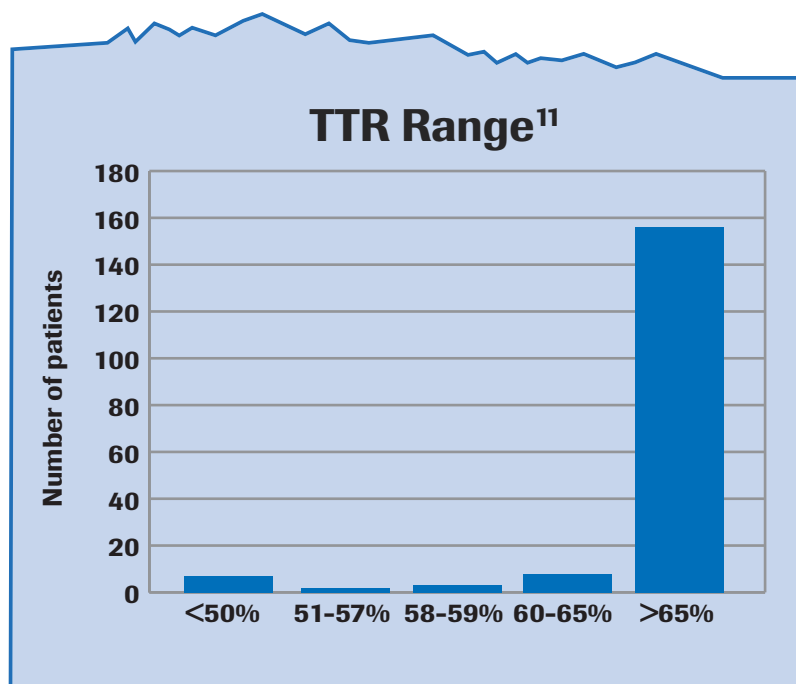
- Lack of a clinical governance process to monitor and regulate the implementation of existing guidelines – medical practice is an important determinant of TTR<sup>8</sup>
- Lack of effective, ongoing dose adjustment<sup>6</sup>
- Patient non-compliance: compliance rates have been estimated at 50%–60% for patients on long term medication.<sup>9</sup> Non compliance has been associated with poor treatment outcomes



# How can you improve TTR levels and get the best out of warfarin?

## Anticoagulation clinics

- Use of anticoagulation clinics can improve TTR, and should include routine measurement of TTR for AF patients and corrective action if the TTR is <65%<sup>7</sup>
- Computer-assisted dosing has been shown to:<sup>4</sup>
  - improve TTR
  - reduce the frequency of testing
  - significantly reduce risk of bleeding and thromboembolic events
  - be more cost-effective than manual dosing<sup>10</sup>
- In one UK practice using INR star, only 11.4% of patients had TTR <65%<sup>11</sup>

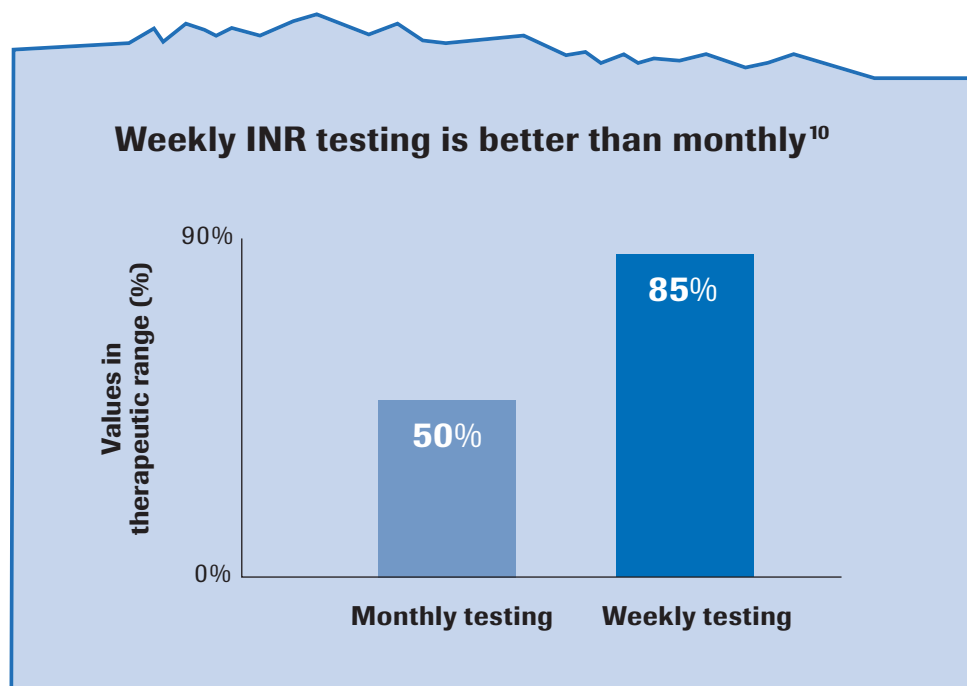


## Improve compliance

- Low TTR may be due to poor compliance – assess compliance and, if necessary, strategies to ensure compliance should be used<sup>12</sup>
- The longer half-life and OD dose of warfarin could encourage compliance and provide a more consistent anticoagulant effect than products with a BD dose<sup>13</sup>

## Patient self-testing (PST), self-management (PSM)

- PST\* and PSM\*\* improved the overall quality of OAC therapy compared to standard monitoring<sup>14</sup>
- The number of thromboembolic events and overall mortality was decreased without any increase in bleeding<sup>14</sup>
- Regular monitoring increases TTR. Up to 85% of patients remain in target range when monitoring weekly<sup>15</sup>



Adapted from Heneghan C et al, 2006.

- PSM has been used in Europe for 25 years and is now adopted across 55 countries, yet less than 2% of patients are supported to self-test in the UK

**‘Self-monitoring of anticoagulation therapy is an example of an innovation that has been developed but not disseminated to its full potential’<sup>16</sup>**

**NHS briefing pack, 2009**

\* self-testing – carrying out their own blood tests with dose adjustments made by HCPs.

\*\* self-managing – carrying out their own blood tests and adjusting their dose according to local agreement protocol.

# Achieving 65% TTR and greater – near patient testing

- Over 350 primary care sites have implemented Near Patient Testing with CoaguChek® XS Plus
- Use of Computer Decision Support Software (CDSS) allows for practice and patient audit of TTR
- CoaguChek® XS Plus has a dedicated EQA scheme through NEQAS to provide the necessary quality assurance

## CoaguChek® XS Plus and XS systems – tried and trusted

- Fully evaluated by the NHS – Centre for Evidence based Purchasing (CEP) 2006
- Recommended as option for specific patients in NICE AF guidelines 2006<sup>18</sup>
- Accurate (ISI of 1.0) and precise (CV<4.5%)<sup>19</sup> – giving reproducible results time after time



# Achieving 65% TTR and greater – patient self-monitoring

- Over 10,000 patients in the UK are self-monitoring, either:<sup>17</sup>
  - self-testing – carrying out their own blood tests with dose adjustments made by HCPs
  - self-managing – carrying out their own blood tests and adjusting their dose according to local agreement protocol
- Published data shows that self-management could deliver TTR of up to 85%<sup>15</sup>



CoaguChek® XS Plus



CoaguChek® XS



# Optimising the potential of warfarin monitoring

## A tried, trusted but underused anticoagulant

- Ensuring that patients' TTR is  $\geq 65\%$  can significantly improve outcomes
- To help achieve this, consider:
  - near patient testing
  - use of computer-assisted dosing tools
  - improving patient compliance
  - routine, regular monitoring of TTR
    - through anticoagulation clinics
    - by maximising the benefits of PST, PSM and Point of Care testing, proven to improve outcomes
- For self- or Point of Care testing, the obvious choice is CoaguChek®

For further information, please visit [www.coaguchek.co.uk](http://www.coaguchek.co.uk) or contact Roche Point of Care on 0808 100 99 88 (UK) 1800 509 586 (IE)

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