

# Atrial Fibrillation

## Patient Decision Aid

### Is aspirin or warfarin better?

#### Introduction

You have been diagnosed as having atrial fibrillation (AF). AF is a kind of irregular heart rhythm. Sometimes, but by no means always, people with AF develop blood clots in their hearts. These clots can lead to strokes if the blood clots travel from the heart to the brain. Strokes may cause weakness or difficulty with speech. This happens because the brain tissue does not get enough blood reaching it. Strokes can happen either when a blood clot blocks blood vessels in the brain, or (more rarely) when bleeding occurs in the brain. This all sounds very worrying, but the risks of stroke in people with AF can be reduced.

Warfarin and aspirin both make the blood take longer to clot. These medicines can therefore help to prevent the most common kind of stroke in many people with AF. People with AF are recommended to take either warfarin or aspirin. This leaflet has been written to help you decide which one to take.

You need to weigh up the risks and benefits that are likely to come from taking either drug. You would be less likely to have a stroke if you take warfarin rather than aspirin. However, you would be more likely to have side effects from warfarin than aspirin. Warfarin and aspirin can both cause bleeding complications such as bleeding stomach ulcers, but this is less likely with aspirin than with warfarin. **The chances of avoiding a stroke by taking aspirin or warfarin are much greater than the chance of having side effects from them.** We have provided some pictures which we hope will help explain this.

Whether you take warfarin or aspirin you will need to take it every day. If you take warfarin you will need to have regular blood tests to make sure you take exactly the right dose. If you take too much warfarin (like taking several days' doses together) you are more likely to have serious bleeds. If you forget to take your warfarin, it will not work so well.

If you take aspirin you would not need regular blood tests. If you take the too many doses by mistake you are less likely to have bleeding problems, although these may still occur. If you forget to take it, it will not work so well.

You can also reduce your risk of stroke by controlling your blood pressure. You can do this by taking the medicine(s) prescribed for you, and also by eating a healthy diet and taking exercise. Please ask your doctor, nurse or pharmacist if you have any questions.

#### What are the benefits and risks from taking aspirin or warfarin?

In the pictures below, we ask you to imagine 100 people at 35% risk of having a stroke over the next ten years. That means that in the next ten years, about 35 of them will have a stroke (35% means 35 out of 100). **Please ask your doctor, nurse or pharmacist what your risk of a stroke is likely to be.** If it is higher, you will be more likely to benefit from treatment, if it is lower you will be less likely to benefit. Whatever your risk of stroke, your risk of side effects is the same.

#### Benefits from taking aspirin

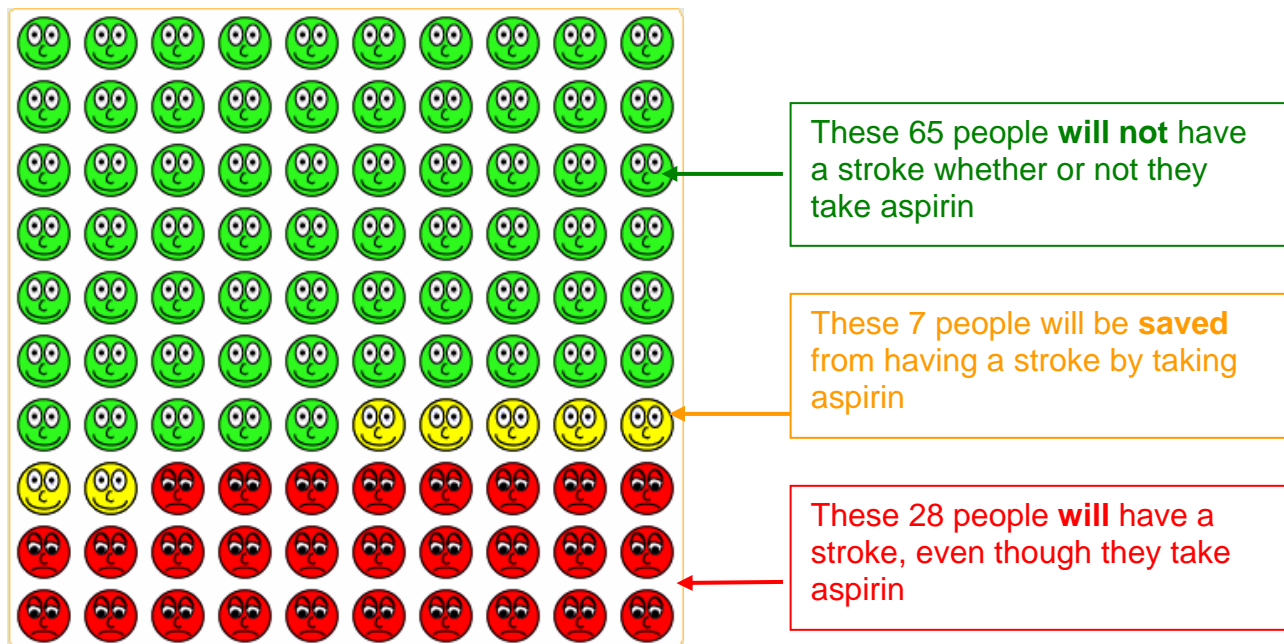
Imagine 100 people at 35% risk of having a stroke over the next ten years. That means that, without treatment, about 35 of them will have a stroke over the next 10 years (35% means 35 out of 100). So 65 of them will not have a stroke ( $100 - 35 = 65$ ).

However, if those same 100 people each take aspirin for 10 years:

1. About 7 people will be 'saved' from having a stroke by taking aspirin (the **yellow** faces)
2. About 65 people will not have a stroke – but would not have done even if they had not taken aspirin (the **green** faces)
3. About 28 people will still have a stroke (the **red** faces), even though they take aspirin.

But remember

- It is impossible to know for sure what will happen to each individual person.
- All 100 people will have to take aspirin for 10 years.



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### Harms from taking aspirin

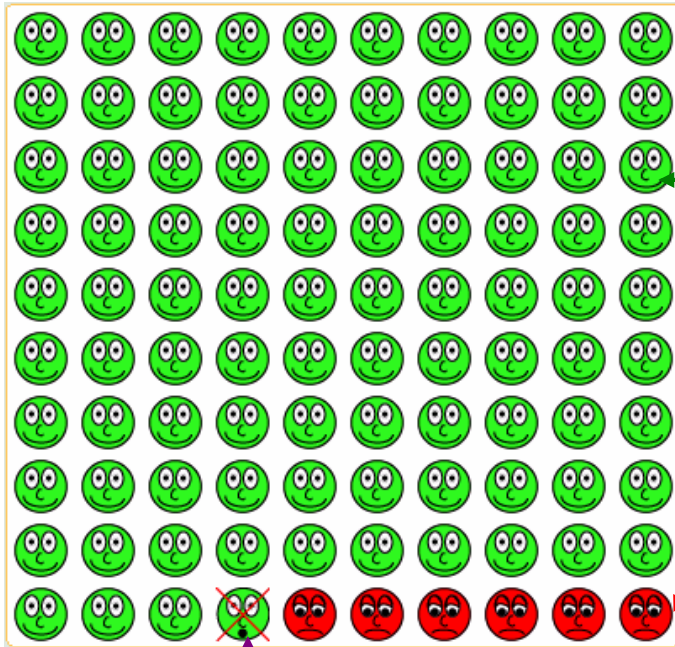
We would normally expect 6 of those 100 people to have a major bleed over the next ten years. So 94 of them will not have a major bleed ( $100 - 6 = 94$ ).

However, if those same 100 people each take aspirin for 10 years:

1. About 1 person will have a major bleed **because** he or she takes aspirin (the **green** face with a **red** cross)
2. About 93 people will not have a major bleed – just as if they had not taken aspirin (the **green** faces)
3. About 6 people will still have a major bleed (the **red** faces), just as they would have done even if they had not taken aspirin.

But remember

- It is impossible to know for sure what will happen to each individual person.



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These 93 people will not have a major bleed, just as if they had not taken aspirin

These 6 people will have a major bleed, but they would have done even if they had not taken aspirin

This 1 person will have a major bleed **because** he or she takes aspirin

### Benefits from taking warfarin

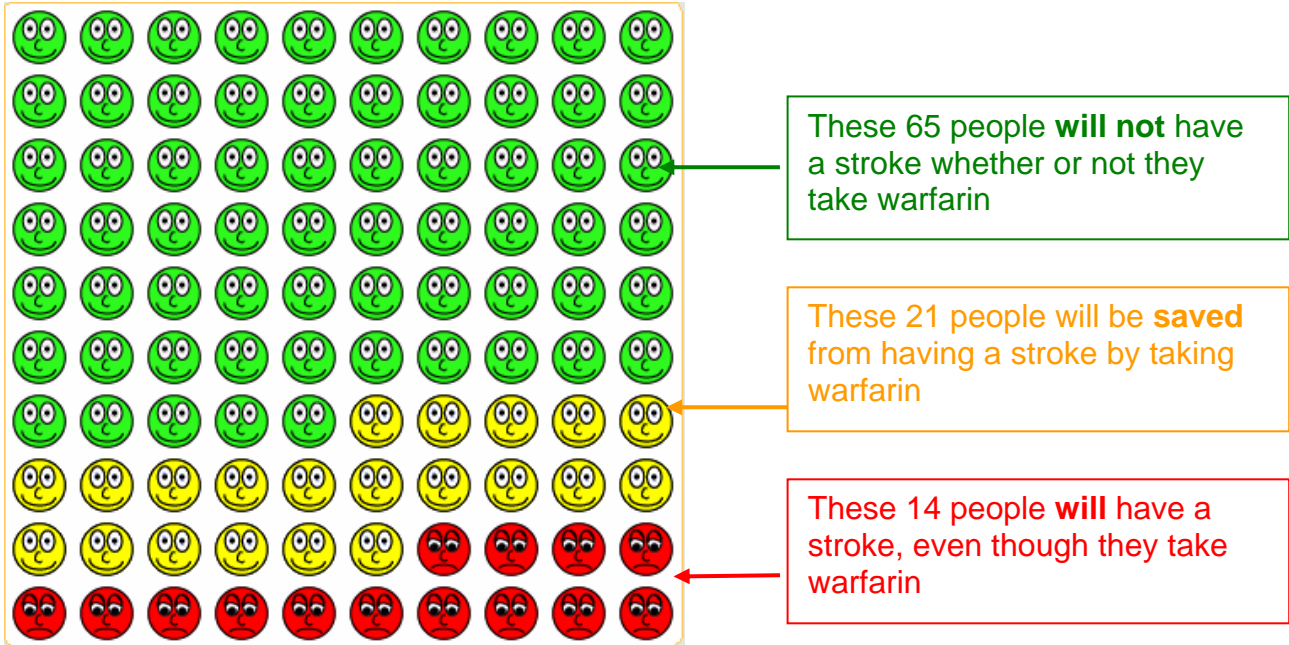
Imagine 100 people at 35% risk of having a stroke over the next ten years. That means that, without treatment, about 35 of them will have a stroke over the next 10 years (35% means 35 out of 100). So 65 of them will not have a stroke ( $100 - 35 = 65$ ).

However, if those same 100 people each take warfarin for 10 years:

1. About 21 people will be 'saved' from having a stroke by taking warfarin (the **yellow** faces)
2. About 65 people will not have a heart attack or stroke – but would not have done even if they had not taken warfarin (the **green** faces)
3. About 14 people will still have a stroke (the **red** faces), even though they take warfarin.

But remember

- It is impossible to know for sure what will happen to each individual person.
- All 100 people will have to take warfarin for 10 years.



### Harms from taking warfarin

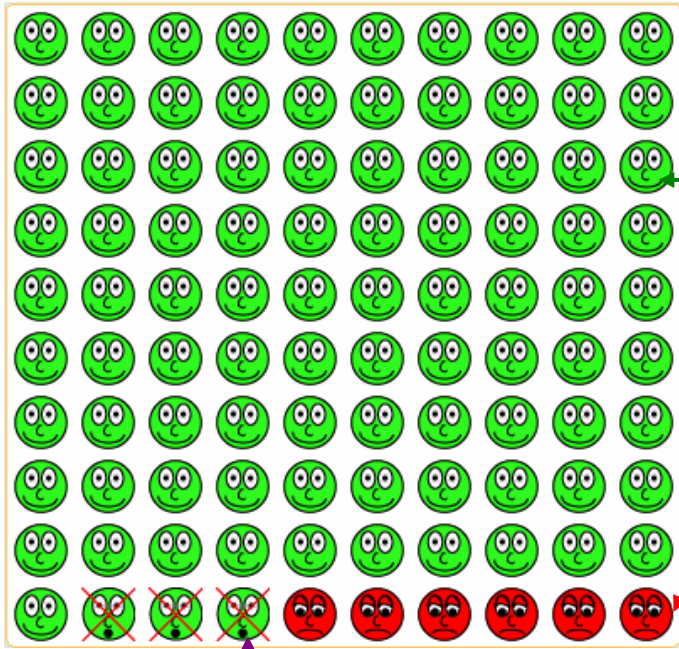
We would normally expect 6 of those 100 people to have a major bleed over the next ten years. So 94 of them will not have a major bleed ( $100 - 6 = 94$ ).

However, if those same 100 people each take warfarin for 10 years:

1. About 3 people will have a major bleed because they take warfarin (the **green** faces with **red** crosses)
2. About 91 people will not have a major bleed – just as if they had not taken warfarin (the **green** faces)
3. About 6 people will still have a major bleed (the **red** faces), just as they would have done even if they had not taken warfarin.

But remember

- It is impossible to know for sure what will happen to each individual person.



These 91 people will not have a major bleed, just as if they had not taken warfarin

These 6 people will have a major bleed, but they would have done even if they had not taken warfarin

These 3 people will have a major bleed, **because** they take warfarin

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**Note for clinicians**

The benefits and risks are taken from a meta-analysis of antithrombotic therapy<sup>1</sup>. The risk of all stroke (haemorrhagic and ischaemic) is reduced by approximately 60% with warfarin (INR 2 to 3) and by 20% with aspirin (75mg to 300mg/day). Hence the number of people in every 100 at 35% baseline risk “saved” by warfarin is  $35 \times 0.6 = 21$ , and the number “saved” by aspirin is  $35 \times 0.2 = 7$ . The likely benefits can therefore be adjusted according to the patient’s estimated risk of stroke. For example, in a group of 100 patients at 50% risk, the number “saved” by warfarin is  $50 \times 0.6 = 30$  and the number “not saved” is  $50 - 30 = 20$ . The risks expressed are the risks of major extracranial bleeds (since intracranial bleeds are accounted for in the overall stroke risk).

<sup>1</sup> Hart RG, et al. Antithrombotic therapy to prevent stroke in patients with atrial fibrillation: A meta-analysis. Ann Intern Med 1999; 131: 492– 501