Systemic sclerosis (scleroderma)

This booklet provides information and answers to your questions about this condition.
What is systemic sclerosis (scleroderma)?

Systemic sclerosis is a long-term condition that causes thickening and hardening of the skin, but it can also affect the body’s internal organs. In this booklet, we’ll explain the different types of systemic sclerosis and look at the symptoms, causes and the available treatments. We’ll also suggest where you can find out more about living with systemic sclerosis.

At the back of this booklet you’ll find a brief glossary of medical words – we’ve underlined these when they’re first used.

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What’s inside?

3 Systemic sclerosis at a glance

4 What is systemic sclerosis?

4 What are the symptoms of systemic sclerosis?

7 What causes systemic sclerosis?

9 What is the outlook?

9 How is systemic sclerosis diagnosed?
   – What tests are there?

10 What treatments are there for systemic sclerosis?

13 Self-help and daily living
   – Exercise
   – Diet and nutrition
   – Complementary medicine
   – Supports, aids and gadgets
   – Skin care and keeping warm
   – Dealing with stress

16 Research and new developments

16 Glossary

18 Where can I find out more?

20 We’re here to help
Systemic sclerosis is an autoimmune disease, which means the immune system attacks the body’s own tissues. It mostly affects the skin but it can also affect other parts of the body.

It’s 3–4 times more likely to affect women than men.
At a glance
Systemic sclerosis (scleroderma)

What is systemic sclerosis?
An older name for systemic sclerosis is scleroderma, which means hard skin. Thickening and hardening of the skin is the most obvious symptom of systemic sclerosis but it can also affect the body’s internal organs. The word ‘systemic’ refers to a disease that can affect many different organs in the body.

What are the symptoms?
Systemic sclerosis almost always causes thickening and hardening of the skin. Additional symptoms can include:

• variable degrees of tightening of facial skin – for example, around the mouth
• fingers or toes turning white then blue in the cold (Raynaud’s phenomenon)
• small red blood spots on the face, hands and arms
• small lumps of soft or hard calcium deposits under the skin, often on the fingertips
• digestive problems (e.g. heartburn, difficulty swallowing)
• joint pain and stiffness.

Rarer complications include heart, lung or kidney problems.

What treatments are there?
The treatment you’re given will depend on your symptoms. It can include:

• drugs to widen the blood vessels (e.g. nifedipine) for Raynaud’s phenomenon
• antacids for heartburn
• painkillers and non-steroidal anti-inflammatory drugs (NSAIDs) for joint pain
• ACE inhibitors for high blood pressure and kidney problems
• steroid tablets or immunosuppressive drugs (usually in more severe cases).

How can I help myself?
There are different things that you can do to ease your symptoms, including:

• exercising
• looking after your skin
• keeping warm
• not smoking
• eating a healthy diet.

Systemic sclerosis normally develops between the ages of 25 and 55.
What is systemic sclerosis (scleroderma)?
The word *scleroderma* means hard skin (*sclero* = hard, *derma* = skin), and this is the most visible symptom of systemic sclerosis. For this reason, the disease is sometimes just called scleroderma and many patients’ organisations use that name. However, it’s very important to understand that this disease can affect other parts of the body in addition to the skin. Because not just the skin is involved, many people prefer the name *systemic sclerosis*. The word ‘systemic’ refers to a disease that can affect different organs or systems of the body. In this booklet we’ll use the name systemic sclerosis throughout.

Systemic sclerosis can affect the joints, muscles, blood vessels and digestive system. It affects the lungs of about half the people with the condition, although this doesn’t always cause symptoms. It can also affect the kidneys, but this is rare.

Systemic sclerosis is an *autoimmune* disease, which means the immune system attacks the body’s own tissues. It’s one of a number of diseases called connective tissue diseases. It’s a rare condition, but women are 3–4 times more likely than men to develop it. Systemic sclerosis usually starts between the ages of 25 and 55 and only occasionally begins in children or in older people.

It’s important not to confuse systemic sclerosis with a completely different disease called *morphoea* or *localised scleroderma*. In this disease there is thickening of the skin and soft tissues in a localised area of the body only, but other organs aren’t involved. Morphoea doesn’t develop into systemic sclerosis, and this booklet isn’t intended for people with morphoea.

What are the symptoms of systemic sclerosis?
Systemic sclerosis can cause a range of symptoms affecting many different parts of the body. The most common symptoms are described in Figure 1.

**Sensitivity to the cold (Raynaud’s phenomenon)**
Most people with systemic sclerosis develop an unusual sensitivity to the cold, known as Raynaud’s phenomenon. The fingers or toes turn white then blue in the cold. Just walking into a cold room or reaching into the fridge can make this happen. The colour returns to normal as the hands or feet warm up.

Raynaud’s phenomenon is caused by a narrowing (constriction) of the blood vessels, which reduces the blood supply to the fingers or toes. Stressful situations can also cause the blood supply to reduce in the hands and provoke a Raynaud’s attack.

It’s possible to have Raynaud’s without having systemic sclerosis, but most people with systemic sclerosis will have symptoms of Raynaud’s at some time.
Changes in the skin
Stiffening, hardening or tightening of the skin, especially of the hands, face and feet

Symptoms of systemic sclerosis

Increased sensitivity to the cold
Fingers turn white then blue (Raynaud’s phenomenon)

Changes in the skin

Joint or muscle pain and stiffness

Digestive problems
Swallowing difficulties, heartburn

during their illness, and it’s often one of the first symptoms to appear. It can sometimes appear years before the onset of systemic sclerosis.

Changes in the skin
The most common changes in the skin include:

- thickening and hardening of the skin on the hands, arms and face – about 95% of people with systemic sclerosis will notice these changes (see Figure 2)
- swelling of the hands and/or feet, especially in the morning

See Arthritis Research UK booklet Raynaud’s phenomenon.
• shiny skin, without its usual creases
• stiffening of the facial skin, making it difficult to open the mouth wide, and sometimes thinning of the lips
• small red blood spots (called telangiectasia) on the face, hands and arms.

Less frequently, or later on in the condition, there may be:
• thinning of the pads at the finger tips and the soles of the feet
• peeling, cracking or open sores (ulcers) in the skin and flesh over the fingertips, caused by poor blood supply
• white chalky lumps under the skin (calcinosis), caused by calcium-containing deposits, often on the fingertips.

Digestive problems
Systemic sclerosis can affect the connective tissue of the internal organs – for example, the digestive system – resulting in:
• difficulty swallowing, caused by weakening of the muscles in the gullet (oesophagus)
• heartburn/reflux, caused by acid leaking upwards from the stomach into the lower part of the gullet.

Most people with systemic sclerosis have some problems with swallowing or heartburn. Less often, other parts of the bowel may be affected, leading to symptoms such as abdominal bloating, diarrhoea or constipation.
Pain or stiffness in the joints or muscles
Systemic sclerosis can cause the tissues around joints to stiffen, which makes the joints contract. It can also cause joint inflammation, which may lead to pain, stiffness, swelling and tenderness. Muscle weakness (myositis) is also sometimes a symptom of systemic sclerosis. About 1 person in 5 with systemic sclerosis will also have symptoms of a second rheumatic condition such as rheumatoid arthritis, lupus or Sjögren’s syndrome.

People who’ve had systemic sclerosis for a long time may find that their joints can tighten into a bent position because of the tightening of the skin and tissues surrounding the joints. These are called contractures and can occur in the fingers or elsewhere in the body.

See Arthritis Research UK booklets
Lupus; Rheumatoid arthritis; Sjögren’s syndrome.

What causes systemic sclerosis?
Systemic sclerosis develops because of changes that occur in the body’s connective tissues. These tissues lie under the surface of the skin and also in and around the body’s internal organs and blood vessels.

Systemic sclerosis leads to too much fibrous connective tissue, which is similar to scars that form after an injury. Scar tissue contains a protein called collagen, which is essential to help hold the body together, but having too much can cause the body’s tissues to stiffen and thicken.

We don’t yet know exactly why some people produce too much scar-like connective tissue. The immune system – which normally fights off infections – appears to be overactive and attacks healthy body tissues instead. This is thought to be due to a mix of genetic and environmental factors.

Although the genes we inherit from our parents can affect our risk of developing systemic sclerosis, the condition isn’t passed directly from one generation to another. Systemic sclerosis isn’t contagious so it can’t be caught from somebody else.
Although systemic sclerosis is a long-term condition, serious complications are relatively rare.

What is the outlook?
Systemic sclerosis is different for everyone, so it’s hard to say how it might affect you. Most people find that systemic sclerosis affects just a few parts of the body and comes on gradually. It may slowly get worse but usually settles down to become stable after a few years. Sometimes systemic sclerosis may progress more quickly, but other people find that it almost disappears after several years.

For some people the skin symptoms are the most troublesome, while others are affected more by poor circulation or digestive problems. Some people find their symptoms improve in summer but become worse in the winter.

Some people have more serious complications, for example:
- scarring (fibrosis) of the lungs, causing shortness of breath and/or a dry cough
- narrowing of the blood vessels of the lungs, leading to high blood pressure in the lungs (pulmonary hypertension), which may in turn strain the heart
- kidney problems resulting in high blood pressure.

These complications are fairly rare, but regular check-ups, preferably yearly, are recommended so that any problems can be spotted at an early stage.

Because the body has the ability to break down or repair extra scar tissue, there may be some improvement in scarring – both in the skin and in other organs – once the disease becomes less active.

How is systemic sclerosis diagnosed?
There’s no single test for systemic sclerosis, and the characteristic thickening of the skin is often the key factor in making the diagnosis. However, tests can be helpful in finding out whether other parts of the body are affected.

What tests are there?
Tests could include:
- blood tests
- x-rays and computerised tomography (CT) scans
- breathing tests
- a heart scan (echocardiogram or ECG)
- stomach tests (for example an endoscopy)
- a skin biopsy, where a small piece of skin is removed and examined under a microscope.

You may also have a capillaroscopy, which looks at the small blood vessels (capillaries) under a microscope, or thermography, which takes images of the heat coming from your body using an infrared camera, although they’re often only performed at specialist centres.
After you’ve been diagnosed, you might need to see your doctor regularly to monitor the condition. Most people have yearly tests to check for early signs of the more serious complications, such as effects on the heart and lungs.

What treatments are there for systemic sclerosis?
At the moment there’s no cure for systemic sclerosis, although medications can help to control the symptoms and treat any complications. There’s also a lot you can do for yourself, including exercise and skin care, that will help in managing your condition.

Raynaud’s phenomenon
Drugs can help with the symptoms of Raynaud’s phenomenon by widening the blood vessels, improving circulation to the hands and feet. There are quite a few drugs available, including tablets such as nifedipine, and they’re sometimes more effective if more than one is used at the same time.

In more severe cases of Raynaud’s, particularly where there are painful ulcers that won’t heal, drugs such as iloprost can be given into a vein through a drip (infusion). You’ll probably be admitted to hospital for this treatment.

Drugs that relax the blood vessels and increase blood flow to the fingers and toes also have the same effect on blood vessels elsewhere in the body. These drugs can cause side-effects such as flushing, headaches and swelling of the ankles.

Heartburn and swallowing difficulties
To prevent heartburn (reflux) and swallowing difficulties, your doctor may recommend antacids or a drug to lower the production of acid in the stomach. These are usually very effective, although you may need to take them for a much longer period (months or years) than is usual with simple heartburn. You may also be prescribed a drug called a proton pump inhibitor (PPI) which will help to protect your stomach.

Other gastrointestinal problems
If you have spells of constipation and diarrhoea, abdominal swelling, increased wind and discomfort, you may need to see a gastroenterologist who specialises in this area. Some people may also experience anal incontinence, meaning that they can’t control their bowel motions properly so that small amounts of stool slip out and can soil their clothes. This can be uncomfortable or embarrassing, and people may not realise that it’s anything to do with systemic sclerosis. If this happens to you, you should also raise it with your doctor and ask for a referral to a gastroenterologist. Sometimes additional bacteria develop in the bowel, and this can be helped by medications such as antibiotics. However, it’s important to have symptoms like diarrhoea and incontinence looked into to make sure that they don’t have another cause.
Inflamed joints
Painkillers and non-steroidal anti-inflammatory drugs (NSAIDs) should help to relieve joint pain and inflammation. You can buy mild forms over the counter at pharmacies and supermarkets (for example paracetamol), but your doctor may prescribe stronger types if needed. Like all drugs, NSAIDs can sometimes have side-effects, but your doctor will take precautions to reduce the risk of these – for example, by prescribing the lowest effective dose for the shortest possible period of time.

NSAIDs can cause digestive problems (stomach upsets, indigestion, or damage to the lining of the stomach) so in most cases NSAIDs will be prescribed along with a proton pump inhibitor. Even with a PPI, you’ll probably only be given NSAIDs for short periods because of the risk of making any existing gastrointestinal problems worse. NSAIDs also carry an increased risk of heart attack or stroke. Although the increased risk is small, your doctor will be cautious about prescribing NSAIDs if there are other factors that may increase your overall risk – for example, smoking, circulation problems, high blood pressure, high cholesterol or diabetes.

See Arthritis Research UK drug leaflets Non-steroidal anti-inflammatory drugs (NSAIDs); Painkillers (analgesics).

High blood pressure and kidney complications
High blood pressure (hypertension) sometimes occurs in systemic sclerosis and in severe cases can lead to kidney damage and strain on the heart. This is a
serious complication known as a systemic sclerosis renal crisis. It can be treated or often prevented with drugs that help to control the blood pressure, especially ACE inhibitors.

**Lung and heart complications**
Inflammation in the lungs can be treated with steroids or disease-modifying anti-rheumatic drugs (DMARDs).

High blood pressure in the lungs (pulmonary hypertension) is a rare complication of systemic sclerosis, but you’ll have regular tests to check how well your lungs and heart are working, which will pick up any problems. If necessary, pulmonary hypertension can be treated with specific drugs (including bosentan, ambrisentan, sildenafil or iloprost) that improve symptoms such as breathlessness.

Other drugs that may be used include:
- steroid tablets
- immunosuppressive drugs
- drugs to treat blood pressure and cholesterol.

**Steroid tablets**
Steroid tablets are synthetic forms of a hormone (cortisone) that occurs naturally in the body. They may be used either in the early stages of the disease when the skin is just starting to look puffy or later on if the muscles or lungs are affected. They’re usually given in low doses because high doses can raise blood pressure and increase the risk of kidney problems.
**Immunosuppressive drugs**
Immunosuppressive drugs target the immune system and may be used in more severe cases of systemic sclerosis, especially where the skin or lung disease is more extensive.

See Arthritis Research UK drug leaflets Cyclophosphamide; Iloprost; Mycophenolate; Non-steroidal anti-inflammatory drugs (NSAIDs); Steroid tablets.

**Self-help and daily living**
Although some of the symptoms of systemic sclerosis require specific medications, self-help measures like exercise and skin care are important aspects of the treatment.

**Exercise**
One of the best things you can do to keep on top of systemic sclerosis is to follow a regular exercise programme. This will keep your skin flexible, reduce any tightening in your joints and keep your blood flowing freely.

Gentle exercises are needed to keep your joints moving. Although you may need to rest if your joints become swollen, it’s generally helpful to keep moving as much as possible. Stretching exercises should be done regularly, as this should help to reduce joint contractures. Your physiotherapist or a specialist hand therapist will be able to teach you the best exercises to keep your joints mobile and may also suggest using splints to help in managing hand contractures. You might be given special exercises to help maintain facial mobility. The Systemic sclerosis Society also has a leaflet called Physiotherapy and Systemic sclerosis that gives examples of specific exercises that you can try.

See Arthritis Research UK booklets Keep moving; Looking after your joints when you have arthritis; Physiotherapy and arthritis; Splints for arthritis of the wrist and hand.

**Diet and nutrition**
Maintaining a healthy diet is important as it may help Raynaud’s symptoms and the healing of skin ulcers. However, digestive problems can make it difficult to keep up a balanced diet and to keep to your normal weight. If you have heartburn or difficulty in swallowing, the following tips may help:

- Eat six small meals a day instead of three larger ones – this helps with digestion while making sure your body gets the nutrients it needs.
- Eat slowly, chew thoroughly and drink plenty of water with meals.
- Taking your largest meal in the middle of the day can help to avoid heartburn. If you do suffer with heartburn, see your doctor, who may prescribe a proton pump inhibitor (PPI) which will help to reduce irritation of the gullet.
• Don’t eat too much in the evening to make sure you have time for digestion before you go to bed.

• Raise the head of your bed a few inches to stop acid coming back up from your stomach into your gullet while you sleep.

If you find it difficult to fit in six small meals, maybe because you’re at work during the day, you can eat a healthy snack instead. The key thing to be aware of is that you’re getting all the nutrients you need and don’t feel hungry.

Sometimes you may need nutritional supplements. They’re usually taken by mouth, but occasionally they need to be given via a narrow tube directly into the stomach or bowel.

See Arthritis Research UK booklet Diet and arthritis.

Complementary medicine
Massaging the hands using warm paraffin wax can help in keeping the skin flexible and reducing joint discomfort, although you shouldn’t use a wax bath if you have any open finger ulcers. Aside from this, there’s no scientific evidence that any form of complementary medicine can help ease the symptoms of systemic sclerosis. However, complementary and alternative medicines are relatively well tolerated if you do want to try them, though you should always discuss their use with your doctor before starting treatment. There are some risks associated with specific therapies.

In many cases the risks associated with complementary and alternative therapies are more to do with the therapist than the therapy. This is why it’s important to go to a legally registered therapist or one who has a set ethical code and is fully insured.

If you decide to try therapies or supplements you should be critical of what they’re doing for you, and base your decision to continue on whether you notice any improvement.

Some people with Raynaud’s find that taking vitamins can help to control symptoms. The use of high-dose vitamins E and C, fish oil and ginger or gingko dietary supplements can also help. If the vitamins don’t help within a three-month period you should stop taking them, but always consult your doctor before you try anything.

Supports, aids and gadgets
If you have trouble with daily activities like dressing or tasks that need you to have good grip strength, there are a number of gadgets available that can help. If in doubt, ask an occupational therapist for advice on how to protect your joints from unnecessary strain.

If you struggle to open childproof medicine containers, ask your pharmacist to put your drugs in containers you can manage.

Some people find it difficult handling coins when their fingers are sore or swollen. A coin purse that opens out to form a tray for the coins may help with this.
Skin care and keeping warm
You need a good supply of blood flowing to your skin to stop it from cracking, peeling and developing ulcers.

- Keep warm from top to toe – this will help open the blood vessels to your arms, hands, legs and feet. Wear a hat to help preserve your body heat. Thermal clothes, hand warmers and electrically heated gloves and socks can also help. Remember that layers of clothing will trap heat and keep you warmer than thick clothes.
- If your skin is broken or painful, dressings can help to protect it.
- Don’t use strong detergents or anything else that irritates your skin, and avoid soaps that contain lanolin. Try soaps, creams and bath oils designed to prevent dry skin until you find the ones that give you the best results in keeping your skin supple.
- If your hands are prone to dry skin, put cream on them whenever they’ve been in water. You can use either a water-based cream (such as E45 or aqueous cream), which is short-acting, or an oil-based cream (such as emulsifying ointment), which is thicker and longer lasting.
- Smoking reduces the blood flow to your skin and is very likely to make Raynaud’s symptoms worse, so it’s best to stop.

Managing telangiectasia
Telangiectasia are the small broken red blood spots that you may see appearing on your face, hands, and sometimes your chest and arms. You can use make-up to help cover them up if you want to, which shouldn’t make your skin symptoms worse. Changing Faces, a charity for people with conditions, marks or scars that affect their appearance, offer a skin camouflage service, giving advice on how to cover the marks with camouflage.
cream. Clinics are available throughout the UK and you can find information on the nearest one to you by visiting their website, www.changingfaces.org.uk. The service is free (though donations are welcome) and is open to anyone. Changing Faces accept self-referrals in some areas, but in others you’ll need to get a healthcare professional to refer you online. Laser treatment can also help in some cases. It’s available in the specialist dermatology units of some hospitals, and you may need several sessions to keep the telangiectasia under control.

Dealing with stress
There may be emotional difficulties connected with having a long-term condition, and the changes in the appearance of your skin can be upsetting. In addition, stress can reduce the blood flow to some parts of your body, so it can affect your condition, particularly if you have Raynaud’s phenomenon. Talk about any feelings of stress or depression with your family, friends or a healthcare professional. If you need help in handling stress or depression, your doctor may be able to help or can refer you for specialist counselling. You can also speak to a nurse in the rheumatology clinic – many clinics have nurses who either specialise in systemic sclerosis or have a special interest in the disease – or get in touch with a systemic sclerosis society, where you can talk with people who have the same condition.

Research and new developments
Research into systemic sclerosis is continually progressing and can be expected to lead to a better understanding of the condition and improved treatments.

In particular, research is focusing on identifying the exact causes of blood vessel narrowing and tissue scarring (fibrosis), with the aim of developing treatments that specifically target the causes of the most severe complications of systemic sclerosis.

Arthritis Research UK is also funding research into the different skin changes that occur as a result of systemic sclerosis.

Glossary
ACE (angiotensin converting enzyme) inhibitors – a group of drugs commonly used to treat heart failure and high blood pressure. They work by widening the blood vessels.

Antacid – a medication used to neutralise your stomach acid. Antacids can treat the symptoms of heartburn and indigestion.

Autoimmune disease – a disorder of the body’s defence mechanism (immune system), in which antibodies and other components of the immune system attack the body’s own tissue rather than germs, viruses and other foreign substances.

Collagen – the main substance in the white, fibrous connective tissue that’s found in tendons, ligaments and cartilage.
This very important protein is also found in skin and bone.

**Computerised tomography (CT) scan** – a type of scan that records images of sections or ‘slices’ of the body using x-rays. These images are then transformed by a computer into cross-sectional pictures.

**Contracture** – an abnormal shortening or contraction of muscle tissue which causes deformity.

**Connective tissues** – tissues which bind together, separate or support the structures of the body. They include tendons and cartilage, the matrix that forms the basis of bone, and the blood vessels.

**Disease-modifying anti-rheumatic drugs (DMARDs)** – drugs used in rheumatoid arthritis and some other rheumatic diseases to suppress the disease and reduce inflammation. Unlike painkillers and non-steroidal anti-inflammatory drugs (NSAIDs), DMARDs treat the disease itself rather than just reducing the pain and stiffness caused by the disease. Examples of DMARDs are methotrexate, sulfasalazine, gold, infliximab, etanercept and adalimumab.

**Echocardiogram (ECG)** – a type of scan that uses ultrasound waves to create detailed pictures of the inside of the heart. This test helps show the structure and movement of the heart.

**Endoscopy** – a test using a long flexible tube with a camera and light at the end to look inside the body, usually at the stomach in systemic sclerosis.

**Hand therapist** – a trained occupational therapist or physiotherapist who restores hand function and can assist with emotional and psychological support. Hand therapists also treat other upper limb disorders that affect hand function.

**Immune system** – the tissues that enable the body to resist infection. They include the thymus (a gland that lies behind the breastbone), the bone marrow and the lymph nodes.

**Immunosuppressive drugs** – drugs that suppress the actions of the immune system. They can be used in conditions such as systemic sclerosis where the immune system attacks the body’s own tissues.

**Inflammation** – a normal reaction to injury or infection of living tissues. The flow of blood increases, resulting in heat and redness in the affected tissues, and fluid and cells leak into the tissue, causing swelling. Inflammation can damage the tissues if left untreated.

**Lupus** (systemic lupus erythematosus or SLE) – an autoimmune disease in which the immune system attacks the body’s own tissues. It can affect the skin, the hair and joints and may also affect internal organs. It’s often linked to a condition called antiphospholipid syndrome (APS).

**Non-steroidal anti-inflammatory drugs (NSAIDs)** – a large family of drugs prescribed for different kinds of arthritis that reduce inflammation and control pain, swelling and stiffness. Common examples include ibuprofen, naproxen and diclofenac.
Occupational therapist – a trained specialist who uses a range of strategies and specialist equipment to help people to reach their goals and maintain their independence by giving practical advice on equipment, adaptations or by changing the way you do things (such as learning to dress using one handed methods following hand surgery).

Physiotherapist – a therapist who helps to keep your joints and muscles moving, helps ease pain and keeps you mobile.

Proton pump inhibitor (PPI) – a drug that acts on the stomach to reduce the amount of acid it produces. They’re often prescribed along with non-steroidal anti-inflammatory drugs (NSAIDs) to reduce side-effects from the NSAIDs.

Raynaud’s phenomenon – a circulatory problem that causes the blood supply to certain parts of the body to be greatly reduced. It can make the fingers and toes go temporarily cold and numb and they turn white, then blue, then red.

Rheumatoid arthritis – an inflammatory disease affecting the joints, particularly the lining of the joint. It most commonly starts in the smaller joints in a symmetrical pattern – that is, for example, in both hands or both wrists at once.

Sjögren’s syndrome – an autoimmune disorder that is characterised by dry eyes and/or a dry mouth, aching and fatigue.

Where can I find out more?
If you’ve found this information useful you might be interested in these other titles from our range:

Conditions
- Lupus
- Raynaud’s phenomenon
- Rheumatoid arthritis
- Sjögren’s syndrome

Therapies
- Occupational therapy and arthritis
- Physiotherapy and arthritis

Self-help and daily living
- Diet and arthritis
- Keep moving
- Looking after your joints when you have arthritis
- Splints for arthritis of the wrist and hand

Drug leaflets
- Cyclophosphamide
- Illoprost
- Mycophenolate
- Non-steroidal anti-inflammatory drugs (NSAIDs)
- Painkillers (analgesics)
- Steroid tablets
You can download all of our booklets and leaflets from our website or order them by contacting:

**Arthritis Research UK**
Copeman House
St Mary’s Court
St Mary’s Gate
Chesterfield
Derbyshire S41 7TD
Phone: 0300 790 0400
www.arthritisresearchuk.org

**Related organisations**
The following organisations may be able to provide additional advice and information:

**Arthritis Care**
Floor 4, Linen Court
10 East Road
London N1 6AD
Phone: 020 7380 6500
Helpline: 0808 800 4050
Email: info@arthritiscare.org.uk
www.arthritiscare.org.uk

**British Red Cross**
British Red Cross
UK Office
44 Moorfields
London EC2Y 9AL
Phone: 0844 412 2804
Email: information@redcross.org.uk
www.redcross.org.uk

**Raynaud’s & Systemic sclerosis Association**
112 Crewe Road
Alsager
Cheshire ST7 2JA
Phone: 01270 872776 (for enquiries) or 0800 917 2494 (for information orders)
Email: info@raynauds.org.uk
www.raynauds.org.uk

**Scleroderma Society**
Bride House
18–20 Bride Lane
London EC4Y 8EE
Helpline: 0800 311 2756
Email: info@sclerodermasociety.co.uk
www.sclerodermasociety.co.uk
We’re here to help

Arthritis Research UK is the charity leading the fight against arthritis. We’re the UK’s fourth largest medical research charity and fund scientific and medical research into all types of arthritis and musculoskeletal conditions.

We’re working to take the pain away for sufferers with all forms of arthritis and helping people to remain active. We’ll do this by funding high-quality research, providing information and campaigning.

Everything we do is underpinned by research.

We publish over 60 information booklets which help people affected by arthritis to understand more about the condition, its treatment, therapies and how to help themselves.

We also produce a range of separate leaflets on many of the drugs used for arthritis and related conditions. We recommend that you read the relevant leaflet for more detailed information about your medication.

Please also let us know if you’d like to receive our quarterly magazine, Arthritis Today, which keeps you up to date with current research and education news, highlighting key projects that we’re funding and giving insight into the latest treatment and self-help available.

We often feature case studies and have regular columns for questions and answers, as well as readers’ hints and tips for managing arthritis.

Tell us what you think

Please send your views to: feedback@arthritisresearchuk.org or write to us at: Arthritis Research UK, Copeman House, St Mary’s Court, St Mary’s Gate, Chesterfield, Derbyshire S41 7TD

A team of people contributed to this booklet. The original text was written by Prof. Chris Denton, who has expertise in the subject. It was assessed at draft stage by specialist registrar in rheumatology James Bateman, lead nurse for inflammatory and connective tissue disease Louise Parker, and clinical nurse specialist Sue Brown. An Arthritis Research UK editor revised the text to make it easy to read and a non-medical panel, including interested societies, checked it for understanding. An Arthritis Research UK medical advisor, Dr Fraser Birrell, is responsible for the content overall.
Get involved

You can help to take the pain away from millions of people in the UK by:

• volunteering
• supporting our campaigns
• taking part in a fundraising event
• making a donation
• asking your company to support us
• buying products from our online and high-street shops.

To get more actively involved, please call us on 0300 790 0400, email us at enquiries@arthritisresearchuk.org or go to www.arthritisresearchuk.org