Rheumatoid Arthritis
Glossary of Terms

American College of Rheumatology (ACR)
- The ACR response is a scoring system used to measure a patient’s response to a therapy during a clinical trial. ACR measures are generally used in clinical trials to compare the efficacy of one treatment against another and are not commonly used in clinical practice. Different degrees of improvement are referred to as ACR20, ACR50 and ACR70. The numbers 20, 50 and 70 refer to the percentage of reduction in the number of swollen and tender joints and the percentage of reduction in three of the following five parameters: physician global assessment of disease, patient global assessment of disease, patient assessment of pain, C-reactive protein or erythrocyte sedimentation rate, and degree of disability in Health Assessment Questionnaire (HAQ) score.

Analgesics therapies
- Commonly known as ‘painkiller medications’, analgesics are prescribed to reduce pain. There are many different types of analgesic medications, available by prescription only or over-the-counter.

Arthritis
- Characterised by inflammation of a joint and usually accompanied by pain, swelling, and stiffness, arthritis is a systemic disease, potentially affecting the whole body and internal organs. It is an autoimmune condition meaning it occurs when the body does not recognise its own cells and tissues and attacks itself. It occurs in various forms, such as bacterial arthritis, osteoarthritis, or rheumatoid arthritis.

Autoimmune disease
- A condition in which the immune system attacks the body’s own organs and tissues.

Biologic therapies
- Biologic therapies (or ‘biologics’) are genetically engineered proteins derived from human genes. They are designed to inhibit specific components of the immune system that play pivotal roles in fuelling inflammation, which is a central feature of rheumatoid arthritis.

Chronic disease
- An illness that is ongoing and long-term.

Corticosteroids
- Often called ‘steroids’, these drugs are prescribed to decrease inflammation and pain.
Disease-modifying anti-rheumatic drugs (DMARDs)

- A category of medicines used in rheumatoid arthritis to slow down the development of the disease. DMARDS work by interfering with or suppressing the immune system's attack on the joints.
- DMARDS can be further categorised as synthetic (or conventional) DMARDs and biologic DMARDs.

Disease activity score (DAS)

- The Disease Activity Score (DAS) is an assessment used to measure the level of disease activity in people with rheumatoid arthritis (RA).
- DAS is calculated using a formula that includes counts for tender and swollen joints (53 and 44 joints, respectively), an evaluation of overall health by the patient, and a measure of circulating inflammatory markers.

Disease activity score (DAS28)

- The DAS28 is a measure of disease activity in rheumatoid arthritis (RA) assessing the 28 joints commonly affected by RA.

Disease activity score 28: DAS28-CRP or DAS28-ESR

- An assessment of DAS involves the rheumatologist or specialist nurse looking at the number of tender and swollen joints (out of the 28), the erythrocyte sedimentation rate (ESR) or C reactive protein (CRP) both of which measure the degree of inflammation in the blood. These results are then fed into a mathematical formula to produce the overall disease activity score. A DAS28 of greater than 5.1 implies active disease, less than or equal to 3.2 low disease activity (LDAS) and less than 2.6 remission.

Health assessment questionnaire (HAQ)

- The HAQ is a validated, self-administered questionnaire composed of twenty items relating to function and four items relating to aids and devices. These comprise eight subscales: dressing and grooming, arising, hygiene, reach, eating, walking, grip, and activities. Items are scored from 0 (able to function without difficulty) to 3 (unable to function).

Health assessment questionnaire – disability index (HAQ-DI)

- The HAQ disability index is a weighted sum of the scale scores, with a higher score indicating poorer function. Decreases in the HAQ disability index exceeding -0.19 to -0.22 are considered to be clinically important.
Immunogenicity

- Immunogenicity is when a substance provokes an immune response in the body. An immune response is the reaction of the cells and fluids of the body to the presence of a substance that is not recognized as a constituent of the body itself. Owing to the way that biologic therapies work, one side effect has been found to be immunogenicity which means that the treatments produce an immune response against the patient. In most instances this does not have any impact on the patient however the effects can be severe and may lead to a loss of efficacy of the treatment.

Inflammation

- Inflammation is a localised protective reaction of tissue resulting from irritation, injury or infection. It is characterised by pain, redness, swelling, and sometimes loss of function.

Injection site reaction (ISR)

- An injection site reaction is inflammation or damage to the tissue surrounding the area where a drug has been injected. Symptoms of ISRs include redness, tenderness, warmth, and itching. In more severe ISR cases, damage caused by leakage of solutions from the vein to the surrounding tissue spaces during intravenous administration can also occur. This can result in pain, blistering, and severe skin damage.

Intravenous (IV) therapy

- Intravenous therapies are administered through a vein, usually at a hospital or clinic and by a healthcare professional.

Methotrexate

- Methotrexate (MTX) is the most common disease-modifying anti-rheumatic drug (DMARD). It is often used as a first DMARD, and as a background therapy to which a biologic DMARD is added.
- MTX has been shown to significantly help prevent disease progression and reduce inflammation in RA.
- MTX acts by inhibiting the metabolism of folic acid. It is also used in treatment of other autoimmune diseases and cancer.

Non-steroidal anti-inflammatory drugs (NSAIDs)

- NSAIDs are drugs with analgesic and antipyretic (fever-reducing) effects. In higher doses, they can also have anti-inflammatory effects. NSAIDs are often used to treat the symptoms of rheumatoid arthritis, but do not reduce the long-term damaging effects of the disease on the joints.

Pharmacokinetics

- Pharmacokinetics refers to the study of the action of drugs within the body. This can include the way in which a drug is absorbed, distributed, metabolized, and eliminated by the body.
Radiographic progression

- Radiographic progression is measured by scoring bone erosion and joint space narrowing on X-ray films at different time intervals. Radiographic progression is an important outcome measure in rheumatoid arthritis, as it determines how rapidly the disease is progressing. This method of measurement accurately indicates historic disease activity and loss of function over time.

Rheumatoid arthritis

- Rheumatoid arthritis is a chronic autoimmune disease characterised by inflammation in the synovium (lining of the joints), which causes joint damage, chronic pain, stiffness, swelling and fatigue. It is a systemic disease which means that it can affect the whole body and internal organs.

Subcutaneous (SC) injection

- Different from intravenous infusions (where the medicine is infused into the vein), subcutaneous injections are made by inserting a needle just under the skin. Therapies delivered via subcutaneous injections can generally be administered by the person him/herself, outside of a hospital/clinic environment.

Synovium

- The lining of a joint.

Synovial fluid

- Fluid found in joints that, among other functions, provides lubrication that allows for movement.