

# Rheumatoid Arthritis

## Media backgrounder

### DISEASE AWARENESS:

#### What is rheumatoid arthritis?

Rheumatoid arthritis (RA) is a chronic inflammatory arthritis that typically affects the hands and feet, although any joint lined by a synovial membrane may be affected.<sup>1</sup> It can also affect the knees, hips and shoulders. If the condition persists over time, it can cause permanent damage, including tendon, ligament, cartilage and bone destruction and deformity.<sup>1</sup>

#### What causes rheumatoid arthritis?

The cause of RA is unknown,<sup>1</sup> however it is thought that people can inherit certain genes that affect the way the immune system works. For example, people with the gene HLA-DR seem to be more susceptible to the disease than others.<sup>1</sup>

### IMPACT ON PATIENTS:

#### What are the symptoms of RA?

Rheumatoid arthritis is a progressive disease with symptoms and evidence of joint destruction becoming increasingly worse over time which may lead to irreversible joint damage, work disability and functional decline.<sup>1,2</sup>

Clinical features of RA include:<sup>1</sup>

- ▶ Stiffness, commonly in the morning
- ▶ Joint swelling, which can occur in any joint but most often occurs in the small joints of the hands and feet and often symmetrically
- ▶ Tiredness, fever, weight loss and depression

Rheumatoid arthritis is also associated with a number of serious medical conditions including:

- ▶ Irreversible joint damage which may lead to loss of function and premature death<sup>2</sup>
- ▶ Increased risks of coronary artery disease<sup>3</sup> and infection<sup>4</sup>

### FACT!

RA may reduce a patient's lifespan by about ten years<sup>2</sup>

#### Prevalence:

RA affects approximately one per cent of the adult population worldwide. Twice as many women as men suffer from the disease. RA can start at any age, but usually occurs between 40 and 70 years.<sup>1</sup>

#### How is RA diagnosed?

An accurate diagnosis of rheumatoid arthritis can be difficult as there is no single test for the condition and the symptoms only develop over time. The diagnosis is normally based upon a number of symptoms including the pattern of affected joints, X-ray and/or scan results which show joint damage, and high levels of an antibody called rheumatoid factor (RF) in the blood.<sup>1</sup>

### THE ECONOMIC IMPACT OF RA:

The economic burden created by rheumatoid arthritis in Europe is significant due to the high rate of indirect costs from work disability.

- ▶ Prospective European studies indicate that 20-30 per cent of RA patients become work disabled during the first three years of the condition<sup>5</sup>
- ▶ Research has shown that 66 per cent of patients with RA lose on average 39 working days per year<sup>6</sup>
- ▶ In Europe, the indirect (work disability) and direct (medical care) costs of RA to society have been estimated at up to \$21,000 per patient per year<sup>5</sup>

The impact of being unable to work and contribute to society can also serve to increase the likelihood of depression and anxiety arising.<sup>7</sup>

## TREATMENT OPTIONS:

### The need for early treatment:

Joint destruction can occur rapidly in the early stages of RA and joint damage is evident in 70 per cent of patient X-rays taken within the first two years of the disease.<sup>1</sup> Furthermore, magnetic resonance imaging (MRI) can detect changes in joint structure from as early on as two months after disease onset.<sup>2</sup> Because joint damage can occur very quickly at the beginning of the disease, there may be a need to initiate aggressive treatment very soon after an RA diagnosis, before a significant amount of irreversible joint damage has occurred.<sup>2</sup>

### The treatment of RA:

The treatment of RA has changed considerably within the past decade, moving from a conservative approach designed to control clinical symptoms to a more progressive approach designed to limit joint destruction and disability.<sup>2</sup> The main goal of treatment for RA is to stop disease progression, otherwise known as achieving remission.

- ▶ Historically RA has typically been treated with non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen and simple analgesics to relieve pain and symptoms<sup>1</sup>
- ▶ However, NSAIDs are now being replaced with disease modifying anti-rheumatic drugs (DMARDs) which have an overall systemic effect on the body and prevent long term structural damage. These include methotrexate, sulphasalazine, cyclosporine, leflunomide and gold<sup>1</sup>

### Biologics

Recently a new class of medicines called biologics has been developed to treat rheumatoid arthritis. Unlike other therapies which are made by combining man-made chemicals, biologics are created from living human or animal proteins.

Whereas other systemics have a broad impact on the immune system, biologics are designed to selectively target mediators believed to be involved in the process of inflammation. Some biologics work by inhibiting the action of a naturally occurring protein in the body called

'tumour necrosis factor alpha' (TNF- $\alpha$ ) and are known as anti-TNFs.<sup>2</sup>

Anti-TNFs that are approved for the treatment of rheumatoid arthritis in Europe include:

- ▶ **Enbrel<sup>®</sup> (etanercept)**
- ▶ **Humira<sup>®</sup> (adalimumab)**
- ▶ **Remicade<sup>®</sup> (infliximab)**

Enbrel and Humira are injected under the skin, and Remicade is administered as an infusion into a vein.

The B-cell inhibitor Mabthera<sup>®</sup> and T cell costimulation blocker Orencia<sup>®</sup> are also both available for treatment of rheumatoid arthritis.

Biologics have been shown to slow the progression of joint damage, or even inhibit progression altogether allowing patients to achieve disease remission, as measured by X-ray assessed by radiography and MRI scans.

Early effective treatment may slow or even stop disease progression, thereby improving quality of life, but also decrease societal costs by preserving productivity and reducing the financial burden of extended treatment.<sup>1,2</sup>

## COST EFFECTIVENESS OF BIOLOGICAL THERAPY:

The cost of biological therapy for inflammatory conditions such as rheumatoid arthritis is high, however in comparison to the improvement in patient quality of life and reduction of associated comorbidities, biologics are considered to be extremely cost effective.<sup>8</sup>

- ▶ Results from the DART Study have demonstrated that dose escalation in severe RA patients is more commonly required with infliximab and adalimumab than etanercept due to the development of neutralising antibodies. With efficacy sustained over time, etanercept is demonstrated to be a cost effective and viable treatment option<sup>8-13</sup>

## Benefits of early intervention with optimal treatments:

Reaching remission is a key goal for patients as RA can cause severe disruption to patients' lives, increased lost work days<sup>6</sup> and possible permanent joint damage which may lead to loss of function and premature death.<sup>2</sup> Benefits associated with early disease intervention in RA have been demonstrated by the COMET Study (COmbination of Methotrexate and ETanercept in Active Early Rheumatoid Arthritis):

- ▶ The COMET Study demonstrates that rheumatoid arthritis patients treated early with etanercept and methotrexate can achieve clinical, radiographic and functional remission<sup>14</sup>
- ▶ Achieving remission provides real-life benefits for the patient by stopping the disease from progressing whilst at the same time helping them to continue more normal and productive lives<sup>14</sup>
- ▶ Further data from the COMET Study show that the number of lost work days in patients treated with the Enbrel combination was significantly less than that of patients receiving methotrexate alone<sup>15</sup>
- ▶ New COMET data, presented at 2009 European League Against Rheumatism (EULAR) annual congress show that the percentage of patients who achieved clinical remission was significantly greater in the groups treated with etanercept than in the methotrexate monotherapy group. Furthermore, successful clinical remission doubled patients' quality of life in the short term and over the longer term halting joint damage<sup>17,18</sup>

## Proven Enbrel experience

Enbrel has a long established safety profile with over 16 years of proven clinical experience for the treatment of inflammatory conditions. Enbrel is currently the number one biologic prescribed worldwide.<sup>16</sup>

## Note to media

Please contact your local Wyeth office for information regarding country regulations. Further details are available at [www.wyeth.eu](http://www.wyeth.eu)

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