



Real-life patient characteristics and treatment assessments following clinical use of biosimilar adalimumab (Exemptia) in patients with various inflammatory arthritis conditions.

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# Background/Purpose & Methods



- Adalimumab is a proven safe and effective treatment in patients with chronic inflammatory arthritic conditions like ankylosing spondylitis (AS), rheumatoid arthritis (RA), juvenile idiopathic arthritis (JIA) and psoriatic arthritis (pSA).
- We present our first hand experience of the clinical use of adalimumab (Exemptia, Cadila Healthcare Ltd,. India) which is biosimilar of originator adalimumab, in a real-life patients with the conditions mentioned above from our centre.

# Result

VAS (Pain) score after 12 weeks of biosimilar adalimumab treatment

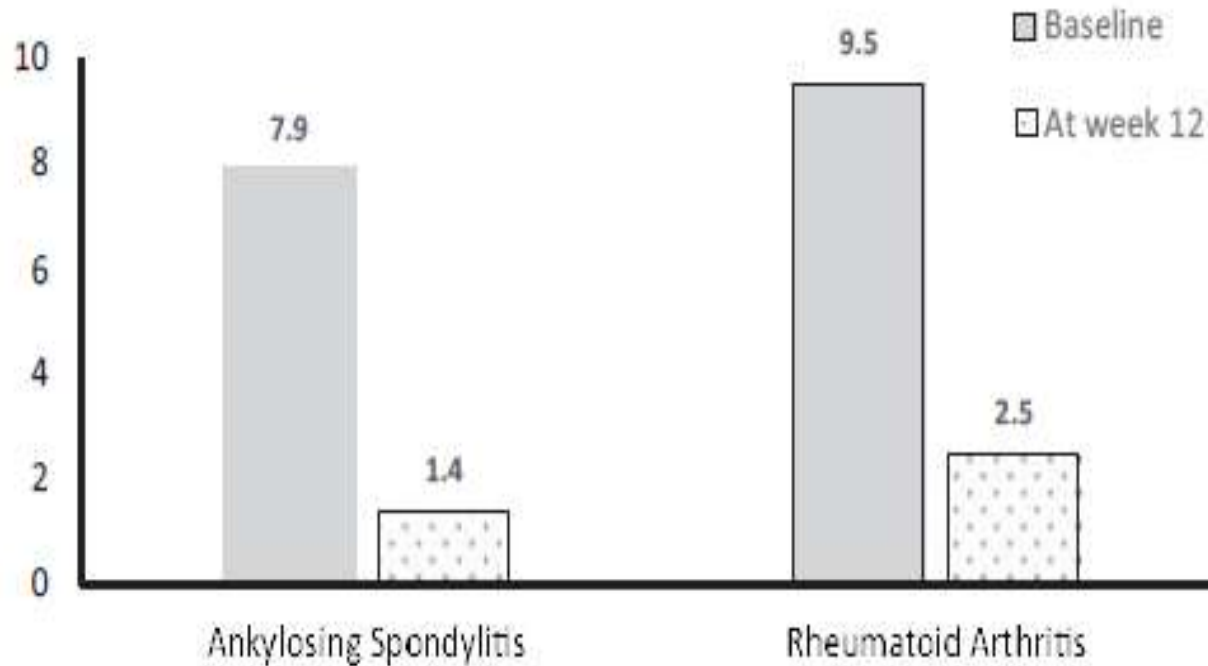


Figure 1: Improvement in VAS (pain) Score following 12 weeks of biosimilar adalimumab (Exemptia™) treatment.

# Result

## Efficacy and safety Assessment of biosimilar adalimumab (Exemptia™) therapy by Physician and Patients

Patients	Overall assessment of Efficacy [Good- Excellent]		Overall assessment of Safety/ Tolerability [ Good- Excellent]	
	By Physician	By Patients	By Physician	By Patients
Ankylosing Spondylitis	92.86%	92.86%	92.86%	78.57%
Rheumatoid Arthritis	100%	100%	100%	100%
Juvenile Idiopathic Arthritis	100%	100%	100%	100%
Psoriatic Arthritis	100%	100%	100%	100%

# Result

- Patients with AS(14), RA (8), JIA (2) and pSA (1) receiving Exemptia at out clinic were evaluated. All patients with RA and JIA, and 78.5% of AS patients received concomitant methotrexate. Biosimilar adalimumab is prescribed subcutaneously every fortnight at a dose of 40mg in AS, RA and sPA patients and at a dose of 20mg in JIA patients.
- About 86% AS, 63% RA and 100% JIA and sPA patients reported symptomatic relief within the first week of treatment initiation. There was a significant improvement in the VAS(pain) score after 12 weeks of therapy.
- The overall physician as well as patient assessment of efficacy and safety/tolerability was good to excellent for majority of the patients (Table 1).
- Overall, Biosimilar adalimumab is well tolerated with no unexpected adverse events and/or serious events so far.

# Conclusion



- While originator adalimumab treatment currently remains unavailable to the Indian population, biosimilar adalimumab (Exemptia) serves as an accessible, efficacious, safe and cost-effective option for patients with chronic inflammatory arthritis.

# Abridged Prescribing Information

**COMPOSITION:** Exemptia™ (Adalimumab) 40 mg /0.8 mL single use pre filled syringe and 20mg /0.4 mL single use pre filled syringe **DESCRIPTION:** EXEMPTIATM (Adalimumab) is a recombinant human IgG1 monoclonal antibody specific for human tumor necrosis factor (TNF- $\alpha$ ). EXEMPTIATM is supplied as a sterile, preservative-free solution of Adalimumab for subcutaneous administration. The solution of EXEMPTIATM is clear and colorless. **MECHANISM OF ACTION:** Adalimumab binds specifically to TNF- $\alpha$  and blocks its interaction with the p55 and p75 cell surface TNF- $\alpha$  receptors. Adalimumab also lyses surface TNF expressing cells in vitro in the presence of complement. Elevated levels of TNF- $\alpha$  is found in the synovial fluid of rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis patients and play an important role in both the pathologic inflammation and the joint destruction that are hallmarks of these diseases. **INDICATIONS & DOSAGE:** Rheumatoid Arthritis, Psoriatic Arthritis, and Ankylosing Spondylitis: The recommended dose of EXEMPTIATM for adult patients with rheumatoid arthritis (RA), psoriatic arthritis (PsA), or ankylosing spondylitis (AS) is 40 mg subcutaneously administered every other week. Methotrexate (MTX), other non-biologic DMARDs, glucocorticoids, nonsteroidal anti-inflammatory drugs (NSAIDs), and/or analgesics may be continued during treatment with EXEMPTIATM. Juvenile Idiopathic Arthritis: Exemptia™ dosing in JIA is based on weight; for 10 kg (22 lbs) to <15 kg (33 lbs): 10 mg s.c. every other week. For 15 kg (33 lbs) to < 30 kg (66 lbs): 20 mg s.c. every other week and for  $\geq$  30 kg (66 lbs): 40 mg s.c. every other week. Plaque Psoriasis or Non-Infectious Uveitis: Initial dose of 80 mg, followed by 40 mg every other week starting from week one after initial dose. Hidradenitis Suppurativa: 160 mg (Day 1) (four 40 mg injections in one day or two 40 mg injections per day for two consecutive days), followed by 80 mg two weeks later (Day 15). Two weeks later (Day 29) begin a maintenance dose of 40 mg every week. Adult Crohn's Disease and Ulcerative Colitis: Initial dose (Day 1): 160 mg s.c. (four 40 mg injections in one day or two 40 mg injections per day for two consecutive days). Second dose two weeks later (Day 15): 80 mg. Two weeks later (Day 29): Begin a maintenance dose of 40 mg s.c. every other week. For patients with Ulcerative Colitis only: Only continue EXEMPTIATM in patients who have shown evidence of clinical remission by eight weeks (Day 57) of therapy. Pediatric Crohn's Disease: For weight 17 kg (37 lbs) to < 40 kg (88 lbs): Initial dose (Day 1): 80 mg s.c. (two 40 mg injections in one day). Second dose two weeks later (Day 15): 40 mg s.c.. Two weeks later (Day 29): Begin a maintenance dose of 20 mg s.c. every other week. For  $\geq$  40 kg (88 lbs): Initial dose (Day 1): 160 mg s.c. (four 40 mg injections in one day or two 40 mg injections per day for two consecutive days). Second dose two weeks later (Day 15): 80 mg s.c. (two 40 mg injections in one day). Two weeks later (Day 29): Begin a maintenance dose of 40 mg s.c. every other week. **CONTRAINDICATIONS:** Hypersensitivity to the active substance or to any of the excipients, Moderate to severe heart failure, Active tuberculosis or other severe infections such as sepsis and opportunistic infections. **SPECIAL WARNINGS AND PRECAUTIONS:** Serious and fungal infections: Do not start EXEMPTIATM during an active infection. If an infection develops, monitor carefully, and stop EXEMPTIATM if infection becomes serious • Anaphylaxis or serious allergic reactions may occur • Hepatitis B virus reactivation: Monitor HBV carriers during and several months after therapy. If reactivation occurs, stop EXEMPTIATM and begin antiviral therapy • Demyelinating disease: Exacerbation or new onset, may occur • Heart failure: Worsening or new onset, may occur • Lupus-like syndrome: Stop EXEMPTIATM if syndrome develops **USE IN PREGNANCY AND LACTATION:** Pregnancy Category B: Adequate and well controlled studies with EXEMPTIATM have not been conducted in pregnant women. Adalimumab is an IgG1 monoclonal antibody and IgG1 is actively transferred across the placenta during the third trimester of pregnancy. Lactation: No data is available on the absorption of adalimumab from breast milk in newborn or preterm infants. Caution should be exercised when EXEMPTIATM is administered to a nursing woman. **DRUG INTERACTION** Biological Products- Concomitant administration of EXEMPTIATM with other biologic DMARDs (e.g., Anakinra and Abatacept) or other TNF blockers is not recommended • Live Vaccines- Avoid the use of live vaccines with EXEMPTIATM. • Cytochrome P450 Substrates- The formation of CYP450 enzymes may be suppressed by increased levels of cytokines (e.g., TNF $\alpha$ , IL-6) during chronic inflammation. Upon initiation or discontinuation of EXEMPTIATM in patients being treated with CYP450 substrates with a narrow therapeutic index, monitoring of the effect (e.g., Warfarin) or drug concentration (e.g., Cyclosporine or Theophylline) is recommended and the individual dose of the drug product may be adjusted as needed. **UNDESIRE EFFECTS:** The most serious adverse reactions include the following • Serious Infections- Tuberculosis and Opportunistic Infections • Malignancies. The Clinical experience has reported Upper Respiratory Tract Infection (URTI), Increased creatine phosphokinase, Headache, Rash, Sinusitis, Nausea, Urinary Tract Infection (UTI), Abdominal pain, Flulike syndrome, Hyperlipidemia, Back pain, Hypercholesterolemia, Hematuria, Hypertension, Increased alkaline phosphatase as common side effects. **STORAGE CONDITION:** Store between + 2°C and + 8 °C, in the carton to protect from light. Do not freeze Exemptia™. Do not use Exemptia™ if frozen, even if it has been thawed. Keep out of reach of children. **PRESENTATION:** a) Injection: 40 mg/0.8 mL in a single-use prefilled syringe b) Injection: 20 mg/0.4 mL in a single-use prefilled syringe.

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Please refer to the full Prescribing Information before starting EXEMPTIATM.

**Please consult full Prescribing Information before prescribing.**

**Zydus Cadila does not recommend the use of any product in any different manner than as described in the prescribing information.**

**Further information is available on request from:**

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Thank you

