

Intravenous therapy for rheumatoid arthritis



Biologic disease-modifying antirheumatic drugs (DMARD) that target inflammatory cytokines, such as tumour necrosis factor (TNF) or IL-6, have expanded treatment options for rheumatoid arthritis (RA), and improved patient outcomes^{1,2}

Overview of IV therapy for RA

IV therapy for RA	Therapeutic target	Dosing regimen and frequency (adults)*	Time to improvement
Abatacept ¹	T cell co-stimulation	An initial 30-minute IV infusion with dose dependent on body weight, followed by administration at 2 and 4 weeks; thereafter, every 4 weeks	Approximately 4 weeks
Rituximab ²	The CD20 antigen of B cells	Two 1000 mg IV infusions, two weeks apart Evaluate need for further courses after 24 weeks	16–24 weeks post-initial treatment dose
Infliximab ³	Tumour necrosis factor alpha (TNF-α)	3 mg/kg as an IV infusion followed by additional 3 mg/kg infusion doses at 2 and 6 weeks after the first infusion; thereafter, every 8 weeks	12 weeks
Tocilizumab ⁴	IL-6 receptors	8 mg/kg body weight once every four weeks Doses exceeding 800 mg per infusion are not recommended in people >100 kg	6 months

Benefits of IV therapy for RA

- Individualised dosing by body weight (up to 800 mg)⁵
- Improved patient adherence compared to subcutaneous therapy – adherence to biologic therapies in RA is sub-optimal; adherence is reported to be as low as 11%⁶
- Closer monitoring of patients, as the treatment is delivered in a physician’s clinic or outpatient setting⁶
- Less frequent IV administration may be more convenient and better for patients who have difficulty self-injecting⁶

Potential side effects of IV therapy for RA

IV therapy for RA	Potential very common side effects
Abatacept ¹	Upper respiratory tract infection (including tracheitis, nasopharyngitis, sinusitis)
Rituximab ²	Upper respiratory tract infection, urinary tract infections Hypertension, nausea, rash, pyrexia, pruritus, urticaria, throat irritation, hot flush, hypotension, rhinitis, rigors, tachycardia, fatigue, oropharyngeal pain, peripheral oedema, erythema Headache
Infliximab ³	Upper respiratory tract infection, sinusitis Viral infection (influenza, herpes virus infection) Headache Abdominal pain, nausea Infusion-related reaction, pain
Tocilizumab ⁴	Upper respiratory tract infections Hypercholesterolaemia Injection site reactions

Women and IV therapy for RA

It is unknown if abatacept is excreted in human milk. A risk to the newborn or infant cannot be excluded¹

Women of childbearing potential should use effective contraceptive methods during, and for 12 months following treatment, with rituximab², and up to 3 months after treatment with tocilizumab⁴

Infliximab should only be used during pregnancy if clearly needed³

Abbreviations
IL-6, interleukin-6; IV, intravenous.

References
1. Abatacept Summary of Prescribing Information. 2021. Available at: <https://www.medicines.org.uk/emc/product/334/smpc>. 2. Rituximab Summary of Prescribing Information. 2022. Available at: <https://www.medicines.org.uk/emc/product/2714/smpc>. 3. Infliximab Summary of Prescribing Information. 2022. Available at: <https://www.medicines.org.uk/emc/product/7265/smpc>. 4. Tocilizumab Summary of Prescribing Information. 2022. Available at: <https://www.medicines.org.uk/emc/product/5357/smpc>. 5. Scott LJ. Tocilizumab: A Review in Rheumatoid Arthritis. Drugs. 2017;77(17):1865-1879. 6. De Vera MA, Mailman J, Galo JS. Economics of non-adherence to biologic therapies in rheumatoid arthritis. Curr Rheumatol Rep. 2014;16(11):460.