Subcutaneous Infliximab prescribing

Key recommendations

- Review locally whether subcutaneous (s.c.) infliximab is the most cost-effective formulation, considering contract prices as well as locally charged/agreed activity costs. A cost calculator is available for local commissioners and providers to compare costs using the tariffs charged locally. https://www.prescqipp.info/our-resources/bulletins/bulletin-264-subcutaneous-infliximab/
- Switching suitable patients to s.c. infliximab could help reduce capacity problems at providers. As with all switches, these should be tailored to the individual patient and should take capacity at homecare providers into account as well.
- Ensure that prescribing of s.c. infliximab is in line with its licence and relevant NICE guidance, taking into account that there is currently no data on switching from another brand of infliximab to s.c. infliximab.

National Guidance

Infliximab (as an infusion) has been licensed for over two decades and has been recommended by NICE as a first line biologic in the treatment of a range of immune-mediated inflammatory diseases. The first subcutaneous preparation of infliximab (Remsima® 120mg solution for injection) has been authorised by the European Medicines Agency for use in rheumatoid arthritis (RA)[1] and is expected to be followed by a licence extension in inflammatory bowel disease (IBD) later in 2020. It will be available in pre-filled pens and pre-filled syringes.

Infliximab is one of a wide range of biologics (from different therapeutic classes) available and recommended by NICE for RA and IBD.[2-7] The choice of agent is generally guided by a combination of clinical factors, patient choice, cost, likely adherence and local infusion capacity.[8,9] If more than one treatment is suitable, the least expensive option should be chosen to make the best use of NHS resources. On this basis, adalimumab and infliximab (both available as biosimilars) are currently considered first line anti-TNFs for both RA and IBD, with etanercept being an alternative in RA as well.

Clinical effectiveness and safety

Comparability studies have been undertaken to compare safety and efficacy of the intravenous (i.v.) biosimilar Remsima® (CT-P13) with the originator Remicade®, the outcome of which informed the decision to authorise the i.v. preparation.

Initial marketing authorisation for the s.c. formulation was granted based on the data from an initial (part 1) 54-week phase 1 / phase 3 study and the subsequent randomised controlled trial (part 2), demonstrating non-inferiority of the s.c. preparation of CT-P13 (following an i.v. loading dose) compared to the i.v. preparation over a period of 30 weeks in patients with active RA, and with a similar safety profile. Outcome data of these studies have been published in the Summary of Product Characteristics (SmPC).[10]

Comparable efficacy and safety of the s.c. and i.v formulations of CT-P13 has also been demonstrated in patients with Crohn's Disease and ulcerative colitis in a one year trial.[11] There is no data available on switching from a different brand of infliximab to s.c. Remsima®.[10]

Switching options

Switching from infliximab infusions to s.c. injections in patients responding well to infliximab and who are willing and able to self-administer could increase capacity in day units.

Although s.c infliximab will offer an alternative s.c. treatment option to other first-line anti-TNFs, it is unlikely that significantly more patients will be switched to an anti-TNF rather than a different class of biologic following the new licence. Guidelines recommend switching to either a different class of biologic or alternative anti-TNF if there is a reason to discontinue first-line treatment. Whether clinically more appropriate to switch to an alternative anti-TNF or different class of biologic depends on numerous factors, including whether the reason for discontinuation was intolerance, loss of efficacy (and after what time) and what the drug/antibody concentrations in the blood are. Significant savings by avoiding more expensive biologics as second-line treatment are therefore unlikely.

During the Current COVID-19 pandemic, NICE have recommended the following in their COVID-19 rapid guideline: rheumatological autoimmune, inflammatory and metabolic bone disorders:[12]

"Assess whether patients having intravenous treatment can be switched to the same treatment in subcutaneous form. If this is not possible, discuss with the patient an alternative subcutaneous treatment."

References

1. European Medicines Agency. Remsima®: EPAR - Medicine overview. EMA/547143/2019; EMEA/H/C/002576. First published 04/10/2013, last updated 05/12/2019. Available from: https://www.ema.europa.eu/en/medicines/human/EPAR/remsima Accessed 12/12/19.
2. National Institute for Health and Care Excellence (NICE). Rheumatoid arthritis in adults: management. NICE guideline [NG100]. July 2018. Available from: https://www.nice.org.uk/guidance/ng100 Accessed 12/12/19.
3. National Institute for Health and Care Excellence (NICE). Crohn's disease: management. NICE guideline [NG129]. May 2019. Available from: https://www.nice.org.uk/guidance/ng129 Accessed 12/12/19.
4. National Institute for Health and Care Excellence (NICE). Ulcerative colitis: management. NICE guideline [NG130]. May 2019. Available from: https://www.nice.org.uk/guidance/ng130 Accessed 12/12/19.
5. National Institute for Health and Care Excellence (NICE). NICE pathway: Rheumatoid arthritis overview [Internet]. [London]: NICE; last updated October 2019. Available from: https://pathways.nice.org.uk/pathways/rheumatoid-arthritis Accessed 12/12/19.
6. National Institute for Health and Care Excellence (NICE). NICE pathway: Ulcerative colitis overview [Internet]. [London]: NICE; last updated June 2019. Available from: https://pathways.nice.org.uk/pathways/ulcerative-colitis Accessed 12/12/19.
7. National Institute for Health and Care Excellence (NICE). NICE pathway: Crohn's disease overview [Internet]. [London]: NICE; last updated September 2019. Available from: https://pathways.nice.org.uk/pathways/crohns-disease Accessed 12/12/19.
8. Holroyd CR, Seth R, Bukhari M. The British Society for Rheumatology biologic DMARD safety guidelines in inflammatory arthritis - Executive summary. Rheumatology 2019; 58: 220-226. Available from: https://doi.org/10.1093/rheumatology/key207
9. Lamb CA, Kennedy NA, Raine T, et al. British Society of Gastroenterology consensus guidelines on the management of inflammatory bowel disease in adults. Gut 2019; 68 (Suppl 3): s1-s106. Available from: http://dx.doi.org/10.1136/gutjnl-2019-318484
10. Summary of Product Characteristics. Remsima 120mg solution for injection in pre-filled pen. Celltrion Healthcare UK Ltd. Last updated 24/02/2020. Available from: https://www.medicines.org.uk/emc/product/11101 Accessed 09/03/20.
11. Ben-Horin S, Leszczyszyn J, Dudkowiak R, et al. OP24 A novel subcutaneous infliximab (CT-P13): 1-year results including switching results from intravenous infliximab (CT-P13) in patients with active Crohn's disease and ulcerative colitis. Journal of Crohn's and Colitis 2020;14 (supplement 1): S021-S022. Available from: https://doi.org/10.1093/ecco-jcc/jjz203.023
12. National Institute of Health and Care Excellence (NICE). COVID - 19 rapid guideline: rheumatological autoimmune, inflammatory and metabolic bone disorders [NG167]. Published 3 April 2020, updated 24 April 2020. Available from https://www.nice.org.uk/guidance/NG167 accessed 28/04/2020

Additional resources available	Bulletin	https://www.prescqipp.info/our-resources/bulletins/bulletin-264-subcutaneous-infliximab/
	Tools	