South East London Integrated Medicines Optimisation Committee
Formulary recommendation

Reference	**145**
Intervention:	**Rituximab intravenous injection for the treatment of refractory autoimmune hepatitis in adults** (Rituximab is an anti-lymphocyte monoclonal antibody)
Date of Decision	**April 2023, updated May 2025 following report on outcomes data, time limit for the approval removed**
Date of Issue:	**June 2023, re-issued June 2025**
Recommendation:	**RED – suitable for prescribing, supply and administration by hospital only**
Further Information	• Refractory autoimmune hepatitis (AIH) is a chronic inflammatory disease which if untreated can lead to cirrhosis and liver failure. Rituximab intravenous injection is accepted for use in South East London as a **third line add on treatment** for refactory cases of AIH where: - **First line treatment** with steroids (prednisolone or budesonide) plus azathioprine are ineffective or contraindicated **OR** - **Second line treatment** with steroids plus mycophenolate, ciclosporin or tacrolimus are ineffective or contraindicated • Rituximab is recommended at a dose of 1g for 2 doses, given on day 1 and day 15. • A second 2 dose course of rituximab may be provided after a minimum of 6 months in cases where a reduction in baseline medication has been successful and the patient may benefit from further treatment to maintain response. • Rituximab is **not licensed** for use in this indication (off-label use). Informed consent should be gained from the patient before treatment is initiated. • This recommendation only supports use of the best value rituximab product for AIH, taking into account any locally negotiated prices. • **May 2025:** In April 2023 the committee approved the formulary inclusion of rituximab in this setting for a time limited period to enable experience of use. A report summarising outcomes with the use of rituximab in this setting was requested by the committee over a phased time period between 1 – 5 years. It was reported by the lead acute Trust that over the last 2 years, all patients initiated on rituximab in this setting is in line with the formulary recommendation with half of the patients achieving biochemical response from treatment. Patient numbers treated over this time were significantly lower than originally estimated. Some patients were able to reduce their steroid dose as a result of treatment with rituximab or to stop their steroid treatment altogether There were no safety issues reported by patients treated with rituximab in this setting. Data is being collated across the UK and Europe by the International Autoimmune Hepatitis Group in relation to the use of rituximab in this setting, longer term outcome data will be presented back to the committee in the longer term. An update on patient numbers will be reported in 2 years.
Shared Care/ Transfer of care required:	N/A
Cost Impact for agreed patient group	• It is estimated 15 patients will be eligible for treatment with rituximab in this setting per annum. Aproximately 80% of these patients will be from SEL (12 patients). In May 2025 an outcomes report presented to the committee demonstrated that significantly fewer patients has been treated in SEL over 2 years (n = 4). • Treatment is based on one 500mg rituximab vial of best value rituximab preparation (biosimilar), therefore a 2 dose course of 1g is £628.64. • Asssuming approximately 12 patients overall for SEL are treated annually with rituximab in this setting, and if 50% (6 patients) require a repeat course at 6 months this equates to ~ £11,300 (or £595 per 100,000 population). • The costs of using rituximab could potentially be offset by a reduction in liver

	transplantation and associated costs in the longer term.
Usage Monitoring & Impact Assessment	**Acute Trusts:** • Monitor and audit longer term outcomes from the use of rituximab in this setting over time. Provide an update in 2 years (June 2027) on the patient numbers. Report back to the Committee in the future using data from the International Autoimmune Hepatitis Group database
	SEL Borough Medicines Teams: • Monitor exception reports from GPs if inappropriate prescribing requests are made to primary care.
Evidence reviewed	**References (from evidence review)** 1. Gleeson D, Heneghan M. British Society of Gastroenterology (BSG) guidelines for the management of autoimmune hepatitis. Gut 2011 60 p1611-1629. 2. EASL Clinical Practice Guidelines: Autoimmune hepatitis. Journal of Hepatology 2015 63 p971-1004. 3. Mack C, Adams D, Assis D et al. Diagnosis and Management of Autoimmune Hepatitis in Adults and Children: 2019 Practice Guidance and Guidelines From the American Association for the Study of Liver Diseases. Hepatology, 2020 VOL . 72, NO. 2, p671-722. 4. Lohse A, Sebode M, Jørgensen M et al. Second-line and third-line therapy for autoimmune hepatitis: A position statement from the European Reference Network on Hepatological Diseases and the International Autoimmune Hepatitis Group. Journal of Hepatology 2020 vol. 73 j 1496–1506. 5. Burak K, Swain M, Santodomino-Garzon T et al. Rituximab for the treatment of patients with autoimmune hepatitis who are refractory or intolerant to standard therapy. Canadian Journal of Gastroenterology 2013 27 (5) p273-280. 6. Than N, Hodson J, Schmidt-Martin D et al. Efficacy of rituximab in difficult to manage autoimmune hepatitis: results from the International Autoimmune Hepatitis Group. JEHP Reports 2019 1 p437-444. 7. Mabthera, Summary of Product Characteristics. Available here [Accessed 27 Jan 2023] 8. Gautam N, Than N, Nizamuddin M et al. Use of rituximab in resistant autoimmune hepatitis – Birmingham Experience. Gut 2014 63 (Suppl 1)A1-A288 pA93.

NOTES:

a) SEL IMOC recommendations and minutes are available publicly via the website.

b) This SEL IMOC recommendation has been made on the cost effectiveness, patient outcome and safety data available at the time. The recommendation will be subject to review if new data becomes available, costs are higher than expected or new NICE guidelines or technology appraisals are issued.

c) **Not to be used for commercial or marketing purposes. Strictly for use within the NHS**