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Health Technology Briefing
July 2025

Surovatamig for treating relapsed or refractory b-cell acute lymphoblastic leukaemia in adolescents and adults after 2 or more treatments

Company/Developer	AstraZeneca

☒ New Active Substance ☐ Significant Licence Extension (SLE)

NIHRIO ID: 38278	NICE ID: Not available	UKPS ID: 675133

Licensing and Market Availability Plans

In phase II clinical development.

Summary

Surovatamig is in clinical development for the treatment of relapsed or refractory B-cell acute lymphoblastic leukaemia (r/r B-ALL) following two or more treatments. ALL is a type of cancer that affects white blood cells. It progresses quickly and aggressively and requires immediate treatment. B-ALL occurs when there is rapid growth of abnormal B-cells inside the bone marrow, resulting in accumulation of immature white blood cells in the blood. Relapsed cancer is where it has returned after a period of improvement. Refractory cancer is where it doesn't respond well to treatments. There are currently limited therapies for r/r B-ALL, which are associated with severe side effects such as damage to the central or peripheral nervous system.

Surovatamig, which is administered intravenously (into a vein) as an infusion, works by enabling T cells, which are part of the immune system, to find and destroy and cancerous B-cells. Surovatamig only weakly binds to the T cells, which reduces the risk of serious side effects such as increased inflammatory response and nervous system damage. If licensed, surovatamig would offer a new third-line or greater treatment option for patients with r/r B-ALL, who currently have few well-tolerated treatment options available.

Proposed Indication

This briefing reflects the evidence available at the time of writing and a limited literature search. It is not intended to be a definitive statement on the safety, efficacy or effectiveness of the health technology covered and should not be used for commercial purposes or commissioning without additional information. A version of the briefing was sent to the company for a factual accuracy check. The company was available to comment.

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Treatment of relapsed or refractory B-cell acute lymphoblastic leukaemia (r/r B-ALL) after ≥ 2 prior lines of therapy in adolescent and adult patients.[1]

Technology

Description

Surovatamig (AZD0486, TNB-486) is a IgG4 fully human CD19xCD3 bispecific T-cell engager (TCE).[1-3] Surovatamig binds to CD3 antigen on cytotoxic T lymphocytes, and CD19 antigen expressed on malignant B cells. This activates and redirects cytotoxic T lymphocytes to CD19-expressing tumour cells, resulting in T lymphocyte-mediated killing of tumour cells.[3] Surovatamig is designed to bind CD3 with low affinity, which helps reduce cytokine release during T cell activation. Despite its low affinity binding, surovatamig still enables T cells to target and kill malignant B cells.[2]

Surovatamig is in clinical development for the treatment of r/r B-ALL in adult and adolescent patients.[1] In the phase I/II trial, SYRUS (NCT06137118), surovatamig is administered via intravenous infusion. The dosing regime is currently unknown.[1]

Key Innovation

R/r B-ALL is challenging to treat and associated with poor patient outcomes.[4,5] Surovatamig induces tumour cell lysis with minimal cytokine release, meaning it is less likely to cause dangerous side effects such as cytokine release syndrome and neurotoxicity, which can be associated with other immunotherapies.[6] Surovatamig's low cytokine release profile may provide a wider therapeutic window compared to other bispecific TCEs in development, with a more favourable dosing regime due to its longer half-life.[6] If licensed, surovatamig would offer a new treatment option for patients with r/r B-ALL, who currently have few well-tolerated treatment options available.

Regulatory & Development Status

Surovatamig does not currently have Marketing Authorisation in the EU/UK for any indication.

Surovatamig is in phase II/III development for:[7]

- Follicular lymphoma
- Non-Hodgkin Lymphoma
- Mature B-cell malignancies

Patient Group

Disease Area and Clinical Need

ALL is a type of cancer that affects white blood cells. It progresses quickly and aggressively and requires immediate treatment.[8] B-ALL occurs when there is rapid proliferation of poorly differentiated B-cell progenitors inside the bone marrow, resulting in abnormally large numbers of immature, poorly differentiated white blood cells in the blood. The occurrence of B-ALL is associated with a series of gene mutations resulting in the replacement of normal lymphoid cells by malignant cells.[9] Common symptoms of B-ALL include flu-like symptoms, fever, weakness, weight loss, breathlessness and pain in joints and bones.[10] Viral infections such as parvovirusB19, high birth weight and exposure to environmental toxins such as benzene have been linked to increasing risk of B-ALL development.[9] Some patients have residual leukaemia cells in their bone marrow even after they receive intensive treatment. In these cases, the disease is referred to as being "refractory", whilst others achieve remission but later have decreased

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numbers of normal blood cells and a return of leukaemia cells in their bone marrow. This is referred to as a "relapse" of the disease.[4] R/r B-ALL is associated with poor patient outcomes through development of multidrug resistance.[11]

ALL accounts for less than 1% of new cancer cases in the UK (2017-2019).[12] Incidence of ALL in England in 2022 was 1.5 per 100,000 for men and 1 per 100,000 for women.[13] In England, between 2023-2024, there were 35,899 finished consult episodes (FCE) for ALL (ICD10 code: C91.0), resulting in 27,882 bed days and 52,529 FCE bed days.[14] The average survival after 1 year for patients with B-cell ALL is 81.3%, this decreases to 66.3% after 5-years.[15]

Recommended Treatment Options

The National Institute for Health and Care Excellence (NICE) recommends the following treatment options for r/r B-cell ALL:[16-18]

- Inotuzumab ozogamicin
- Brexucabtagene autoleucel
- Tisagenlecleucel

Clinical Trial Information

Trial	**SYRUS, NCT06137118;** A Phase 1/2 Study to Evaluate the Safety and Efficacy of AZD0486 in Adolescent and Adult Participants With Relapsed or Refractory B-Cell Acute Lymphoblastic Leukaemia **Phase I/II** – Recruiting **Locations:** 4 EU countries, United Kingdom, United States and other countries **Primary Completion Date:** July 2026
Trial Design	Randomised, sequential assignment, open label.
Population	N (estimated) = 120. Subjects with B-cell ALL with either relapsed or refractory disease after 2 prior therapies or 1 prior therapy if no standard of care treatment was available: aged 12 to 80 years.
Intervention(s)	Surovatamig administered via intravenous infusion.
Comparator(s)	No comparator.
Outcome(s)	Primary outcomes: • Frequency of dose-limiting toxicities as defined in the study protocol {Time frame: 28 days) • Safety evaluation of surovatamig measure as frequency, severity, and relationship to study drug of adverse events (AEs) and severe adverse events (SAEs); dose modifications; changes in laboratory evaluations; corrected QT interval (QTc), and vital signs changes. {Time frame: from signing of informed consent through completion of study treatment, an average of 8 months} • Overall response rate (ORR): The Primary analysis for ORR be conducted in recommended phase 2 dose (RP2D)-treated participants (in Part B and C). {Time frame: from First dose to end of treatment or data cutoff, whichever comes first, assessed up to 24 months}

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	See trial record for full list of outcomes.
Results (efficacy)	-
Results (safety)	-

Estimated Cost

The cost of surovatamig is not yet known.

Relevant Guidance

NICE Guidance

- NICE Technology Appraisal in Development. Obecabtagene autoleucel for treating relapsed or refractory B-cell acute lymphoblastic leukaemia (GID-TA11496). Expected date August 2025
- NICE Technology Appraisal. Tisagenlecleucel for treating relapsed or refractory B-cell acute lymphoblastic leukaemia in people 25 years and under (TA975). May 2024.
- NICE Technology Appraisal. Brexucabtagene autoleucel for treating relapsed or refractory B-cell acute lymphoblastic leukaemia in people 26 years and over (TA893). June 2023.
- NICE Technology Appraisal. Inotuzumab ozogamicin for treating relapsed or refractory B-cell acute lymphoblastic leukaemia (TA541). September 2018.
- NICE Clinical Guideline. Haematological cancers: improving outcomes (NG47). May 2016.
- NICE Quality Standard. Haematological cancers (QS150). June 2017.

NHS England (Policy/Commissioning) Guidance

- NHS England. 2017 Clinical commissioning policy: Second allogeneic haematopoietic stem cell transplant for relapsed disease (all ages). 16068/P
- NHS England. 2013/14 NHS Standard Contract for Cancer: Chemotherapy (Adult). B15/S/a

Other Guidance

- European Leukemia Net (ELN). Management of ALL in adults: 2024 ELN recommendations from a European expert panel. May 2024.[19]
- NHS Northern Cancer Alliance. Haematology Cancer Clinical Guidelines V17. November 2019.[20]
- European Society for Medical Oncology (ESMO). Acute lymphoblastic leukaemia in adult patients: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. September 2016.[21]

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