Technology Guidance

Brentuximab vedotin

for treating T-cell lymphoma

Technology Guidance from the MOH Drug Advisory Committee

Guidance Recommendations

The Ministry of Health's Drug Advisory Committee has recommended:

- ✓ Brentuximab vedotin 50 mg powder for infusion in line with its registered indications for treating:
  - Previously untreated CD30-positive peripheral T-cell lymphoma when used with cyclophosphamide, doxorubicin and prednisone;
  - Relapsed or refractory systemic anaplastic large cell lymphoma; and
  - CD30-positive cutaneous T-cell lymphoma, after at least one prior systemic therapy.

Funding status

Brentuximab vedotin 50 mg powder for infusion is recommended for inclusion on the MOH Medication Assistance Fund (MAF) for the abovementioned indications with effect from 1 September 2022.

Clinical indications, subsidy class and MediShield Life claims eligibility are provided in the Annex.

Updated: 1 June 2026

Technology evaluation

1.1. The MOH Drug Advisory Committee ("the Committee") considered the evidence presented for the technology evaluation of brentuximab vedotin ("brentuximab") for treating T-cell lymphoma. The Agency for Care Effectiveness (ACE) conducted the evaluation in consultation with clinical experts from the public healthcare institutions. Published clinical and economic evidence for brentuximab was considered in line with its registered indications. Additional expert opinion was obtained from the MOH Oncology Drug Subcommittee (ODS) who assisted ACE ascertain the clinical value of brentuximab and provided clinical advice on its appropriate and effective use based on the available clinical evidence.

1.2. The evidence was used to inform the Committee's deliberations around four core decision-making criteria:

- Clinical need of patients and nature of the condition;
- Clinical effectiveness and safety of the technology;
- Cost-effectiveness (value for money) – the incremental benefit and cost of the technology compared to existing alternatives; and
- Estimated annual technology cost and the number of patients likely to benefit from the technology.

1.3. Additional factors, including social and value judgments, may also inform the Committee's subsidy considerations.

Clinical need

2.1. Previously untreated CD30-positive peripheral T-cell lymphoma (PTCL)
Approximately 23 patients are diagnosed with CD30-positive PTCL each year in Singapore. Treatment options include chemotherapy regimens such as cyclophosphamide + doxorubicin + vincristine + prednisone (CHOP), CHOP + etoposide (CHOEP), and brentuximab in combination with cyclophosphamide + doxorubicin + prednisone (CHP), with or without stem cell transplantation. Although chemotherapy treatments are already subsidised, the Committee noted that treatment outcomes from their use are generally poor, and acknowledged that there was a clinical need to improve the affordability of more effective treatment options for patients to ensure appropriate care.

2.2. Relapsed or refractory systemic anaplastic large cell lymphoma (sALCL)
The sALCL subtype accounts for the majority of CD30-positive PTCL cases in Singapore, and disease relapses are common after initial chemotherapy. Patients with relapsed or refractory sALCL following initial treatment with chemotherapy are treated with brentuximab in local practice, in line with international clinical guidelines.

2.3. CD30-positive cutaneous T-cell lymphoma (CTCL) after prior systemic therapy
The Committee heard that CTCL are a rare group of non-Hodgkin lymphomas with

heterogeneous characteristics. Subtypes of cutaneous T cell lymphoma that can express CD30 include primary cutaneous ALCL, mycosis fungoides and Sézary syndrome. Approximately 3 patients are diagnosed with CTCL each year in Singapore, of which, local experts estimated about 30% are CD30-positive. While early-stage disease can be effectively controlled with skin-directed therapies, about 30% of patients experience disease progression and require systemic therapy.

2.4. The Committee noted that there is no clearly defined standard of care for CTCL in Singapore. Systemic therapy options for CD30-positive disease include brentuximab, low-dose methotrexate, gemcitabine-based chemotherapy and romidepsin (not HSA-approved). They noted that while methotrexate and gemcitabine are already subsidised, the duration of response with these treatments is generally short. Thus, the Committee acknowledged that there was a clinical need to improve the affordability of more effective treatment options for patients with CTCL who have failed prior systemic therapies.

Clinical effectiveness and safety

3.1. Previously untreated CD30-positive PTCL

The Committee reviewed the pivotal randomised controlled trial (RCT; ECHELON-2) which compared brentuximab + CHP with CHOP in patients with previously untreated CD30-positive PTCL. The Committee noted that brentuximab + CHP significantly improved progression-free survival (PFS) compared with CHOP, and median overall survival (OS) was not reached in either treatment arm. The Committee agreed that brentuximab + CHP was generally well-tolerated and had a similar adverse event profile to CHOP.

3.2. Relapsed or refractory sALCL

In the absence of an RCT, the Committee reviewed a single-arm study (SGN-035-004) that investigated the use of brentuximab in patients with relapsed or refractory sALCL. While there were uncertainties regarding the magnitude of clinical benefit of brentuximab due to the lack of a comparator arm, the Committee noted that a substantial proportion of patients (86%) achieved an objective response. The Committee also considered results from an investigator-assessed intra-patient analysis which showed that the median PFS for patients receiving brentuximab (14.3 months) was longer than the observed median PFS (5.9 months) that these patients achieved on their most recent prior treatment. Median OS was not reached. The most common grade $\geq$3 adverse events were neutropenia, thrombocytopenia and peripheral sensory neuropathy. The Committee considered that the results from the intra-patient analysis were clinically meaningful and the use of brentuximab for relapsed or refractory sALCL was adequately supported by the available evidence.

3.3. CD30-positive CTCL after at least one prior systemic therapy

The Committee reviewed the pivotal RCT (ALCANZA) which compared brentuximab

with physician's choice of oral methotrexate or bexarotene in patients with previously treated CD30-positive mycosis fungoides or primary cutaneous ALCL. The results showed that brentuximab significantly improved PFS, objective response rate and objective response rate lasting four months (ORR4) compared with physician's choice of treatment. The frequency of grade ≥3 adverse events was similar in both treatment arms and the Committee considered brentuximab to be generally well-tolerated.

Cost effectiveness

4.1 In the absence of local cost-effectiveness analyses for brentuximab, the Committee reviewed results of evaluations from overseas HTA agencies and agreed they were likely to be generalisable to the local context. The Committee noted that the manufacturer agreed to lower their prices to be more aligned with overseas jurisdictions and enter into a confidential price volume agreement (PVA) which reduced the uncertainty of the overall budget impact and further improved cost effectiveness.

Estimated annual technology cost

5.1. Based on local epidemiological rates and estimated drug utilisation in the public healthcare institutions, the annual cost impact in the first year of listing brentuximab on the MAF was estimated to be less than SG$1 million for each of the indications subsidised for T-cell lymphoma.

Additional considerations

6.1 The Committee acknowledged that the manufacturer of brentuximab had agreed to implement a patient assistance programme (PAP) in the public healthcare institutions, contingent on subsidy listing, which would provide further savings to eligible patients in addition to MAF assistance.

Recommendations

7.1 On the basis of the available evidence, the Committee recommended brentuximab 50 mg powder for infusion be listed on the MAF for treating previously untreated CD30-positive PTCL when used in combination with CHP; relapsed or refractory sALCL; and CD30-positive CTCL after at least one prior systemic therapy, in view of favourable clinical and cost effectiveness at the proposed price and the PVA agreed with the manufacturer.

ANNEX

Recommendations by the MOH Drug Advisory Committee

Drug preparation	Approved clinical indications	Subsidy class (implementation date)	Eligible for MediShield Life claims (implementation date)
Brentuximab vedotin 50 mg powder for infusion	Brentuximab in combination with cyclophosphamide, doxorubicin and prednisone (CHP), for previously untreated CD30+ peripheral T-cell lymphoma.	MAF (1 Sep 2022)	Yes[1] (1 Sep 2022)
	Treatment of relapsed or refractory systemic anaplastic large cell lymphoma. Treatment should be stopped at 16 cycles, or earlier if disease progresses.		
	Treatment of patients with CD30+ cutaneous T-cell lymphoma who have received at least 1 prior systemic therapy. Treatment should be stopped at 16 cycles, or earlier if disease progresses.		

Abbreviation: MAF, Medication Assistance Fund.
[1] Please refer to MOH's website for the MediShield Life claim limit starting from the implementation date.

VERSION HISTORY

Guidance on brentuximab vedotin for treating T-cell lymphoma

This Version History is provided to track any updates or changes to the guidance following the first publication date. It is not part of the guidance.

Publication of guidance

Date of Publication	12 Jul 2022

Guidance updated to reflect MediShield Life claims eligibility

Date of Publication	1 Jun 2026