Agenda item 4.01

**Methoxsalen,**

**Solution for blood fraction, 20 microgram per mL, 10 mL,**

**Uvadex®,**

**Terumo BCT Australia Pty Limited.**

1. Purpose of Item
	1. To request that the PBAC consider a Section 100 (Highly Specialised Drugs Program) Authority Required (STREAMLINED) listing of methoxsalen delivered via an integrated, closed system, extracorporeal photopheresis (ECP), for the treatment of patients with erythrodermic stage III-IVa T4 M0 cutaneous T-cell lymphoma (CTCL) who are refractory to one or more systemic treatments.
	2. This request was made as part of a streamlined codependent submission in the context of an April 2020 Medical Services Advisory Committee (MSAC) reconsideration of the MBS funding of ECP for CTCL. As the medicine (PBAC relevant) component is substantially smaller in overall scope and financial implications compared to the procedure (MSAC relevant) component, the clinical and cost effectiveness, and estimated overall financial implications were primarily considered by MSAC.
2. Background

*Registration status*

* 1. Methoxsalen was TGA registered on 17 October 2019 for extracorporeal administration with the THERAKOS CELLEX Photopheresis System for the following indications:
* treatment of steroid-refractory and steroid-intolerant chronic graft versus host disease (cGVHD) in adults following allogeneic HSC transplantation
* palliative treatment of the skin manifestations of cutaneous T-cell lymphoma (CTCL) that is unresponsive to other forms of treatment

*Previous PBAC/MSAC consideration*

* 1. An integrated codependent submission for methoxsalen, as part of the ECP service for the treatment of refractory CTCL, was first considered at the July 2017 PBAC and MSAC meetings. The PBAC deferred its consideration of methoxsalen at that time until both a TGA delegate’s overview and an MSAC intention to support the codependent ECP service via the MBS are available (paragraph 6.1, methoxsalen Public Summary Document (PSD), July 2017).
	2. Subsequently, MSAC also deferred its advice on public funding of ECP pending a revision of the economic model. In July 2017, MSAC noted that while the condition was a rare disease and would have a limited budgetary impact, the evidence base was weak with a high and uncertain incremental cost-effectiveness ratio (ICER). MSAC noted that the PBS listing of vorinostat had substantially changed the treatment pathway for refractory erythrodermic CTCL, and requested that the revised economic model only include comparators with accepted cost-effectiveness (methotrexate and vorinostat). MSAC also considered that there was a need to revisit the proposed MBS fee and align the MBS item descriptor and the proposed PBS restriction (p1, Application No. 1420 PSD, July 2017).
	3. At its July 2017 meeting, the PBAC foreshadowed its support for recommending the PBS listing of methoxsalen and stated that, if MSAC subsequently decides to support the MBS listing of ECP for the treatment of erythrodermic CTCL, it would support an expedited process for reconsideration to align any PBAC recommendation for listing methoxsalen according to the circumstances supported by MSAC (paragraph 6.1, methoxsalen PSD, July 2017).
1. Requested listing
	1. An abridged version of the requested listings proposed by the sponsor is provided below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name, Restriction,****Manner of administration and form** | **Max.****qty** | **№.of****Rpts** | **Dispensed Price for Max. Qty** | **Proprietary Name and Manufacturer** |
| METHOXSALEN20 microgram/mL solution, 10 mL vial | 1 | 0 | $'''''''''''''''''' a | UVADEX® | Terumo BCT Australia Pty Ltd |

a The Dispensed Price for Maximum Quantity (DPMQ) proposed by the sponsor appeared to be based on the private hospital setting. The DPMQ in the public hospital setting (as a Section 100 item) would be $'''''''''''''''.

|  |  |
| --- | --- |
| **Category / Program:**  | Section 100 – Highly Specialised Drugs Program  |
| **Prescriber type:** | [ ] Dental [x] Medical Practitioners [ ] Nurse practitioners [ ] Optometrists [ ] Midwives |
| **Restriction Level / Method:** | [ ] Unrestricted benefit[ ] Restricted benefit[ ] Authority Required – In Writing[x] Authority Required – Telephone/Electronic/Emergency (private hospital) [x] Authority Required – Streamlined (public hospital)  |
| **Severity:** | Erythrodermic stage III-IVa T4 M0 |
| **Condition:**  | Cutaneous T-cell lymphoma (CTCL) |
| **Indication:**  | Erythrodermic stage III-IVa T4 M0 CTCL |
| **Treatment Phase:** | Initial or continuing treatment |
| **Clinical criteria:****(initial treatment only)** | Patients must be refractory to prior systemic treatment for this condition*;* andThe treatment must be the sole PBS-subsidised therapy for this condition.  |
| **Clinical criteria:****(continuing treatment only)** | Patient must have previously received PBS-subsidised treatment with this drug for this condition; andPatient must demonstrate a response to PBS-subsidised treatment with this drug for this condition; andThe treatment must be the sole PBS-subsidised therapy for this condition. |
| **Treatment criteria:** | Must be treated by a haematologist; andMust be treated with an integrated, closed-system extracorporeal photopheresis (ECP) device. |
| **Population criteria:** | Patient must be aged 18 years and over |
| **Caution:** | Patient must not be pregnant or breastfeeding. Patients and their partners must each be using an effective form of contraception if of child-bearing age. |
| **Prescribing Instructions:****(initial treatment only)** | A refractory patient is defined as having had disease recurrence while on treatment or experienced intolerance to or toxicity from treatment. |
| **Prescribing Instructions:****(continuing treatment only)** | A response is defined as a greater than or equal to 50% skin score response from baseline for at least 4 weeks, within the first six months of treatment |

* 1. The sponsor proposed an approved ex-manufacturer price (AEMP) of $''''''''''''' per 10 mL vial containing 20 micrograms/mL solution.
	2. The requested restriction for methoxsalen aligns with the April 2020 MSAC-supported MBS item descriptor for ECP which requires all of the following criteria to be met:
1. the patient must be aged 18 years or over; and
2. the patient must have received prior systemic treatment for this condition and experienced either disease progression or unacceptable toxicity while on this treatment; and
3. the treatment must be in combination with use of *ex-vivo* injectable methoxsalen; and
4. the treatment must be under the supervision of a specialist haematologist.
	1. The sponsor requested an Authority Required listing (telephone/online) for private hospitals and an Authority Required (STREAMLINED) listing for public hospitals respectively. The Department advised that since the sponsor’s original submission to the July 2017 PBAC meeting, amendments to Section 100 – Highly Specialised Drugs Program (HSDP) listings framework had been made that allow the method of seeking authority approval to be consistent between private and public hospitals. The PBAC considered that a Streamlined Authority listing is appropriate.
	2. The requested restriction specified that the patient ‘Must be treated by a haematologist’. The PBAC considered that the restriction should also include: ‘Must be treated by a medical physician working under the supervision of a haematologist’ to allow prescribing by doctors working under the supervision of haematologists (e.g. an advance trainee haematologist).
	3. The requested PBS restriction did not limit the duration of use (consistent with the April 2020 advice of MSAC) but would enable access to methoxsalen under the PBS if the patient responds to treatment. The PBAC considered this was appropriate.
	4. In April 2020, MSAC supported appropriate alignment of the MBS item descriptor with the following aspects proposed by the sponsor for the methoxsalen PBS restrictions:
* the criterion in the PBS restriction for continuing methoxsalen that “patient must demonstrate a response [defined as ‘a greater than or equal to 50% skin score response from baseline for at least 4 weeks, within the first six months of treatment’] to PBS-subsidised treatment with this drug for this condition”; and
* the criterion in the PBS restrictions for both initiating and continuing methoxsalen that “the treatment must be the sole PBS-subsidised therapy for this condition” (p3, Application No. 1420.1 MSAC PSD, April 2020).
	1. In the requested restriction, response was defined as a greater than or equal to 50% skin score response from baseline for at least 4 weeks, within the first six months of treatment. The proposed 50% skin score response is not consistent with the definition of an “adequate response” outlined in the approved Product Information (PI), which is based on a 25% improvement in the skin score maintained for at least 4 weeks. However, it aligns with the definition of a partial or complete response according to the Global response criteria[[1]](#footnote-1) for integrated response evaluation. In the Global response criteria, complete response is defined as 100% clearance of disease in all areas, partial response is 50% disease reduction in all involved areas, and stable disease is <25% increase to <50% reduction from baseline.
	2. The PBAC considered that the proposed definition of response (as outlined above) and a clinical criterion requiring patients to demonstrate a response in order for treatment to continue beyond the first six months were reasonable given that clinical response to ECP treatment involving methoxsalen can take up to six months.
	3. The PBAC considered that the requested maximum quantity of one with nil repeats for both initial and continuing treatment (per the correspondence received from the sponsor on 22 April 2020) would only provide sufficient quantity for one cycle of ECP treatment. This conclusion assumes a maximum of one 10 mL vial per cycle of ECP treatment, and is based on the submission to the April 2020 MSAC meeting and Table 1 of the correspondence received from the sponsor on 22 April 2020, which indicated that the Medicinal Product Pack comprises a single 10 mL vial. In proposing alternative maximum quantities and repeats, the PBAC also noted that the submission to the April 2020 MSAC meeting relied on a treatment protocol outlined in Gao et al, 2019[[2]](#footnote-2), which stated: “A novel treatment protocol for ECP is utilised at our centre, as previously published consisting of one day of treatment per week for six weeks, then every two weeks for 12 weeks, then monthly thereafter. This also differs from the traditional protocol found in EORTC and ISCL guidelines, which recommends two consecutive treatment days.” The PBAC noted that the treatment protocol in Gao et al, 2019 also differs from the TGA-approved methoxsalen Product Information, which states that the “patient should receive treatment on two successive days each month for six months. Patients who show an increase in skin scores after eight treatment sessions may have their treatment schedule increased to two successive days every two weeks for the next three months”.
	4. In April 2020, MSAC considered it would be appropriate to limit the MBS item to one MBS fee per cycle of ECP treatment. This limit would prevent double claiming if treatment is received over 2 days with an overnight stay. MSAC confirmed that treatment is intended to be delivered as an outpatient service, and overnight stay would only be required to manage any adverse events, if they arise.
	5. The PBAC noted that as the treatment for this condition will predominately be delivered in an outpatient setting in public hospitals, it is appropriate for methoxsalen to be included on the PBS and that in situations where a patient is being treated while admitted in a public hospital, the states will be responsible for meeting the cost of treatment, including the cost of methoxsalen.

*For more detail on PBAC’s view, see section 5 PBAC outcome.*

1. Current Situation
	1. At its April 2020 meeting, after considering the strength of the available evidence in relation to the safety, clinical effectiveness and cost-effectiveness, MSAC supported public funding of ECP in the treatment of CTCL. However, MSAC noted that the proposed MBS fee for the proposed service included items which are not typically reimbursed under the MBS, and that the Department should negotiate the MBS fee with the applicant (p1, Application No. 1420.1 MSAC PSD, April 2020).
	2. MSAC noted that the nominated comparators had been revised as previously requested to include vorinostat and brentuximab vedotin, and to remove alemtuzumab (which is not PBS listed). Interferon alfa remained as a comparator, as the applicant noted that peginterferon alfa-2a is used in CTCL and is unrestricted on the PBS. Together with methotrexate, MSAC accepted these comparators (p3, Application No. 1420.1 MSAC PSD, April 2020).
	3. MSAC accepted ESC’s advice that ECP is still likely safer than, and at least as effective as, all four identified comparators for stage T4 M0 CTCL, and also noted that the evidence is unlikely to improve because this is a rare condition (p3, Application No. 1420.1 MSAC PSD, April 2020).
	4. Consistent with the evidence considered by MSAC, the PBAC noted a recent publication (Gao et al, 2019) regarding the use of ECP in patients with CTCL, which was a retrospective analysis of 65 patients with Sézary Syndrome (SS) or erythrodermic mycosis fungoides (e-MF) with blood involvement who were treated with ECP and included in the Cutaneous Lymphoma Database at the Peter MacCallum Cancer Centre. The institutional protocol allowed the use of ECP with other therapies, although decisions around concomitant treatment were at the discretion of the clinician. ECP was used as monotherapy in only 35% (20/57) of the patients who received ECP in lines 1 to 3 of treatment (57 of the 65 included patients received ECP in lines 1 to 3). The study reported that patients who received ECP in combination with another systemic agent at treatment lines 1-3 (37 patients) had a significantly shorter median time-on-treatment compared with those who received ECP-alone (15 months vs 42.5 months, p=0.044). However, the PBAC considered that this study did not provide conclusive evidence as to the comparative efficacy of ECP as monotherapy compared with ECP in combination with another systemic agent therapy, and considered that the data from Gao et al, 2019 should be interpreted with caution, given the following:
* it was a retrospective review;
* it was based on a small number of patients (given the condition is rare); and
* the authors postulated that patients who were prescribed a combination of ECP and another systemic agent may have had more aggressive or rapidly progressive disease at the outset. Gao et al, 2019 concluded that ‘this raises the question of whether ECP combination therapy does in fact offer a therapeutic benefit over ECP monotherapy and warrants further prospective evaluation’.
	1. MSAC relied on an ICER that included the effective price of brentuximab vedotin rather than its published price. MSAC advised that, acknowledging the small number of patients and high clinical need for this population, ECP is probably cost-effective (p4, Application No. 1420.1 MSAC PSD, April 2020).
	2. MSAC advised that, as not all the identified cost inputs [into the MBS item fee] are ordinarily reimbursed by the MBS, the applicant should supply a detailed breakdown and justification of each and all of these inputs, to inform a negotiation of the MBS fee with the Department in consideration of the small number of providers for this service. Similarly, MSAC also suggested that the PBAC may wish to negotiate the price of methoxsalen to lower the cost of the entire package (p3, Application No. 1420.1 MSAC PSD, April 2020).
	3. The estimated use and financial implications of listing methoxsalen + ECP are summarised below.

**Table 1: Estimated use and financial implications**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | Year 1  | Year 2  | Year 3  | Year 4  | Year 5  |
| **Estimated extent of use** |
| Number of patients with CTCL (both incident and prevalent populations)a | '''''''''' | '''''''''' | ''''''''' | '''''''''' | '''''' |
| Proportion of patients treated per year | 20% | 30% | 40% | 50% | 60% |
| Number of patients treated | ''''''' | '''''''' | ''''''''' | ''''''' | '''''' |
| Number of scripts dispensed  | ''''''''''' | ''''''''''' | '''''''''''''' | '''''''''''' | ''''''''''''' |
| **Net financial implications** |
| Net cost to PBS/RPBS (methoxsalen)b | $''''''''''''''''''''' | $'''''''''''''''''' | $''''''''''''''''''' | $''''''''''''''''''''' | $'''''''''''''''''''' |
| Net cost to the MBS (ECP)c | $''''''''''''''''''''' | $''''''''''''''''''''' | $'''''''''''''''''''''' | $''''''''''''''''''''''' | $''''''''''''''''''''''''' |
| Net cost to the Government (ECP + methoxsalen) | $'''''''''''''''''''''''' | $'''''''''''''''''''''''' | $''''''''''''''''''''''''' | $'''''''''''''''''''''''' | $''''''''''''''''''''' |

Source: Table E1, p4 of the correspondence received from the sponsor on 22 April 2020.

Abbreviations: CTCL: cutaneous T-cell lymphoma; MBS: Medicare Benefits Schedule; PBS: Pharmaceutical Benefits Scheme; RPBS = Repatriation Pharmaceutical Benefits Scheme

a The resubmission for MSAC consideration subtracted the number of prevalent patients treated per year from the prevalent pool of patients with T4M0 CTCL.

b Number of scripts x DPMQ of methoxsalen ($'''''''''''''''''') – copayments. This appeared to be based on the DPMQ if dispensed in a private hospital setting. The DPMQ in the public hospital setting (as a Section 100 item) would be $''''''''''''''', at the AEMP proposed by the sponsor.

c The resubmission assumed that patients receiving ECP would only receive one year of treatment, using the modelled ECP regimen based on number of treatments in 14 months; number of servicesx cost of ECP ($''''''''''''''''''''')

* 1. The sponsor estimated a net cost to the PBS/RPBS less than $10 million in Year 5 of listing methoxsalen, with a total net cost to the Government less than $10 million in Year 5 of listing ECP + methoxsalen. MSAC accepted the basis for the estimated financial costs to the MBS over 5 years (Table 12, p17, Application No. 1420.1 MSAC PSD, April 2020).

*For more detail on PBAC’s view, see section 5 PBAC outcome.*

1. PBAC Outcome
	1. The PBAC recommended the Section 100 (Highly Specialised Drugs Program – Public and Private Hospital) Authority Required (STREAMLINED) listing of methoxsalen, delivered as part of an extracorporeal photopheresis (ECP) service for the treatment of refractory erythrodermic stage III-IVa T4 M0 cutaneous T-cell lymphoma (CTCL), either as monotherapy or in combination with peginterferon alfa-2a. The PBAC was satisfied that ECP involving methoxsalen provides, for some patients, a significant reduction in toxicity over the nominated comparators (methotrexate, interferon alfa, vorinostat, and brentuximab vedotin).
	2. The PBAC noted that MSAC accepted the claim of superiority for safety and non‑inferiority for efficacy between ECP involving methoxsalen and the comparators (methotrexate, interferon alfa, vorinostat, and brentuximab vedotin), and that the evidence is unlikely to improve in the context of this rare cancer (see paragraph 4.3).
	3. Consistent with the evidence considered by MSAC, the PBAC noted that, in a retrospective analysis of patients treated with ECP at the Peter MacCallum Cancer Centre (Gao et al, 2019), the majority of patients received ECP in combination with another systemic agent (65% of the patients treated in lines 1-3 received ECP as combination therapy). The PBAC considered that providing the ECP service together with other therapies (most commonly peginterferon alfa-2a but also vorinostat and brentuximab vedotin) has become the standard of care for many patients in clinical practice. However, the PBAC noted that the sponsor had requested use of methoxsalen via ECP as monotherapy and considered that based on the available evidence (Gao et al, 2019), it is difficult to justify that use in combination with other systemic therapies would provide an incremental benefit over monotherapy. The PBAC further noted that concomitant use of systemic therapies, in particular vorinostat and brentuximab vedotin, may add substantially to the incremental cost of ECP involving methoxsalen. The PBAC advised that, on balance, it would be appropriate to allow the use of ECP involving methoxsalen with peginterferon alfa-2a (which is an unrestricted benefit on the PBS) but to preclude combination therapy with vorinostat and/or brentuximab vedotin which are PBS-listed for use as monotherapy (i.e. the sole systemic anti-cancer therapy for this condition).
	4. The PBAC noted MSAC’s advice that ECP involving methoxsalen is likely cost-effective taking into account the high clinical need and the small number of patients.
	5. The PBAC noted that the ECP service is currently only available in one or two centres in Australia, but considered that MBS-funding would likely lead to the availability of the service in other centres. The PBAC considered that the uptake rates of ECP in clinical practice were uncertain leading to uncertainty around the estimated patient numbers. However, the PBAC considered it was unlikely that there would be substantial market growth from the increased number of centres delivering the ECP service in light of the rarity of the condition. The PBAC also considered that the risk of use outside the requested population was minimal given the specialist nature of the ECP service.
	6. The PBAC considered that allowing use in combination with peginterferon alfa-2a may increase the financial implications to the PBS.
	7. The PBAC considered that the price of methoxsalen should be reduced to account for utilisation in combination with peginterferon alfa-2a (given combination use may impact the financial implications and also the cost-effectiveness of ECP with methoxsalen) and the uncertain patient population, and noted this would be consistent with MSAC’s advice as outlined in paragraph 4.6.
	8. The PBAC considered that the proposed Section 100 – Highly Specialised Drugs Program (HSDP) listing was appropriate as the drug is highly specialised, making administration outside an institutional environment problematic and the patient target group is clearly identifiable. The PBAC considered that the suitability of methoxsalen for listing under the Section 100 –HSDP should be reviewed after two to four years to determine that the designation as a Section 100 –HSDP listing remains appropriate. Should the review find that methoxsalen is no longer suited to a Section 100 –HSDP listing and can move to the General Schedule, then any extra financial costs of such a move (e.g. PBS mark-ups and dispensing fees) should be borne by the sponsor.
	9. The PBAC considered that the maximum quantity should be two vials with six repeats for initial treatment, and one vial with five repeats for continuing treatment to align with the treatment protocol outlined in Gao et al, 2019 (which was: one day of treatment per week for six weeks; then every two weeks for 12 weeks; then monthly thereafter). The PBAC acknowledged that this differs to the dosing protocol outlined in the TGA-approved methoxsalen Product Information, but considered that the maximum quantity and repeats should be based on the Gao et al, 2019 protocol, consistent with the evidence considered by MSAC at its April 2020 meeting (with no increases to the maximum quantity and maximum number of repeats authorised).
	10. The PBAC noted that patients are currently receiving ECP involving methoxsalen at one or two centres in Australia and noted that patients who require grandfather treatment and who meet the PBS criteria would be able to access methoxsalen through the initial treatment restriction.
	11. The PBAC found that the criteria prescribed by the *National Health (Pharmaceutical and Vaccines – Cost Recovery) Regulations 2009* for Pricing Pathway A were not met. Specifically, the PBAC found that in the circumstances of its recommendation for methoxsalen as part of the ECP service:
2. The medicine component alone is not expected to provide a substantial and clinically relevant improvement in efficacy or reduction of toxicity over the nominated comparators;
3. The medicine component alone is not expected to address a high and urgent unmet clinical need; and
4. It was not necessary to make a finding in relation to whether it would be in the public interest for the subsequent pricing application to be progressed under Pricing Pathway A.
	1. The PBAC advised that under Section 101(3BA) of the *National Health Act 1953* methoxsalen should not be treated as interchangeable with any other drugs on an individual patient basis.
	2. The PBAC advised that methoxsalen is not suitable for prescribing by nurse practitioners.
	3. The PBAC recommended that the Early Supply Rule should not apply as this is a Section 100 listing.
	4. The PBAC noted that this submission is not eligible for an Independent Review as it received a positive recommendation.

**Outcome:**

Recommended

1. Recommended listing
	1. Add new PBS listings:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name, Restriction,****Manner of administration and form** | **PBS item code** | **Max qty****packs** | **Max qty****units** | **№.of****Rpts** | **Proprietary Name and Manufacturer** |
| METHOXSALENmethoxsalen 20 microgram/mL solution, 10 mL vial | NEW (Public)NEW (Private) | 2 | 2 | 6 | Uvadex | Terumo BCT Australia Pty Ltd |

|  |  |
| --- | --- |
| **Concept ID**(for internal Dept. use) | **Category / Program:** Section 100 – Highly Specialised Drugs Program (Public and Private Hospital) |
| **Prescriber type:** [ ] Dental [x] Medical Practitioners [ ] Nurse practitioners [ ] Optometrists [ ] Midwives |
| **Restriction type / Method:**[x] Authority Required – Streamlined ~~(public hospital)~~ [new code 1] |
| **Severity:** Erythrodermic stage III-IVa T4 M0 |
| **Condition:** Cutaneous T-cell lymphoma (CTCL) |
| 20979 | **Indication:** Erythrodermic stage III-IVa T4 M0 cutaneous T-cell lymphoma (CTCL) |
|  | **Treatment Phase:** Initial treatment |
| new | **Clinical criteria:** |
|  | Patient must have experienced disease progression while on at least one systemic treatment for this PBS indication prior to initiating treatment with this drug*;* orPatient must have experienced an intolerance necessitating permanent treatment withdrawal to at least one systemic treatment for this PBS indication prior to initiating treatment with this drug. |
|  | **AND** |
| New | The treatment must be the sole PBS-subsidised systemic anti-cancer therapy for this PBS indication; or |
| new | The treatment must be in combination with peginterferon alfa-2a only if used in combination with another drug |
|  | **AND** |
| new | Patient must be receiving the medical service as described in item XXXXX of the Medicare Benefits Schedule.  |
|  | **AND** |
|  | Patient must not have previously received PBS-subsidised treatment with this drug for this PBS indication |
|  | **AND** |
| 26080 | **Treatment criteria:** |
| 2607726078 | Must be treated by a haematologist; orMust be treated by a medical physician working under the supervision of a haematologist |
|  | **AND** |
| 26083 | **Population criteria:** |
| 26082 | Patient must be aged 18 years or over |
| new | **Caution:** This drug is for *ex vivo* administration and must not to be injected directly into the patient. |
| new | **Administrative advice:**The maximum quantity and maximum number of repeats are based on the following treatment protocol: one day of treatment per week for six weeks, then every two weeks for 12 weeks, then monthly thereafter. This differs from the Product Information. Requests for increased maximum quantities / maximum repeats will not be considered. |

Increases summary:

Maximum quantity increase requests multiplier: 0 (no increases permitted)

Maximum repeats increase requests multiplier: 0 (no increases permitted)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name, Restriction,****Manner of administration and form** | **PBS item code** | **Max qty****packs** | **Max qty****units** | **№.of****Rpts** | **Proprietary Name and Manufacturer** |
| METHOXSALENmethoxsalen 20 microgram/mL solution, 10 mL vial | NEW (Public)NEW (Private) | 1 | 1 | 5 | Uvadex | Terumo BCT Australia Pty Ltd |

|  |  |
| --- | --- |
| **Concept ID**(for internal Dept. use) | **Category / Program:** Section 100 – Highly Specialised Drugs Program (Public and Private Hospital) |
| **Prescriber type:** [ ] Dental [x] Medical Practitioners [ ] Nurse practitioners [ ] Optometrists [ ] Midwives |
| **Restriction Type / Method:** [x] Authority Required – Streamlined [new code 2] |
| **Severity:** Erythrodermic stage III-IVa T4 M0 |
| **Condition:** Cutaneous T-cell lymphoma (CTCL) |
| 20979 | **Indication:** Erythrodermic stage III-IVa T4 M0 cutaneous T-cell lymphoma (CTCL) |
|  | **Treatment Phase:** Continuing treatment |
| new | **Clinical criteria:** |
| (variation of 24641) | Patient must have received PBS-subsidised treatment with this drug for this PBS indication |
|  | **AND** |
| Edit 26075 draft | Patient must have demonstrated a response to treatment with this drug if treatment is continuing beyond 6 months of treatment for the first time.  |
|  | **AND** |
| New (variation of 23280) | The treatment must be the sole PBS-subsidised systemic anti-cancer therapy for this PBS indication; or |
| New (variation of 8322) | The treatment must be in combination with peginterferon alfa-2a only if used in combination with another drug. |
|  | **AND** |
| New | Patient must be receiving the medical service as described in item XXXXX of the Medicare Benefits Schedule.  |
|  | **AND** |
| 26080 draft | **Treatment criteria:** |
| 2607726078 | Must be treated by a haematologist; orMust be treated by a medical physician working under the supervision of a haematologist. |
|  | **AND** |
| 26093 draft | **Prescribing Instructions:**A response, for the purposes of administering this continuing restriction, is defined as attaining a reduction of at least 50% in the overall skin lesion score from baseline, for at least 4 consecutive weeks. Refer to the Product Information for directions on calculating an overall skin lesion score. The definition of a clinically significant reduction in the Product Information differs to the 50% requirement for PBS-subsidy. Response only needs to be demonstrated after the first six months of treatment. |
| new | **Caution:** This drug is for *ex vivo* administration and must not to be injected directly into the patient.  |
| new | **Administrative advice:**The maximum quantity and maximum number of repeats are based on the following treatment protocol: one day of treatment per week for six weeks, then every two weeks for 12 weeks, then monthly thereafter. This differs from the Product Information. Requests for increased maximum quantities / maximum repeats will not be considered. |

Increases summary:

Maximum quantity increase requests multiplier: 0 (no increases permitted)

Maximum repeats increase requests multiplier: 0 (no increases permitted)

1. Context for Decision

The PBAC helps decide whether and, if so, how medicines should be subsidised through the Pharmaceutical Benefits Scheme (PBS) in Australia. It considers applications regarding the listing of medicines on the PBS and provides advice about other matters relating to the operation of the PBS in this context. A PBAC decision in relation to PBS listings does not necessarily represent a final PBAC view about the merits of the medicine or the circumstances in which it should be made available through the PBS. The PBAC welcomes applications containing new information at any time.

1. Sponsor’s Comment

The sponsor had no comment.

1. Duvic M, Kim YH, Zinzani PL, Horwitz SM. Results from a Phase I/II Open-Label, Dose-Finding Study of Pralatrexate and Oral Bexarotene in Patients *Clin Cancer Res*; 23(14) July 15, 2017: 3553. [↑](#footnote-ref-1)
2. Gao, C, McCormack, C, van der Weyden, C et al. (2019). Prolonged survival with the early use of a novel extracorporeal photopheresis regimen in patients with Sezary syndrome. Blood, 134(16), 1346-1350. [↑](#footnote-ref-2)