6.03 DURVALUMAB,  
Solution concentrate for I.V. infusion,  
120 mg in 2.4 mL, 500 mg in 10 mL,  
Imfinzi®,  
AstraZeneca Pty Ltd

1. Purpose of submission
   1. The submission requested a Section 100 Efficient Funding of Chemotherapy listing for durvalumab in combination with etoposide plus platinum based chemotherapy for the treatment of extensive stage small cell lung cancer (ES-SCLC).
   2. Listing was requested on the basis of a cost-minimisation versus atezolizumab in combination with etoposide plus platinum based chemotherapy.

**Table 1: Key components of the clinical issue addressed by the submission**

|  |  |
| --- | --- |
| Component | Description |
| Population | Patients with ES-SCLC who have not received prior treatment. |
| Intervention | Durvalumab plus etoposide and platinum chemotherapy (EP) for 4 cycles followed by durvalumab maintenance monotherapy until progression. |
| Comparator | Atezolizumab plus EP. |
| Outcomes | Primary outcome: OS.  Secondary outcomes: PFS, ORR, APF6, OS at 18 months. |
| Clinical claim | Durvalumab plus etoposide plus platinum chemotherapy is non-inferior in efficacy and safety to atezolizumab plus etoposide plus platinum chemotherapy for the treatment of ES-SCLC. |

Source: Table 1.1.1., p2 of the submission.

APF6 = Alive and progression free at 6 months; APF12 = alive and progression free at 12 months; ES-SCLC = extensive stage small cell lung cancer, EP = etoposide plus platinum chemotherapy; HRQoL = health-related quality of life; ORR = objective response rate; OS = overall survival; PFS = Progression-free survival.

1. Background

Registration status

* 1. The submission was made under the TGA/PBAC Parallel Process.At the time of PBAC consideration the TGA Delegate’s Overview was available. The Delegate noted that:
* in the CASPIAN study four cycles of etoposide plus platinum-based chemotherapy (EP) was used in the durvalumab arm, whereas up to six cycles were used in the EP alone arm. The delegate requested ACM comment on the generalisability of these treatment regimens to the Australian context; and
* there was a statistically significant difference in overall survival for the two treatment arms in the CASPIAN trial, however the additional benefit in terms of life gain appears modest. The delegate requested ACM comment on whether the benefit is clinically meaningful.

Overall the TGA delegate considered that, subject to the advice from the ACM, there is no reason not to approve for the requested indication.

*For more detail on PBAC’s view, see section 7 PBAC outcome.*

1. Requested listing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name, restriction, manner of administration, form** | **Maximum amount** | **No. of repeats** | **Dispensed price for maximum amount** | **Proprietary name and manufacturer** |
| Durvalumab  Initial:  Solution for infusion,  500mg/10mL  120 mg/2.4mL  Continuing  Solution for infusion,  500mg/10mL  120 mg/2.4mL | 1500 mg  1500 mg | 3  5 | $''''''''''''''''''''''''' (public hospital)  $'''''''''''''''''''''''' (private hospital)  $'''''''''''''''''''''''' (public hospital)  $''''''''''''''''''''''''' (private hospital) | Imfinzi, AstraZeneca |
| **Category / Program:** | Section 100 – Efficient Funding of Chemotherapy | | | | |
| **Prescriber type:** | Dental Medical Practitioners Nurse practitioners  Optometrists Midwives | | | | |
| **Severity:** | Extensive stage primary | | | | |
| **Condition:** | Small cell carcinoma of the lung | | | | |
| **PBS Indication:** | Extensive stage primary small cell carcinoma of the lung | | | | |
| **Treatment phase:** | **Initial** | | | | |
| **Restriction:** | Restricted benefit  Authority Required - In Writing  Authority Required – Telephone, Electronic  Streamlined | | | | |
| **Clinical criteria:** | The condition must be previously untreated AND  Patient must have a WHO performance status of 0 or 1 AND  The treatment must be in combination with etoposide and a platinum-based antineoplastic drug | | | | |
| **Administrative Advice:** | No increase in the maximum quantity or number of units may be authorised  No increase in the maximum number of repeats will be authorised  Special pricing arrangements apply | | | | |
| **Category / Program:** | Section 100 – Efficient Funding of Chemotherapy | | | | |
| **Prescriber type:** | Dental Medical Practitioners Nurse practitioners  Optometrists Midwives | | | | |
| **Severity:** | Extensive stage primary | | | | |
| **Condition:** | Small cell carcinoma of the lung | | | | |
| **PBS Indication:** | Extensive stage primary small cell carcinoma of the lung | | | | |
| **Treatment phase:** | **Continuing** | | | | |
| **Restriction:** | Restricted benefit  Authority Required - In Writing  Authority Required – Telephone, Electronic  Streamlined | | | | |
| **Clinical criteria:** | The treatment must be as monotherapy AND  Patient must have previously received PBS‑subsidised treatment with this drug for this condition AND  Patient must not have developed disease progression while being treated with this drug for this condition | | | | |
| **Administrative Advice:** | No increase in the maximum quantity or number of units may be authorised  No increase in the maximum number of repeats will be authorised  Special pricing arrangements apply | | | | |
| **Category / Program:** | Section 100 – Efficient Funding of Chemotherapy | | | | |
| **Prescriber type:** | Dental Medical Practitioners Nurse practitioners  Optometrists Midwives | | | | |
| **Severity:** | Extensive stage primary | | | | |
| **Condition:** | Small cell carcinoma of the lung | | | | |
| **PBS Indication:** | Extensive stage primary small cell carcinoma of the lung | | | | |
| **Treatment phase:** | **Grandfathering** | | | | |
| **Restriction:** | Restricted benefit  Authority Required - In Writing  Authority Required – Telephone, Electronic  Streamlined | | | | |
| **Clinical criteria:** | Patient must have received non PBS subsidised treatment with this drug for this condition prior to [DATE] AND  The condition must have been untreated prior to initiating non PBS subsidised treatment with this drug for this condition AND  Patient must not have developed disease progression while being treated with this drug for this condition AND  Patient must have had a WHO performance status of 0 or 1 at the time non PBS subsidised treatment with this drug for this condition was initiated AND  The treatment must be in combination with etoposide and a platinum based antineoplastic if the patient is yet to complete their first 4 cycles of treatment OR  The treatment must be as monotherapy if being administered as maintenance therapy.  A patient may qualify for PBS subsidised treatment under this restriction once only.  For continuing PBS subsidised treatment, a Grandfathered patient must qualify under the Continuing treatment criteria. | | | | |
| **Administrative Advice:** | No increase in the maximum quantity or number of units may be authorised  No increase in the maximum number of repeats will be authorised  Special pricing arrangements apply | | | | |

Source: Tables 1.4.2 -1.4.4, p11-13 of the submission.

* 1. The submission did not request a specific effective price. A cost-minimisation price against atezolizumab is requested and would be finalised when the effective atezolizumab price is made available.
  2. The proposed initial criteria are consistent with the inclusion criteria of the CASPIAN trial, and the initial and continuation criteria are consistent the requested TGA indication.
  3. The wording of the requested restriction is identical to that of the atezolizumab listing for ES-SCLC. The PBAC considered that it would be appropriate for the durvalumab restrictions to be aligned with the current atezolizumab restrictions for the same indication, as proposed in the submission.

*For more detail on PBAC’s view, see section 7 PBAC outcome.*

1. Population and disease
   1. Lung cancer is the leading cause of cancer mortality in Australia with 20 percent of cancer-related deaths due to lung cancer (AIHW 2017). Small cell lung cancer (SCLC) is a high grade neuroendocrine tumour, distinct from low-grade typical carcinoid neuroendocrine tumours. This form of cancer is characterised by small, round cells found centrally in the bronchi (Cancer Australia 2011; AIHW 2011) SCLC accounts for 11- 12% of all cases of lung cancer in Australia (AIHW analysis 2017).
   2. SCLC is classified as limited stage (LS) or extensive stage (ES). LS-SCLC corresponds to stages I to III cancer and is characterised by localised or locally advanced tumours in the lung only. ES-SCLC is locally advanced or metastatic and therefore equates to Stage IIIb or Stage IV disease (NCCN 2020). LS-SCLC can be treated surgically or radiologically, ES-SCLC is typically considered inoperable and incurable.
   3. Approximately 80% of cases of SCLC are diagnosed in late stage disease, when tumours have spread locally or metastasised (AIHW 2011).
   4. Durvalumab is proposed to be used initially in combination EP in the first-line treatment of patients with ES-SCLC, then as monotherapy as maintenance treatment.
   5. Durvalumab is a human monoclonal antibody (mAb) of the IgG1 kappa subclass that specifically binds human programmed cell death ligand‑1 (PD‑L1).

*For more detail on PBAC’s view, see section 7 PBAC outcome.*

1. Comparator
   1. The submission nominated atezolizumab in combination with EP as the main comparator. The main arguments provided in support of this nomination were:

* Both atezolizumab and durvalumab are immune checkpoint inhibitors targeting PD-L1, intended for use in combination with EP.
* Atezolizumab is PBS listed for the treatment of ES‑SCLC.
* Durvalumab is of the same drug class as atezolizumab, and durvalumab is seeking reimbursement for the same indication as atezolizumab.
  1. The ESC considered the nomination of atezolizumab in combination with EP as the comparator was appropriate given this regimen is currently PBS listed for the same indication and is the treatment most likely be replaced by listing of durvalumab.
  2. The submission also identified pembrolizumab as a potential near market comparator for ES-SCLC. The submission concluded, however, that given the primary endpoint in the KEYNOTE 604 trial, overall survival, was not met (the improvement in survival was not statistically significant), it was unlikely that pembrolizumab would be submitted to the PBAC for this indication in the near future.

*For more detail on PBAC’s view, see section 7 PBAC outcome.*

1. Consideration of the evidence

Sponsor hearing

* 1. There was no hearing for this item.

Consumer comments

* 1. The PBAC noted and welcomed the input from three organisations via the Consumer Comments facility on the PBS website, in support of the durvalumab submission. Comments from Lung Foundation Australia and Rare Cancers Australia noted the importance, to patients, of access to additional effective therapies for SCLC, even where there is no clinical difference between treatments. The comments noted that durvalumab was considered to improve overall survival, with a favourable side effect profile compared with chemotherapy alone.
  2. The Medical Oncology Group of Australia (MOGA) also expressed its support for the durvalumab submission. The PBAC noted that the MOGA presented a European Society for Medical Oncology Magnitude of Clinical Benefit Scale (ESMO-MCBS) for durvalumab, which was limited to 3 (out of a maximum of 5, where 5 and 4 represent the grades with substantial improvement)[[1]](#footnote-1), based on a comparison with chemotherapy alone in the CASPIAN trial.

Clinical trials

* 1. The submission was based on the CASPIAN trial (N=537), a Phase III, open label, randomised controlled trial, which directly compared durvalumab plus EP with EP alone. The indirect comparison against atezolizumab was based on CASPIAN as well as IMpower133, a double blind randomised controlled trial (N=403) comparing atezolizumab plus EP versus EP alone. Though CASPIAN was a three arm trial, the tremelimumab + durvalumab arm is not relevant to the submission (the N values are based on the two relevant arms of the CASPIAN trial).
  2. Details of the trials presented in the submission are provided in Table 2.

**Table 2: Trials and associated reports presented in the submission**

| Trial | Protocol title/ Publication title | Publication citation |
| --- | --- | --- |
| CASPIAN  NCT03043872 | A Phase III, Randomized, Multicenter, Open Label, Comparative Study to Determine the Efficacy of Durvalumab or Durvalumab and Tremelimumab in Combination With Platinum Based Chemotherapy for the First Line Treatment in Patients with Extensive stage Small Cell Lung Cancer (SCLC) (CASPIAN). Version 5, | 29 November 2019. |
| A Phase III, Randomized, Multicenter, Open Label, Comparative Study to Determine the Efficacy of Durvalumab or Durvalumab and Tremelimumab in Combination With Platinum Based Chemotherapy for the First Line Treatment in Patients with Extensive stage Small Cell Lung Cancer (SCLC) (CASPIAN). Edition 1,. | 5 September 2019 |
| Nishio M, Ji JH, Hotta K, Chiu CH, Lee JS, Azuma K, et al. Overall survival with first line durvalumab plus platinum etoposide in patients with extensive stage (ES) SCLC in CASPIAN: subgroup findings from Asia. | Annals of oncology. 2019;30:ix197‐ix8. |
| Özgüroğlu M, Goldman JW, Reinmuth N, Chen Y, Dvorkin M, Trukhin D, et al. First line durvalumab plus platinum etoposide in extensive stage (ES) SCLC: safety, pharmacokinetics (PK) and immunogenicity in CASPIAN. | Annals of oncology. 2019;30:xi66‐. |
| Paz Ares L, Chen Y, Reinmuth N, Hotta K, Trukhin D, Statsenko G, et al. PL02.11 Overall Survival with Durvalumab Plus Etoposide Platinum in First Line Extensive Stage SCLC: results from the CASPIAN Study. | Journal of Thoracic Oncology. 2019;14(10):S7‐S8. |
| Paz Ares L, Dvorkin M, Chen Y, Reinmuth N, Hotta K, Trukhin D, et al. Durvalumab plus platinum–etoposide versus platinum–etoposide in first line treatment of extensive stage small cell lung cancer (CASPIAN): a randomised, controlled, open label, phase 3 trial. | The Lancet. 2019; 394(10212): 1929 39. |
| Paz Ares L, Goldman JW, Garassino MC, Dvorkin M, Trukhin D, Statsenko G, et al. PD L1 expression, patterns of progression and patient reported outcomes (PROs) with durvalumab plus platinum etoposide in ES SCLC: Results from CASPIAN. | Annals of Oncology. 2019; 30:v928 v9. |
| Reinmuth N, Paz Ares L, Chen Y, Hotta K, Trukhin D, Statsenko G, et al. Caspian: OS results from a randomised phase 3 study of first line durvalumab ± tremelimumab + chemotherapy in ES SCLC. | Oncology Research and Treatment. 2020;43:115. |
| IMpower133  NCT02763579 | Califano R, Kazarnowicz A, Karaseva N, Sanchez A, Liu SV, Horn L, et al. IMpower133: patient reported outcomes (PROs) in a ph1/3 study of first line (1L) atezolizumab (atezo) 1 carboplatin 1 etoposide (CP/ET) in extensive stage SCLC (ES SCLC).. | Annals of Oncology. 2018;29:x20 |
| Horn L, Mansfield AS, Szczęsna A, Havel L, Krzakowski M, Hochmair MJ, et al. First Line Atezolizumab plus Chemotherapy in Extensive Stage Small Cell Lung Cancer. | New England journal of medicine. 2018;379(23):2220‐9. [Plus clinical study protocol & supp.material] |
| Horn L, Reck M, Mok TSK, Johnson M, Waterkamp D, Lam S, et al. A Phase III study of atezolizumab with carboplatin plus etoposide in patients with extensive stage small cell lung cancer (IMpower133). | Annals of Oncology. 2016;27:vi496. |
| Reck M et al. IMpower133: Updated overall survival (OS) analysis of first line (1L) atezolizumab (atezo) 1 carboplatin 1 etoposide in extensive stage SCLC (ES SCLC). | Annals of Oncology 2019; 30 (Supplement 5): v710–v717. Abstract 1736O. |
| Reck M et al. IMpower133: updated overall survival (OS) analysis of first line (1L) atezolizumab (atezo) + carboplatin + etoposide in extensive stage SCLC (ES SCLC). | European Society of Medical Oncology Annual Meeting, 2019. Barcelona, Spain. |
| Kawashima Y, Sugawara S, Atagi S, Akamatsu H, Sakai H, Okamoto I, et al. Subgroup Analysis of Japanese Patients in a Phase I/III Study of Atezolizumab in ES SCLC (IMpower133). | Annals of Oncology. 2019;30:vi114‐vi5. |
| Liu S, Mansfield A, Szczesna A, Havel L, Krzakowski M, Hochmair M, et al. IMpower133: primary PFS, OS and Safety in a PH1/3 Study of 1L Atezolizumab + Carboplatin + Etoposide in Extensive Stage SCLC. | Journal of thoracic oncology. 2018;13(10):S185‐S6. |
| Mansfield AS, Kazarnowicz A, Karaseva N, Sanchez A, De Boer R, Andric Z, et al. Safety and patient reported outcomes of atezolizumab, carboplatin, and etoposide in extensive stage small cell lung cancer (IMpower133): a randomized phase I/III trial. | Annals of oncology. 2020;31(2):310‐7. |
| Mansfield AS, Liu SV, Szczesna A, Havel L, Krakowski M, Hochmair MJ, et al. IMpower133: primary efficacy and safety + CNS related adverse events in a Ph1/3 study of first line (1L) atezolizumab (atezo) + carboplatin + etoposide in extensive stage SCLC (ES SCLC). | Cancer Research. 2019;79(13). |
| Mok TSK, Reck M, Horn L, Lam S, Shames DS, Liu J, et al. IMpower133: primary efficacy and safety + CNS related adverse events in a phase I/III study of first line (1L) atezolizumab + carboplatin + etoposide in extensive stage SCLC (ES SCLC). | Annals of oncology. 2018;29. |
| Nishio M, Sugawara S, Atagi S, Akamatsu H, Sakai H, Okamoto I, et al. Subgroup Analysis of Japanese Patients in a Phase III Study of Atezolizumab in Extensive stage Small cell Lung Cancer (IMpower133). | Clinical Lung Cancer. 2019. |
| Reck M, Liu SV, Mansfield AS, Mok TSK, Scherpereel A, Reinmuth N, et al. IMpower133: updated overall survival (OS) analysis of first line (1L) atezolizumab (atezo) 1 carboplatin 1 etoposide in extensive stage SCLC (ES SCLC). | Annals of Oncology. 2019;30:v710‐v1. |

Source: Table 2.2.1, pp18-19 of the submission.

* 1. The key features of the randomised trials are summarised in Table 3.

**Table 3: Key features of the included evidence – indirect comparison**

| Trial | N | Design/ duration | Risk of bias | Patient population | Outcomes | Use in modelled evaluation |
| --- | --- | --- | --- | --- | --- | --- |
| Durvalumab 1500 mg plus EP q3w (up to 4 cycles) followed by durvalumab 1500 q4w versus EP alone | | | | | | |
| CASPIAN | 537 | R, MC, OL  25.1 months\* | Low | ES-SCLC | OS, PFS | NA |
| Atezolizumab 1200 mg plus EP q3w (4-6 cycles) followed by atezolizumab 1200 mg q3w versus EP alone | | | | | | |
| IMpower133 | 403 | R, MC, DB, 22.9 months | Low | ES-SCLC | OS, PFS | NA |

Source: pp19-29 of the submission.

DB = double blind; ES-SCLC = extensive stage – small cell lung cancer; MC = multi-centre; NA = not applicable; OL = open label; OS = overall survival; PFS = progression-free survival; R = randomised; q3w = every 3 weeks; q4w = every 4 weeks.

\* median follow-up

* 1. Though CASPIAN was open label, which carries a risk of bias for secondary efficacy outcomes such as progression free survival and safety outcomes, the open label nature of the trial is unlikely to substantially affect the primary outcome of overall survival.

Comparative effectiveness

* 1. Table 4 presents the OS results of the CASPIAN and IMpower133 trials at the interim and final analyses of each trial.

**Table 4: Results of OS in the CASPIAN and IMpower133 trials**

| Outcome | CASPIAN | | | IMPower133 | | |
| --- | --- | --- | --- | --- | --- | --- |
| D + EP  268 | EP  269 | HR (95% CI)  P-value | A + EP  201 | EP  202 | HR (95% CI)  P-value |
| **Analysis** | **Interim (median 14.2 months follow‑up)** | | | **Interim (median 13.9 months follow‑up)** | | |
| Events, n/N (%) | 155/268 (57.8) | 181/269 (67.3) | **0.73 (0.59, 0.91)**  **0.0047** | 104 (51.7) | 134 (66.3) | **0.70 (0.55, 0.91)**  **0.0069** |
| Median OS, months (95% CI) | 13.0  (11.5, 14.8) | 10.3  (9.3, 11.2) | 12.3 (10.8, 15.9) | 10.3 (9.3, 11.3) |
| **Analysis** | **Final (median 25.1 months follow‑up)** | | | **Final (median 22.9 months follow‑up)** | | |
| Events, n/N (%) | 210/268 (78.4) | 231/269 (85.9) | **0.75 (0.63, 0.91)**  **0.0032** | At least 306 eventsa | | **0.76 (0.60, 0.95)**  **0.0154** |
| Median OS, months, (95% CI) | 12.9  (11.3, 14.7) | 10.5  (9.3, 11.2) | 12.3 (10.8,15.8) | 10.3 (9.3,11.3) |

Source: Table 2.5.1, p39 of the submission

Bold typography represents statistically significant differences

A = atezolizumab; CI = confidence interval; D= durvalumab; EP = etoposide plus platinum-based chemotherapy; HR = hazard ratio; OS = overall survival

a separate event rates not reported.

* 1. In the CASPIAN trial, durvalumab plus EP demonstrated a significantly improved overall survival compared with EP alone (HR 0.75 95% CI [0.63, 0.91] at final analysis).
  2. In the IMpower133 trial, atezolizumab plus carboplatin‑etoposide chemotherapy demonstrated a significantly improved overall survival compared with placebo plus carboplatin‑etoposide (HR 0.76 95% CI [0.60, 0.95] at final analysis).
  3. Figure 1 and Figure 2 present the OS Kaplan Meier curves for the CASPIAN and IMpower133 trials, respectively.

Figure 1: Kaplan–Meier curve for OS from the CASPIAN trial, final analysis (27 January 2020)

Figure 1: Kaplan–Meier curve for OS from the CASPIAN trial, final analysis (27 January 2020)

Source: Figure 2.5.1, p40 of the submission.

CI = confidence interval; D = durvalumab; EP = etoposide plus platinum based chemotherapy; mOS = median overall survival; OS = overall survival.

Figure 2: Kaplan–Meier curve for OS from the IMpower133 trial, final analysis (24 January 2019)

**Figure 2: Kaplan–Meier curve for OS from the IMpower133 trial, final analysis (24 January 2019)**

Source: Figure 2.5.2, p40 of the submission.

CI=confidence interval; CP = carboplatin; ET = etoposide; mo=months; OS = overall survival

* 1. Both durvalumab and atezolizumab in combination with EP were also associated with improvement in progression free survival compared to EP alone.
  2. Table 5 presents the result of the indirect comparison for OS and PFS.

**Table 5: Results of the indirect comparison – OS, PFS**

| Trial ID, outcome | Intervention arm  Median, months (95% CI) | Control arm  Median, months (95% CI) | HR (95% CI) |
| --- | --- | --- | --- |
| **Overall survival** |  |  |  |
| CASPIAN | 12.9 (11.3, 14.7) | 10.5 (9.3, 11.2) | **0.75 (0.63, 0.91)** |
| IMpower133 | 12.3 (10.8, 15.8) | 10.3 (9.3, 11.3) | **0.76 (0.60, 0.95)** |
| Indirect estimate of effect | | | 0.99 (0.73, 1.33) |
| **Progression free survival** |  |  |  |
| CASPIAN | 5.1 (4.7, 6.2) | 5.4 (4.8, 6.2) | **0.78 (0.65, 0.94)** |
| IMpower133 | 5.2 (4.4, 5.6) | 4.3 (4.2, 4.5) | **0.77 (0.62, 0.96)** |
| Indirect estimate of effect | | | 1.01 (0.76, 1.35) |

Source: Tables 2.6.2 – 2.6.4, pp55-56 of the submission.

Bold typography represents statistically significant differences

A = atezolizumab; CI = confidence interval; D = durvalumab; EP = etoposide plus platinum-based chemotherapy; HR = hazard ratio; OS = overall survival; PFS = progression free survival

* 1. The ESC considered there remains a small degree of uncertainty around the claim of non-inferiority, insofar as there is no international consensus for an acceptable non-inferiority margin in SCLC.
  2. The ESC noted that these trials were not prospectively powered to answer the question of non-inferiority between atezolizumab and durvalumab. However, the OS HRs and 95% CIs for both IMpower133 and CASPIAN were very similar. This, in combination with the similarity in trial design and patient populations, and mechanism of action of the two medicines, suggest that the claim of comparative effectiveness is likely reasonable.
  3. The PBAC noted that the atezolizumab dosing regimen in the IMpower133 trial was not the same as the dosing regimen compared in calculation of equi-effective doses as proposed in the pre-sub-committee response (PSCR).

Comparative harms

* 1. Table 6 presents key safety outcomes from the CASPIAN trial. Almost all patients in each trial experienced at least one AE. These were primarily Grade 1 or 2 in severity. There were no significant differences in the rate of most events (AEs) between arms with the exception of immune mediated AEs (imAEs), hyperthyroidism and hypothyroidism.

Table **6**: Key safety outcomes in the CASPIAN trial

| AE, n (%) | D+EP; N=265 | EP; N=265 | Within‑trial OR (95% CI) |
| --- | --- | --- | --- |
| Final analyses | | | |
| Any AE | 260 (98.11) | 258 (96.99) | 1.61 (0.52, 4.99) |
| Any AE, Grade 3/4 | 165 (62.26) | 167 (62.78) | 0.98 (0.69, 1.39) |
| TRAEs | 237 (89.43) | 239 (89.85) | 0.96 (0.55, 1.67) |
| Any SAE | 85 (32.08) | 97 (36.47) | 0.82 (0.57, 1.18) |
| imAEs requiring corticosteroid treatment | 53 (20.00) | 7 (2.63) | **9.26 (4.12, 20.79)** |
| AESI, any | 142 (53.58) | 106 (39.85) | **1.74 (1.23, 2.46)** |
| Rash, grade 1–2 | 2 (0.75) | 1 (0.38) | 1.98 (0.18, 21.85) |
| Rash, grade 3–4 | 0 (0) | 0 (0) | 1 (0.02, 50.78) |
| Hepatitis, grade 1–2 | 1 (0.38) | 0 (0) | 3.02 (0.12, 74.54) |
| Hepatitis, grade 3–4 | 1 (0.38) | 0 (0) | 3.02 (0.12, 74.54) |
| Hypothyroidism, grade 1–2a | 24 (9.06) | 2 (0.75) | **13.18 (3.08, 56.47)** |
| Hyperthyroidism, grade 1–2a | 14 (5.28) | 0 (0) | **30.74 (1.82, 518)** |
| Infusion‑related reaction, grade 1–2 | 0 (0) | 0 (0) | 1 (0.02, 50.78) |
| Infusion‑related reaction, grade 3–4 | 0 (0) | 0 (0) | 1 (0.02, 50.78) |
| Pneumonitis, grade 1–2 | 3 (1.13) | 0 (0) | 7.11 (0.37, 138.28) |
| Pneumonitis, grade 3–4 | 2 (0.75) | 1 (0.38) | 1.98 (0.18, 21.85) |
| Colitis, grade 1–2 | 1 (0.38) | 0 (0) | 3.02 (0.12, 74.54) |
| Colitis, grade 3–4 | 0 (0) | 0 (0) | 1 (0.02, 50.78) |
| Adrenal insufficiency, grade 1–2 | 2 (0.75) | 0 (0) | 5.06 (0.24, 105.85) |

Source: Table 2.5.4, p48 of the submission.

Bold typography represents statistically significant differences

AE = adverse event; AESI = adverse event of special interest; CI = confidence interval; D = durvalumab; EP = etoposide plus platinum based chemotherapy; OR = odds ratio; SAE = serious adverse event; TRAE = treatment-related adverse event

* 1. Table 7 presents the results of the indirect safety comparison.

Table **7**: Results of Indirect comparison of safety outcomes

| **AE, n (%)** | **CASPIAN** | | | **IMpower133** | | | **OR (CI)**  **D+EP vs.**  **A+EP** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **D+EP**  **N=265** | **EP**  **N=265** | **Within‑trial OR**  **(95% CI)** | **A+EP**  **N=198** | **EP**  **N=196** | **Within‑trial**  **OR**  **(95% CI)** |
| **Final analyses** | | | | | | | |
| Any AE | 260 (98.11) | 258 (96.99) | 1.61  (0.52, 4.99) | 198 (100) | 189 (96.4) | 15.72  (0.89, 277.11) | **0.1 (0.00, 2.24)** |
| Any AE, Grade 3/4 | 165 (62.26) | 167 (62.78) | 0.98  (0.69, 1.39) | 134 (67.7) | 124 (63.3) | 1.22  (0.8, 1.84) | **0.8 (0.47, 1.39)** |
| Any SAE | 85 (32.08) | 97 (36.47) | 0.82  (0.57, 1.18) | 77 (38.9) | 69 (35.2) | 1.17  (0.78, 1.76) | **0.7 (0.41, 1.21)** |

Source: Tables 2.6.2 – 2.6.4, pp55-56 of the submission.

Bold typography represents statistically significant differences

A = atezolizumab; AE = adverse event; CI = confidence interval; D = durvalumab; EP = etoposide plus platinum-based chemotherapy; OR = odds ratio; SAE = serious AE

* 1. The submission considered that because of the open‑label trial design, treatment‑related AEs (TRAEs) are inherently open to reporting bias. Despite this risk, the rate of TRAEs in each arm of the CASPIAN trial were similar (89.43% versus 89.85%). The open label nature of the trial made it more susceptible to selection, detection and performance biases. However, given the overall positive benefit risk assessment in the TGA clinical evaluation report (CER), and the similarity between atezolizumab and durvalumab on a pharmacological level, the lack of difference in safety signals would be expected. Although the open label nature of CASPIAN made such comparisons potentially biased, the ESC noted that no safety signals occurred that suggested a difference between atezolizumab and durvalumab. The PBAC considered that the safety of durvalumab is expected to be similar to atezolizumab, noting that they have the same mechanism of action.

Clinical claim

* 1. The submission described durvalumab as non-inferior to atezolizumab in efficacy and safety in patients with ES-SCLC.
  2. The ESC considered the clinical claim was adequately supported by the evidence presented in the submission, specifically the overall survival outcomes The ESC considered that, given the pharmacological similarity of the two regimens, and comparability of the trials, the clinical claim was reasonable, despite some uncertainty regarding the appropriate non-inferiority margin in SCLC.Though the PFS outcomes were susceptible to bias due to the lack of blinding in the CASPIAN trial, they were consistent with the OS results.
  3. With regard to the safety claim, the submission did not present comparisons of specific adverse events to adequately support the claim. The lack of blinding in the CASPIAN trial may have impacted on the indirect safety comparison. Overall, the absence of clear safety signals, the TGA CER consideration of a favourable benefit-risk profile, and the general similarity of durvalumab and atezolizumab on a pharmacological level suggest comparable safety. The ESC considered this conclusion reasonable.
  4. The PBAC considered that the claim of non-inferior comparative effectiveness was reasonable.
  5. The PBAC considered that the claim of non-inferior comparative safety was reasonable.

Economic analysis

* 1. The submission presented a cost-minimisation analysis against atezolizumab in combination with etoposide plus platinum based chemotherapy. This was consistent with the clinical claim of non-inferiority.
  2. Table 8 presents the summary of the cost-minimisation analysis (CMA).

**Table 8**: **Key components and assumptions of the cost-minimisation analysis**

|  |  |
| --- | --- |
| Component | Claim or assumption |
| Therapeutic claim: effectiveness | Based on evidence presented in the submission, effectiveness is assumed to be non-inferior to atezolizumab. |
| Therapeutic claim: safety | Based on evidence presented in the submission, safety is assumed to be non-inferior to atezolizumab. |
| Evidence base | Comparison of durvalumab and atezolizumab via EP as a common comparator (CASPIAN and IMPower133 trials). |
| Equi-effective doses | Durvalumab 1500 mg q3w with EP for up to 4 cycles then as monotherapy q4w until disease progression or unacceptable toxicity is equi-effective to atezolizumab 1200 mg q3w with EP for 4–6 cycles then as monotherapy q3w until disease progression or unacceptable toxicity. In the PSCR this was revised to atezolizumab 1200 mg q3w with EP for 4–6 cycles then as monotherapy 1680 mg q4w until disease progression or unacceptable toxicity. |
| Direct medicine costs | The submission stated that a SPA for durvalumab is requested, consistent with that for atezolizumab for ES‑SCLC. It is proposed that durvalumab be listed at an effective AEMP per vial that reflects the agreed equi‑effective doses for durvalumab and atezolizumab for the treatment of ES‑SCLC. |
| Other costs or cost offsets | None. |

Source: Table 3A.1.1, p67 of the submission. AEMP = Australian ex-manufacturer price; CMA = cost minimisation analysis; EP = etoposide plus platinum based chemotherapy; mg= milligram; ES-SCLC = extensive stage-small cell lung cancer; PSCR = pre-sub-committee response; q3w = every three weeks; q4w = every 4 weeks; SPA = special pricing agreement

* 1. The submission estimated equi-effective doses based on doses given in the CASPIAN and IMpower133 trials, as follows:
* Durvalumab 1500 mg every 3 weeks with EP for up to 4 cycles then as monotherapy every 4 weeks until disease progression or unacceptable toxicity

is equi-effective to

* Atezolizumab 1200 mg every 3 weeks with EP for 4–6 cycles then as monotherapy every 3 weeks until disease progression or unacceptable toxicity.
  1. The submission did not calculate cost-minimised published prices as it stated that this was not informative, and stated that a CMA based on effective prices can only be realised once the confidential effective AEMP for atezolizumab in ES-SCLC is incorporated. The submission included a spreadsheet for the purpose of calculating a cost-minimisation price once the atezolizumab price was made available. This calculation did not specifically rely on the description of equi-effective dosing above, but rather simply assumed an equal number of 1500 mg durvalumab doses and 1200 mg atezolizumab doses. This approach would implicitly assume a longer treatment duration of durvalumab to atezolizumab if more frequent atezolizumab dosing is incorporated. The ESC noted that the clinical evidence presented suggested similar PFS and safety which would suggest that treatment durations are likely to be similar.
  2. The submission noted that in March 2020, the PBAC recommended an additional 1,680 mg q4w dosing regimen for atezolizumab for the first-line treatment of patients with ES-SCLC for continuing treatment only. The 1,680 mg q4w dosing regimen was listed based on a cost-minimisation to the 1,200 mg q3w dose regimen. No clinical evidence was provided to the PBAC to compare the two flat dosing regimens in terms of efficacy and safety for ES-SCLC. The PBAC considered that the effectiveness and safety of the 1680 mg q4w dosing regimen is likely comparable to the 1200 mg q3w dosing regimen for ES-SCLC, based on pharmacokinetic modelling and exposure-response analysis of pooled data from 3 clinical studies in patients with metastatic urothelial cancer and non-small cell lung cancer (paragraph 6.2 atezolizumab Public Summary Document (PSD), March 2020 PBAC meeting). The ESC noted that the less frequent dosing of the q4w dosing regimen for atezolizumab is likely to become the preferred regimen in clinical practice.
  3. The PSCR proposed that the q4w dosage regimen for atezolizumab be used for determining the equi-effective doses, treatment course and equivalent price for durvalumab (1,500 mg durvalumab q4w = 1,680 mg atezolizumab q4w) beyond the induction phase. The ESC considered this was a reasonable basis for calculation of equi-effective doses as clinical outcomes and treatment durations are likely to be comparable. The ESC advised atezolizumab 1,200 q3w could also be considered equi-effective to durvalumab 1,500 mg q4w, assuming the same treatment duration beyond the induction phase. The ESC considered the following equi-effective doses were reasonable:
  + Durvalumab 1,500 mg every 3 weeks with EP for 4 cycles followed by durvalumab monotherapy 1,500 mg every 4 weeks for 6.2 cycles

is equi-effective to

* + Atezolizumab 1,200 mg every 3 weeks with EP for 4 cycles followed by atezolizumab monotherapy 1,680 mg every 4 weeks for 6.2 cycles
  1. In the final analysis of CASPIAN, the mean number of infusions for durvalumab was 10.2; the mean number of infusions was not reported for the final analysis of the IMpower133 trial. The submission considered that in clinical practice, the mean number of infusions of durvalumab is expected to be lower than for atezolizumab based on the 1,200 mg q3w dosing regimen for atezolizumab, which was used in the IMpower133 trial or the same based on the atezolizumab 1,680 mg q4w dosing regimen for the continuing treatment phase.
  2. The submission did not include cost offsets for administration, but stated that it may be reasonable to include a cost offset for administration because there are fewer infusions with the durvalumab q4w dosing regimen than for the atezolizumab 1,200 mg q3w regimen for continuing treatment. The ESC noted that no offsets for administration would be applicable if the q4w dosing schedules for atezolizumab and durvalumab are considered equi-effective.
  3. The submission also considered that there was no significant difference between the two PD‑L1 inhibitors in the rate of any AE, any AE Grade 3 or 4, or any SAE, and, therefore, listing durvalumab on the PBS was not expected to incur any additional AE costs.
  4. The proposed public DPMAs for durvalumab and the ES-SCLC indication were $'''''''''''''''''''' in public hospitals and $''''''''''''''''' in private hospitals. The proposed published price for durvalumab was higher than the published price for atezolizumab. The submission should have presented cost-minimisation calculations based on the published prices.

Drug cost/patient/course

* 1. The ESC noted that the costs per patient in Table 9 reflected the submission’s original assumption that the number of doses of durvalumab (1,500 mg) would be equal to the number of doses of atezolizumab (1,200 mg) which assumed a shorter duration of treatment for atezolizumab as dosing is more frequent under this regimen. Revised costs per patient per course based on the 1,680 mg atezolizumab dose regimen have been added below.

**Table 9: Drug cost per patient for proposed and comparator drugs (published prices)**

|  | Durvalumab  Trial dose and duration | Durvalumab CMA | Durvalumab  Financial estimates | Atezolizumab  Trial dose and duration | Atezolizumab  CMA | Atezolizumab  Financial estimates |
| --- | --- | --- | --- | --- | --- | --- |
| Dose | **1500mg** | **1500mg** | **1500mg** | **1200mg** | **1200mg** | **1200mg** |
| Number of doses **b** | **10.2** | **10.2** | **10.2** | **7** | **10.2** | **10.2** |
| Cost/patient/course (published prices)a | $''''''''''''''''''''''''''''' | | | $74,146.55 | | |
| Dose | **1500mg** | **1500mg** | **1500mg** | **1200 mg (4 cycles)**  **1680 mg (6.2 cycles)** | | |
| Assumed number of doses | **10.2** | **10.2** | **10.2** | **10.2** | | |
| Revised Cost/patient/course (published prices) | $'''''''''''''''''''''''''''' | | | $91,874.88 c | | |

Source: pp31-80 of the submission.

a weighted DPMA (durva: $'''''''''''''''''''''''''; atezo: $7,269.27) x 10.2;

b based on median number of doses in CASPIAN (10.2 doses) and the interim analysis of IMpower133 (7 doses).

c Weighted DPMA assuming 44.72% public and 55.28% private split for continuing scripts from financial estimates worksheet “4. Scripts affected”(atezo 1,200 mg: $7,269.27 x 4 + atezo 1,680 mg: $10,129 x 6.2)

Estimated PBS usage & financial implications

* 1. This submission was not considered by DUSC. The submission used an epidemiological approach to estimate financial implications.
  2. Though a market share approach is more appropriate in the case of a listed comparator, the submission considered that atezolizumab was listed too recently (1 March 2020) for a market share approach.The evaluation considered this was reasonable.
  3. The submission considered that the eligible population will be the same as for the listed atezolizumab and, therefore, wherever possible, data pertaining to the epidemiological steps was sourced from the PSDs for atezolizumab and ES-SCLC. Overall, it was reasonable to assume that the eligible population would be the same as that listed for atezolizumab.
  4. Table 10 presents a summary of the key inputs for the financial estimates.

**Table 10: Key inputs for financial estimates**

| Data | Value | Source | Comment |
| --- | --- | --- | --- |
| Eligible population | | | |
| Number of patients in Australia with lung cancer | Yr 1: 13,419\*  Yr 2: 13,762  Yr 3: 14,034  Yr 4: 14,305  Yr 5: 14,577  Yr 6: 14,882 | Taken from the atezolizumab ES-SCLC PSD, July 2019 | Reasonable |
| Proportion with small‑cell lung cancer | 11.75% | Derived from the atezolizumab ES‑SCLC PSD, July 2019 | Reasonable |
| Proportion with ES‑SCLC | 71.3% | Derived from the atezolizumab ES‑SCLC PSD, July 2019 | Reasonable |
| Proportion with LS‑SCLC | 28.7% | Inverse of proportion with ES‑SCLC | - |
| Proportion with LS‑SCLC developing ES‑SCLC | 74.75% | Average from literature search | Reasonable |
| Proportion with ES‑SCLC with WHO PS of 0 or 1 | 67.1% | Average from literature search | Reasonable |
| **Treatment utilisation** | | | |
| Uptake rate | Yr 1: 17%  Yr 2: 27%  Yr 3: 27%  Yr 4: 27%  Yr 5: 27%  Yr 6: 27% | Market share assumption based on durvalumab being second to market | This may be substantially underestimated given the availability of only one other potentially equi-effective therapy (atezolizumab). |
| Doses | 10.2 (4 in initial treatment and 6.2 in continuing) | Based on median number of doses from CASPIAN | This is only one of two possible atezolizumab treatment regimens. The alternative, a higher dose, administered less frequently may be more prescribed more often in practice due to greater convenience. |
| Scripts dispensed | 10.2 |
| **Costs** | | | |
| Proposed medicine | Public: $'''''''''''''''''''''''  Private: $''''''''''''''''''''''' | Proposed published prices: | The use of published prices is not informative. |
| Comparator | Public: $7,328.33  Private $7,188.27 | 11926Q, 11927R 11929W, 11928T |
| Patient copayment | $17.55 | Based on PBS data for utilisation of atezolizumab for non–small cell lung cancer; PBS item codes 11277M, 11284X, 11297N and 11309F | Reasonable |
| MBS costs | $0 | Assumes no additional administration or safety cost offsets consistent with cost minimisation. | It is uncertain whether in practice there would be no difference in administration costs and would depend on the atezolizumab regimen replaced. |

Source: Table 4.1.1, p74 of the submission, pp 75 -82 of the submission, and attached financial spreadsheet.

ES-SCLC = extensive stage small cell lung cancer; MBS = Medicare Benefits Schedule; PSD = Public Summary Document; WHO PS = World Health Organisation Performance status

\* This appears to be a typographical error with the correct number being “13,491.’ As this was not expected to make a substantial difference, for consistency of results and cross-validation, the typographical error has been maintained in the evaluation.

* 1. Table 11 presents a summary of the financial estimates.

**Table 11: Estimated use and financial implications (published prices)**

|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| --- | --- | --- | --- | --- | --- | --- |
| Estimated extent of use | | | | | | |
| Number of patients treated | ''''''''''''' | '''''''''1 | ''''''''''1 | ''''''''1 | ''''''''''1 | '''''''''1 |
| Number of scripts dispenseda | ''''''''''''''' | '''''''''''''2 | ''''''''''''2 | ''''''''''''''2 | '''''''''''''2 | '''''''''''''2 |
| Estimated financial implications of Durvalumab | | | | | | |
| Cost to PBS/RPBS less copayments | $'''''''''''''''''''''''''''''3 | $'''''''''''''''''''''''''4 | $'''''''''''''''''''''''''''''4 | $'''''''''''''''''''''''''4 | $''''''''''''''''''''''''4 | $''''''''''''''''''''''''''4 |
| Estimated financial implications for atezolizumab | | | | | | |
| Cost to PBS/RPBS less copayments | ‑$''''''''''''''''''''''''''''5 | ‑$'''''''''''''''''''''''''''3 | ‑$'''''''''''''''''''''''3 | ‑$'''''''''''''''''''''''''''''3 | ‑$'''''''''''''''''''''''''3 | ‑$''''''''''''''''''''''''''3 |
| Net financial implications | | | | | | |
| Net cost to PBS/RPBS | **$'''''''''''''''''''''5** | **$''''''''''''''''''''5** | **$'''''''''''''''''''''5** | **$''''''''''''''''''''5** | **$'''''''''''''''''''''5** | **$''''''''''''''''''''5** |

Source: Tables 4.2.1 to 4.4.1, pp76-84 of the submission. PBS = Pharmaceutical Benefits Scheme; RPBS = Repatriation Pharmaceutical Benefits Scheme

aAssuming 10.2 per year as estimated by the submission.

*The redacted values correspond to the following ranges:*

*1<500*

*2500 to <5000*

*3$20 million to <$30 million*

*4$30 million to <$40 million*

*5$10 million to <$20 million*

* 1. As in the CMA, the submission assumed trial-based dosing for atezolizumab and an equivalent number of doses. This was inconsistent with the equi-effective doses proposed in the PSCR. Financial estimates were based on published prices and the proposed published price for durvalumab was higher than the published price for atezolizumab.
  2. The financial estimates indicated a substantial additional cost based on the higher published price proposed for durvalumab. Though no financial implications based on effective prices have been presented, the PBAC considered it would be appropriate that use of equi-effective pricing would result in cost neutral estimates, as no cost offsets or additional costs are assumed.
  3. Overall, use of durvalumab may be underestimated given that uptake may have been substantially underestimated.
  4. 40 grandfathered patients have been included in the financial estimates. The submission anticipated that a durvalumab patient familiarisation programme (PFP) may be initiated for patients with ES‑SCLC following registration.

Financial Management – Risk Sharing Arrangements

* 1. This submission requested a confidential RSA and an SPA for durvalumab for the ES-SCLC indication which is separate to the RSA and SPA for the durvalumab Stage III non–small cell lung cancer (NSCLC) listing. No further details were provided. As durvalumab is expected to replace treatment with atezolizumab, the PBAC advised that durvalumab would need to join the existing RSA caps for atezolizumab for ES-SCLC.

*For more detail on PBAC’s view, see section 7 PBAC outcome.*

1. PBAC Outcome
   1. The PBAC recommended the listing of durvalumab, for use in combination with platinum-based chemotherapy plus etoposide, in patients with ES-SCLC, on the basis that it should be available only under special arrangements under section 100 – Efficient Funding of Chemotherapy. The PBAC’s recommendation for listing was based on, among other matters, its assessment, as described above, that the cost-effectiveness of durvalumab would be acceptable if it were cost-minimised against atezolizumab based on the following equi-effective doses:

* Durvalumab 1,500 mg every 3 weeks with EP for 4 cycles followed by durvalumab monotherapy 1,500 mg every 4 weeks for 6.2 cycles

is equi-effective to

* Atezolizumab 1,200 mg every 3 weeks with EP for 4 cycles followed by atezolizumab monotherapy 1,680 mg every 4 weeks for 6.2 cycles
  1. The PBAC recalled, in consideration of submissions for atezolizumab in ES-SCLC, it had noted that there is a clinical need for effective treatments in SCLC given its poor prognosis (Paragraph 7.2 atezolizumab PSD, July 2019 PBAC Meeting).
  2. The PBAC considered that it would be appropriate for the durvalumab restriction criteria to be identical to the atezolizumab restrictions for ES-SCLC.
  3. The PBAC considered the nomination of atezolizumab in combination with EP as the comparator was appropriate given this regimen is currently PBS listed for the same indication and is the treatment most likely be replaced by listing of durvalumab.
  4. The PBAC noted that the clinical evidence for non-inferiority was based on an indirect comparison of durvalumab and atezolizumab was using CASPIAN and IMpower133 trials, with EP alone as the common arm. The PBAC noted that the trial designs were similar and the overall survival in each of the active arms was similar, as was overall survival in the common comparator arms in each of the trials. Further, in each trial the active treatment arm demonstrated similar improvement over the control arm in terms of overall survival.
  5. The PBAC noted that the 3-weekly atezolizumab dosing regimen used in the IMpower133 trial was different to that in the equi-effective doses proposed in the PSCR, and did not reflect the dose likely to be used in clinical practice, where the less frequent (4-weekly) dosing regimen for atezolizumab is likely to become the preferred regimen. However the PBAC considered that the indirect comparison presented adequately supported the clinical claims.
  6. The submission’s clinical claim was that durvalumab is non-inferior to atezolizumab in efficacy and safety in patients with ES-SCLC. The PBAC considered that the clinical claim of non-inferior efficacy was reasonable given the similarity of trial design for CASPIAN and IMpower133, the common mechanism of action for atezolizumab and durvalumab, and the similar OS and PFS outcomes for atezolizumab and durvalumab in the trials. Although a robust comparison of AEs was difficult, the PBAC noted that no safety signals occurred that suggested a difference between atezolizumab and durvalumab. The PBAC considered that the safety of durvalumab is expected to be similar to atezolizumab, given the lack of safety signals and noting they have the same mechanism of action.
  7. The PBAC noted that the cost-minimisation approach must establish that the cost per patient for durvalumab would be no more than the cost per patient of atezolizumab. The cost per patient takes into account the mean equi-effective doses of the new intervention and the alternative therapy, and also accounts for any difference in the mean duration of treatment. The PBAC considered that the equi-effective doses outlined in paragraph 7.1 are an appropriate basis for calculation of the price for durvalumab as treatment durations are likely to be comparable for durvalumab and atezolizumab given the similar efficacy shown in trials and the common mechanism of action.
  8. The PBAC noted that the submission’s financial estimates indicated a substantial additional cost based on the higher published price proposed for durvalumab. Though no financial implications based on effective prices have been presented, the PBAC considered it would be appropriate that at the effective price, the use of the equi-effective doses as recommended would result in no additional cost to the PBS as no cost offsets or additional costs are assumed.
  9. As durvalumab is expected to replace treatment with atezolizumab, the PBAC advised that durvalumab would need to join the existing RSA caps for atezolizumab for ES-SCLC with no increase to the current caps, to ensure an equivalent level of cost-effectiveness for both products.
  10. The PBAC noted that its recommendation was on a cost-minimisation basis and advised that, because durvalumab is not expected to provide a substantial and clinically relevant improvement in efficacy, or reduction of toxicity, over atezolizumab, or not expected to address a high and urgent unmet clinical need given the presence of an alternative therapy, the criteria prescribed by the National Health (Pharmaceuticals and Vaccines – Cost Recovery) Regulations 2009 for Pricing Pathway A were not met.
  11. The PBAC noted that this submission is not eligible for an Independent Review as it is a positive recommendation.

**Outcome:**

Recommended

1. Recommended listing
   1. Add indication (Extensive-stage small cell lung cancer) as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| MEDICINAL PRODUCT  Form | | **PBS item code** | **Max. Amount** | **№.of Repeats** | **Manufacturer** |
| DURVALUMAB  Injection | | NEW (Public)  NEW (Private) | 1500 mg | 3 | AstraZeneca Pty Ltd |
| **Available brands**  **(medicinal product pack)** | | | | | |
| Imfinzi  (durvalumab 500 mg/10 mL injection, 10 mL vial) | | | | | |
| Imfinzi  (durvalumab 120 mg/2.4 mL injection, 2.4 mL vial) | | | | | |
|  | | | | | |
| **Restriction Summary 10205 / Treatment of Concept: 10206** *(same as atezolizumab, 11926Q / 11927R, current as of 1 November 2020)* | | | | | |
|  | **Category / Program:** Section 100 – Efficient Funding of Chemotherapy Public/Private hospitals | | | | |
| **Prescriber type:** Medical Practitioners | | | | |
| **Restriction Type:** Authority Required – Streamlined [10206] | | | | |
|  | **Administrative Advice:**  No increase in the maximum quantity or number of units may be authorised  No increase in the maximum number of repeats will be authorised  Special pricing arrangements apply | | | | |
|  | **Indication:** Extensive-stage small cell lung cancer | | | | |
|  | **Treatment Phase:** Initial treatment | | | | |
|  | **Clinical criteria:** | | | | |
|  | The condition must be previously untreated | | | | |
|  | **AND** | | | | |
|  | **Clinical criteria:** | | | | |
|  | Patient must have a WHO performance status of 0 or 1 | | | | |
|  | **AND** | | | | |
|  | **Clinical criteria:** | | | | |
|  | The treatment must be in combination with etoposide and a platinum‑based antineoplastic drug | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| MEDICINAL PRODUCT  Form | | **PBS item code** | **Max. Amount** | **№.of Repeats** | **Manufacturer** |
| DURVALUMAB  Injection | | NEW (Public)  NEW (Private) | 1500 mg | 5 | AstraZeneca Pty Ltd |
| **Available brands**  **(medicinal product pack)** | | | | | |
| Imfinzi  (durvalumab 500 mg/10 mL injection, 10 mL vial) | | | | | |
| Imfinzi  (durvalumab 120 mg/2.4 mL injection, 2.4 mL vial) | | | | | |
|  | | | | | |
| **Restriction Summary 10509 / Treatment of Concept: 10509** *(same as atezolizumab, 12076N / 12078Q current as of 1 November 2020)* | | | | | |
|  | **Category / Program:** Section 100 – Efficient Funding of Chemotherapy Public/Private hospitals | | | | |
| **Prescriber type:** Medical Practitioners | | | | |
| **Restriction Type:**  Authority Required – Streamlined [10509] | | | | |
|  | **Administrative Advice:**  No increase in the maximum quantity or number of units may be authorised  No increase in the maximum number of repeats will be authorised  Special pricing arrangements apply | | | | |
|  | **Indication:** Extensive-stage small cell lung cancer | | | | |
|  | **Treatment Phase:** Continuing treatment – 4 weekly treatment regimen | | | | |
|  | **Clinical criteria:** | | | | |
|  | The treatment must be as monotherapy | | | | |
|  | **AND** | | | | |
|  | **Clinical criteria:** | | | | |
|  | Patient must have previously received PBS subsidised treatment with this drug for this condition | | | | |
|  | **AND** | | | | |
|  | **Clinical criteria:** | | | | |
|  | Patient must not have developed disease progression while being treated with this drug for this condition | | | | |

***This restriction may be subject to further review. Should there be any changes made to the restriction the Sponsor will be informed.***

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. Cherny NI, Dafni U, Bogaerts J, et al: ESMO-Magnitude of Clinical Benefit Scale version 1.1. Annals of Oncology 28:2340-2366, 2017] [↑](#footnote-ref-1)