ATEZOLIZUMAB (Tecentriq)

INDICATION (ICD10) C34, C66, C67, C68

Check the most recent Blueteq eligibility criteria before prescribing. Blueteq registration required. (www.england.nhs.uk/publication/national-cancer-drugs-fund-list/) (ATE1) (ATE2) (ATE3) (ATE9) (ATE10)

1. Atezolizumab monotherapy for the treatment of PD-L1 positive or negative locally advanced or metastatic stage IIIB or IIIC or IV **non-small cell lung** cancer after chemotherapy. Has progressed either after treatment with at least two cycles of platinum-based doublet chemotherapy for stage IIIB or IIIC or IV or recurrent NSCLC after previous potentially curative local management or has progressed within 6 months of completing platinum-based adjuvant or neoadjuvant therapy or chemoradiation and if appropriate that has had all appropriate targeted treatments if the patient has a tumour which is positive for an actionable genomic change in relation to EGFR or ALK or ROS1 or MET exon 14 or KRAS G12C or RET or BRAF V600 status. Has not received prior treatment with an anti PD-1, anti-PD-L1, anti-PD-L2, anti-CD137 or anti-cytotoxic T-lymphocyte-associated antigen-4 (CTL-4) antibody unless discontinued or completed checkpoint inhibitor immunotherapy as part of adjuvant/neoadjuvant/maintenance therapy without disease progression and at least 6 months elapsed between the date of the last immunotherapy treatment and the date of first diagnosis of relapse with recurrent or metastatic disease. No symptomatically active brain metastases or leptomeningeal metastases. PS 0 or 1. (TA520)
2. Atezolizumab monotherapy for the first line treatment of locally advanced or metastatic IIIB or stage IIIC or stage IV **non-small cell lung** cancer which has PD-L1 expression in at least 50% of tumour cells or in at least 10% of tumour-infiltrating immune cells. Has not received prior treatment with an anti PD-1, anti-PD-L1, anti-PD-L2, anti-CD137 or anti-cytotoxic T-lymphocyte-associated antigen-4 (CTL-4) antibody unless discontinued or completed checkpoint inhibitor immunotherapy as part of adjuvant/neoadjuvant/maintenance therapy without disease progression and at least 6 months elapsed between the date of the last immunotherapy treatment and the date of first diagnosis of relapse with locally recurrent or metastatic disease. No symptomatically active brain metastases or leptomeningeal metastases. PS 0 or 1. (TA705)
3. Atezolizumab monotherapy as first line treatment of locally advanced (ie T4b any N or any T N2-3 disease) or metastatic (any T any N M1 disease).transitional cell carcinoma of the **urothelial** cancer in patients who are ineligible for cisplatin-based chemotherapy. PD-L1 expression of ≥5%. Not received previous chemotherapy for inoperable locally advanced or metastatic urothelial cancer. Either not received previous adjuvant chemotherapy, neoadjuvant chemotherapy or chemo-radiotherapy or, if previously treated with platinum-based chemotherapy whether as adjuvant chemotherapy or as neoadjuvant chemotherapy or with chemo-radiotherapy, has relapsed more than 12 months since completing the platinum-based chemotherapy. No symptomatically active brain metastases or leptomeningeal metastases. PS 0, 1 or 2. (TA739)
4. Atezolizumab monotherapy for locally advanced (i.e. T4b any N or any T N2-3 disease) or metastatic (any T any N M1 disease) **transitional cell** carcinoma of the urothelial cancer previously treated with platinum-based chemotherapy. Has either not received previous adjuvant chemotherapy, neoadjuvant chemotherapy or chemo-radiotherapy, or if previously treated with platinum-based chemotherapy whether as adjuvant chemotherapy or as neoadjuvant chemotherapy or with chemo-radiotherapy, has relapsed ≤12 months since completing the platinum-based chemotherapy. Has been disease progression during or following previous platinum-based combination chemotherapy for inoperable locally advanced or metastatic urothelial cancer. No symptomatically active brain metastases or leptomeningeal metastases. PS 0 or 1. (TA525)

5. Atezolizumab monotherapy for adjuvant treatment after complete tumour resection in adult patients with UICC/AJCC 8th edition stage IIB or IIIA or N2 only IIIB **non-small cell lung** cancer and with PD-L1 expression on >=50% of tumour cells and whose disease has not progressed on recently completed adjuvant platinum-based chemotherapy. Had M0 disease prior to surgery and has undergone a complete resection of the primary NSCLC with all surgical margins negative for tumour i.e. a R0 resection has taken place. Commenced adjuvant platinum-based chemotherapy within 12 weeks of resection of the NSCLC and received a maximum of 4 adjuvant platinum cycles, has been radiologically re-staged after completion of adjuvant chemotherapy and continues to have no evidence of residual or metastatic disease and no more than 12 weeks have elapsed since the start of the last cycle of adjuvant platinum-based chemotherapy. PS 0 or 1.

REGIMEN 21 day SC
Day 1 ATEZOLIZUMAB 1875mg SC

Atezolizumab 1875mg SC – Administer in the thigh over 7 minutes. Alternate thighs, administer at least 2.5cm from the old site

CYCLE FREQUENCY AND NUMBER OF CYCLES
Lung adjuvant only SC (not IV) - every 21 days up to a maximum 1 year (17 cycles)
Lung metastatic (previously treated) - every 21 days up to a maximum 2 years (35 cycles)
Lung metastatic (previously untreated) - every 21 days until progression
Lung - A formal medical review as to whether treatment with atezolizumab should continue or not will be scheduled to occur at least by the end of the second cycle of treatment.
Urothelial metastatic (previously treated with cisplatin) - every 21 days up to a maximum 2 years (35 cycles)
Urothelial metastatic (first line metastatic ineligible for cisplatin) - every 21 days until progression
Urothelial - A formal medical review as to whether treatment with atezolizumab should continue or not will be scheduled to occur at least by the end of the third cycle of treatment.

REGIMEN 28 day IV
Day 1 ATEZOLIZUMAB 1680mg in 250ml sodium chloride 0.9% IV infusion

Atezolizumab IV - The initial dose of Atezolizumab should be delivered over 60 minutes.
If the first infusion is tolerated without infusion-associated adverse events, the second infusion may be delivered over 30 minutes.
If the 30-minute infusion is well tolerated, all subsequent infusions may be delivered over 30 minutes.
For the first infusion, the patient's vital signs (heart rate, respiratory rate, blood pressure, and temperature) should be determined within 60 minutes before, during (every 15 minutes), and 30 minutes after the infusion.
For subsequent infusions, vital signs should be monitored within 60 minutes before infusion and at the end of the infusion. Patients will be informed about the possibility of delayed post-infusion symptoms and instructed to contact their study physician if they develop such symptoms.
Inflammation of the lung (pneumonitis) new or worsening cough, shortness of breath, and chest pain.

CYCLE FREQUENCY AND NUMBER OF CYCLES
Lung adjuvant - every 28 days up to a maximum 1 year (13 cycles)
Lung metastatic (previously treated) - every 28 days up to a maximum 2 years (26 cycles)
Lung metastatic (previously untreated) - every 28 days until progression
Lung - A formal medical review as to whether treatment with atezolizumab should continue or not will be scheduled to occur at least by the end of the second cycle of treatment.
Urothelial metastatic (previously treated with cisplatin) - every 28 days up to a maximum 2 years (26 cycles)
Urothelial metastatic (first line metastatic ineligible for cisplatin) - every 28 days until progression
Urothelial - A formal medical review as to whether treatment with atezolizumab should continue or not will be scheduled to occur at least by the end of the third cycle of treatment.

Can be given 3 weekly IV if necessary (see SPC for details)

ANTI-EMETICS
Low risk

CONCURRENT MEDICATION REQUIRED
None required

EXTRAVASATION AND TYPE OF LINE / FILTERS
Atezolizumab IV – neutral

Use of 0.2-5micron filter is optional
Peripheral line

INVESTIGATIONS
Blood results required before SACT administration
FBC, U&E and LFTs every cycle
Neutrophils x 10^9/L ≥1.5
Platelets x 10^9/L ≥100
Random blood glucose every cycle
Thyroid function baseline and every 1 to 2 cycles
Random cortisol baseline and every 1 to 2 cycles
Baseline weight

MAIN TOXICITES AND ADVERSE REACTIONS

Atezolizumab	Immune mediated pneumonitis Immune mediated hepatitis Immune mediated colitis Immune mediated endocrinopathies

INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS
(not exhaustive list check SPC/BNF/Stockleys)

Atezolizumab	-

DOSE MODIFICATIONS
Non-haematological
Atezolizumab
Immune-related adverse reactions refer to TV immune-oncology agent immune related adverse event clinical guideline for dose modifications.

Infusion-related reactions

Grade 1 or 2	Reduce infusion rate or interrupt. Treatment may be resumed when the event is resolved
Grade 3 or 4	Permanently discontinue Atezolizumab

Hepatic impairment
Atezolizumab
No dose adjustment is needed for patients with mild hepatic impairment. Atezolizumab has not been studied in patients with moderate or severe hepatic impairment.

Renal impairment
Atezolizumab
No dose adjustment is needed for patients with renal impairment.

REFERENCES
1. Rittmeyer, A et al; Lancet 2017; 289 (10066): 255–265 (NSCLC)
2. Balar, A et al ; Lancet 2017; 389 (10064): 67–76 (bladder)