#### 582 583

# Table 13: Laboratory Abnormalities Worsening from Baseline Occurring in ≥20% of Patients with SCLC Receiving TECENTRIO in IMpower133

Laboratory Abnormality	TECENTRIQ with Carboplatin and Etoposide <sup>2</sup>		Placeb Carboplatin a	o with nd Etoposide <sup>2</sup>
	All Grades <sup>1</sup> (%) <sup>2</sup>	Grades 3–4 <sup>1</sup> (%) <sup>2</sup>	All Grades <sup>1</sup> (%) <sup>2</sup>	Grades 3–4 <sup>1</sup> (%) <sup>2</sup>
Hematology				
Anemia	94	17	93	19
Neutropenia	73	45	76	48
Thrombocytopenia	58	20	53	17
Lymphopenia	46	14	38	11
Chemistry				
Hyperglycemia	67	10	65	8
Increased Alkaline Phosphatase	38	1	35	2
Hyponatremia	34	15	33	11
Hypoalbuminemia	32	1	30	0
Decreased TSH <sup>3</sup>	28	NA <sup>3</sup>	15	NA <sup>3</sup>
Hypomagnesemia	31	5	35	6
Hypocalcemia	26	3	28	5
Increased ALT	26	3	31	1
Increased AST	22	1	21	2
Increased Blood Creatinine	22	4	15	1
Hyperphosphatemia <sup>3</sup>	21	NA <sup>3</sup>	23	NA <sup>3</sup>
Increased TSH <sup>3</sup>	21	NA <sup>3</sup>	7	NA <sup>3</sup>

584 <sup>1</sup> Graded per NCI CTCAE v4.0 585

<sup>2</sup> Each test incidence is based on the number of patients who had both baseline and at least one on-study 586

laboratory measurement available: TECENTRIQ (range: 181-193); Placebo (range: 181-196)

587 <sup>3</sup>NA= Not applicable. NCI CTCAE v4.0 does not include these laboratories.

588

#### 589 Immunogenicity 6.2

590 As with all therapeutic proteins, there is a potential for immunogenicity. The detection of

591 antibody formation is highly dependent on the sensitivity and specificity of the assay.

592 Additionally, the observed incidence of antibody (including neutralizing antibody) positivity in

593 an assay may be influenced by several factors including assay methodology, sample handling,

594 timing of sample collection, concomitant medications, and underlying disease. For these reasons,

595 comparison of the incidence of antibodies to atezolizumab in the studies described above with

596 the incidence of antibodies in other studies or to other products may be misleading.

597 Among 565 patients with NSCLC in OAK, 30% tested positive for treatment-emergent anti-drug

598 antibodies (ADA) at one or more post-dose time points. The median onset time to ADA

599 formation was 3 weeks. The ability of these binding ADA to neutralize atezolizumab is

600 unknown. Patients who tested positive for treatment-emergent ADA also had decreased systemic

- 601 atezolizumab exposure [see Clinical Pharmacology (12.3)]. Exploratory analyses showed that
- 602 the subset of patients who were ADA positive by week 4 (21%; 118/560) appeared to have less
- 603 efficacy (effect on overall survival) as compared to patients who tested negative for treatment-
- 604 emergent ADA by week 4 [see Clinical Studies (14.2)]. The presence of ADA did not have a
- 605 clinically significant effect on the incidence or severity of adverse reactions.
- 606 Among 275 patients with urothelial carcinoma in IMvigor210 (Cohort 2), 42% tested positive for
- 607 treatment-emergent ADA at one or more post-dose time points. Among 111 patients in

- 608 IMvigor210 (Cohort 1), 48% tested positive for treatment-emergent ADA at one or more post-
- dose time points. Patients who tested positive for treatment-emergent ADA also had decreased
- 610 systemic atezolizumab exposures. The presence of ADA did not have a clinically significant
- 611 effect on the incidence or severity of adverse reactions.
- 612 Among 364 ADA-evaluable patients with NSCLC who received TECENTRIQ with
- bevacizumab, paclitaxel and carboplatin in IMpower150, 36% (n=132) tested positive for
- treatment-emergent ADA at one or more post-dose time points and 83% of these 132 patients
- tested ADA positive prior to receiving the second dose of atezolizumab. The ability of these
- 616 binding ADA to neutralize atezolizumab is unknown. Patients who tested positive for treatment-
- 617 emergent ADA had lower systemic atezolizumab exposure as compared to patients who were
- 618 ADA negative [see Clinical Pharmacology (12.3)]. The presence of ADA did not increase the
- 619 incidence or severity of adverse reactions [see Clinical Studies (14.2)].
- 620 Among 434 patients with TNBC in IMpassion130, 13% tested positive for treatment-emergent
- ADA at one or more post-dose time points. Among 178 patients in PD-L1 positive subgroup
- 622 with TNBC in IMpassion130, 12% tested positive for treatment-emergent ADA at one or more
- 623 post-dose time points. Patients who tested positive for treatment-emergent ADA had decreased
- 624 systemic atezolizumab exposure [see Clinical Pharmacology (12.3)]. There are insufficient
- numbers of patients in the PD-L1 positive subgroup with ADA to determine whether ADA alters
- the efficacy of atezolizumab. The presence of ADA did not have a clinically significant effect on
- 627 the incidence or severity of adverse reactions.

# 628 8 USE IN SPECIFIC POPULATIONS

# 629 8.1 Pregnancy

- 630 <u>Risk Summary</u>
- 631 Based on its mechanism of action [see Clinical Pharmacology (12.1)], TECENTRIQ can cause
- 632 fetal harm when administered to a pregnant woman. There are no available data on the use of633 TECENTRIQ in pregnant women.
- Animal studies have demonstrated that inhibition of the PD-L1/PD-1 pathway can lead to
- 635 increased risk of immune-related rejection of the developing fetus resulting in fetal death (see
- 636 *Data*). Advise females of reproductive potential of the potential risk to a fetus.
- 637 In the U.S. general population, the estimated background risk of major birth defects and
- miscarriage in clinically recognized pregnancies is 2% to 4% and 15% to 20%, respectively.
- 639 <u>Data</u>
- 640 Animal Data

641 Animal reproduction studies have not been conducted with TECENTRIQ to evaluate its effect on 642 reproduction and fetal development. A literature-based assessment of the effects on reproduction

- 643 demonstrated that a central function of the PD-L1/PD-1 pathway is to preserve pregnancy by
- 644 maintaining maternal immune tolerance to a fetus. Blockage of PD-L1 signaling has been shown
- 645 in murine models of pregnancy to disrupt tolerance to a fetus and to result in an increase in fetal
- 646 loss; therefore, potential risks of administering TECENTRIQ during pregnancy include increased
- rates of abortion or stillbirth. As reported in the literature, there were no malformations related to
- the blockade of PD-L1/PD-1 signaling in the offspring of these animals; however, immune-
- 649 mediated disorders occurred in PD-1 and PD-L1 knockout mice. Based on its mechanism of
- action, fetal exposure to atezolizumab may increase the risk of developing immune-mediated
- disorders or altering the normal immune response.

#### 652 8.2 Lactation

#### 653 <u>Risk Summary</u>

There is no information regarding the presence of atezolizumab in human milk, the effects on the

breastfed infant, or the effects on milk production. As human IgG is excreted in human milk, the

potential for absorption and harm to the infant is unknown. Because of the potential for serious

adverse reactions in breastfed infants from TECENTRIQ, advise women not to breastfeed during

treatment and for at least 5 months after the last dose.

#### 659 8.3 Females and Males of Reproductive Potential

660 <u>Pregnancy Testing</u>

661 Verify pregnancy status in females of reproductive potential prior to initiating TECENTRIQ [see 662 Use in Specific Populations (8.1)].

- 663 <u>Contraception</u>
- 664 *Females*

Based on its mechanism of action, TECENTRIQ can cause fetal harm when administered to a

666 pregnant woman [see Use in Specific Populations (8.1)]. Advise females of reproductive

- 667 potential to use effective contraception during treatment with TECENTRIQ and for at least
- 668 5 months following the last dose.
- 669 <u>Infertility</u>
- 670 Females

671 Based on animal studies, TECENTRIQ may impair fertility in females of reproductive potential 672 while receiving treatment [*see Nonclinical Toxicology* (13.1)].

# 673 8.4 Pediatric Use

- 674 The safety and effectiveness of TECENTRIQ have not been established in pediatric patients.
- 675 **8.5 Geriatric Use**
- 676 Of 2481 patients with urothelial carcinoma, lung cancer, and triple-negative breast cancer who
- were treated with TECENTRIQ in clinical studies, 45% were 65 years and over and 11% were
- 678 75 years and over. No overall differences in safety or effectiveness were observed between
- 679 patients aged 65 years or older, and younger patients.

# 680 11 DESCRIPTION

- 681 Atezolizumab is a programmed cell death ligand 1 (PD-L1) blocking antibody. Atezolizumab is
- an Fc-engineered, humanized, non-glycosylated IgG1 kappa immunoglobulin that has a
- 683 calculated molecular mass of 145 kDa.
- 684 TECENTRIQ (atezolizumab) injection for intravenous use is a sterile, preservative-free,
- colorless to slightly yellow solution in single-dose vials. Each 20 mL vial contains 1200 mg of
- atezolizumab and is formulated in glacial acetic acid (16.5 mg), L-histidine (62 mg),
- polysorbate 20 (8 mg), and sucrose (821.6 mg), with a pH of 5.8. Each 14 mL vial contains 840
- mg of atezolizumab and is formulated in glacial acetic acid (11.5 mg), L-histidine (43.4 mg),
- polysorbate 20 (5.6 mg), and sucrose (575.1 mg) with a pH of 5.8.

# 690 12 CLINICAL PHARMACOLOGY

# 691 12.1 Mechanism of Action

- 692 PD-L1 may be expressed on tumor cells and/or tumor infiltrating immune cells and can
- 693 contribute to the inhibition of the anti-tumor immune response in the tumor microenvironment.

- 694 Binding of PD-L1 to the PD-1 and B7.1 receptors found on T cells and antigen presenting cells 695 suppresses cytotoxic T-cell activity, T-cell proliferation and cytokine production.
- 696 Atezolizumab is a monoclonal antibody that binds to PD-L1 and blocks its interactions with both
- PD-1 and B7.1 receptors. This releases the PD-L1/PD-1 mediated inhibition of the immune
- response, including activation of the anti-tumor immune response without inducing antibody-
- 699 dependent cellular cytotoxicity. In syngeneic mouse tumor models, blocking PD-L1 activity
- resulted in decreased tumor growth.

# 701 **12.3 Pharmacokinetics**

- 702 Patients' exposure to atezolizumab increased dose proportionally over the dose range of 1 mg/kg
- 703 to 20 mg/kg, including a dose of 1200 mg administered every 3 weeks. The clearance (CV%)
- was 0.20 L/day (29%), the volume of distribution at steady state was 6.9 L, and the terminal half-
- life was 27 days. Steady state was achieved after 6 to 9 weeks following multiple doses. The
   systemic accumulation ratio for every 2 weeks administration and every 3 weeks administration
- 707 was 3.3- and 1.9- fold, respectively. Atezolizumab clearance was found to decrease over time,
- with a mean maximal reduction (CV%) from baseline value of approximately 17% (41%);
- 709 however, the decrease in clearance was not considered clinically relevant.
- 710 Specific Populations
- Age (21 to 89 years), body weight, sex, albumin levels, tumor burden, region or race, mild or
- moderate renal impairment [estimated glomerular filtration rate (eGFR) 30 to 89 mL/min/1.73
- 713 m<sup>2</sup>], mild hepatic impairment (bilirubin  $\leq$  ULN and AST > ULN or bilirubin > 1 to  $1.5 \times$  ULN
- and any AST), level of PD-L1 expression, or performance status had no clinically significant
- effect on the systemic exposure of atezolizumab. In OAK, IMpower150 (TECENTRIQ,
- bevacizumab, paclitaxel, carboplatin arm only), and IMpassion130 (TECENTRIQ and paclitaxel
- 717 protein-bound) atezolizumab clearance in patients who tested positive for treatment-emergent
- anti-drug antibodies (ADA) was 25%, 18%, and 22% higher, respectively, as compared to
- 719 clearance in patients who tested negative for treatment-emergent ADA.
- The effect of severe renal impairment or moderate or severe hepatic impairment on the
- 721 pharmacokinetics of atezolizumab is unknown.
- 722 Drug Interaction Studies
- The drug interaction potential of atezolizumab is unknown.

# 724 13 NONCLINICAL TOXICOLOGY

# 725 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

- No studies have been performed to test the potential of atezolizumab for carcinogenicity orgenotoxicity.
- Animal fertility studies have not been conducted with atezolizumab; however, an assessment of
- the male and female reproductive organs was included in a 26-week, repeat-dose toxicity study
- in cynomolgus monkeys. Weekly administration of atezolizumab to female monkeys at the
- highest dose tested caused an irregular menstrual cycle pattern and a lack of newly formed
- corpora lutea in the ovaries. This effect occurred at an estimated AUC approximately 6 times the
- AUC in patients receiving the recommended dose and was reversible. There was no effect on the
- male monkey reproductive organs.

# 735 **13.2 Animal Toxicology and/or Pharmacology**

- 736 In animal models, inhibition of PD-L1/PD-1 signaling increased the severity of some infections
- and enhanced inflammatory responses. M. tuberculosis-infected PD-1 knockout mice exhibit
- markedly decreased survival compared with wild-type controls, which correlated with increased

- bacterial proliferation and inflammatory responses in these animals. PD-L1 and PD-1 knockout
- mice and mice receiving PD-L1 blocking antibody have also shown decreased survival following
- 741 infection with lymphocytic choriomeningitis virus.

#### 742 14 CLINICAL STUDIES

#### 743 14.1 Urothelial Carcinoma

#### 744 Cisplatin-Ineligible Patients with Locally Advanced or Metastatic Urothelial Carcinoma

745 The efficacy of TECENTRIO was investigated in IMvigor210 (Cohort 1) (NCT02951767), a 746 multicenter, open-label, single-arm trial that included 119 patients with locally advanced or 747 metastatic urothelial carcinoma who were ineligible for cisplatin-containing chemotherapy and 748 were either previously untreated or had disease progression at least 12 months after neoadjuvant 749 or adjuvant chemotherapy. Patients were considered cisplatin-ineligible if they met any one of 750 the following criteria at study entry: impaired renal function [creatinine clearance (CLcr) of 30 to 751 59 mL/min], Eastern Cooperative Oncology Group (ECOG) performance status (PS) of 2, 752 hearing loss of  $\geq 25$  decibels (dB) at two contiguous frequencies, or Grades 2-4 peripheral 753 neuropathy. This study excluded patients who had: a history of autoimmune disease; active or 754 corticosteroid-dependent brain metastases; administration of a live, attenuated vaccine within 755 28 days prior to enrollment; or administration of systemic immunostimulatory agents within 6 756 weeks or systemic immunosuppressive medications within 2 weeks prior to enrollment. Patients 757 received TECENTRIQ 1200 mg as an intravenous infusion every 3 weeks until unacceptable 758 toxicity or disease progression. Tumor response assessments were conducted every 9 weeks for 759 the first 54 weeks and every 12 weeks thereafter. Major efficacy outcome measures included 760 confirmed overall response rate (ORR) as assessed by independent review facility (IRF) using

- 761 Response Evaluation Criteria in Solid Tumors (RECIST v1.1), duration of response (DoR) and
- 762 overall survival (OS).
- In this study, the median age was 73 years, 81% were male, and 91% were White. Thirty-five
- percent of patients had non-bladder urothelial carcinoma and 66% had visceral metastases.
- Eighty percent of patients had an ECOG PS of 0 or 1. Reasons for ineligibility for cisplatin-
- containing chemotherapy were: 70% had impaired renal function, 20% had an ECOG PS of 2,
- 14% had a hearing loss of  $\geq$  25dB, and 6% had Grades 2-4 peripheral neuropathy at baseline.
- 768 Twenty percent of patients had disease progression following prior platinum-containing
- neoadjuvant or adjuvant chemotherapy.
- 770 Tumor specimens were evaluated prospectively using the VENTANA PD-L1 (SP142) Assay at a
- central laboratory, and the results were used to define subgroups for pre-specified analyses. Of
- the 119 patients, 27% were classified as having PD-L1 expression of  $\geq$  5% (defined as PD-L1
- stained tumor-infiltrating immune cells [IC] covering  $\geq$  5% of the tumor area). The remaining
- 774 73% of patients were classified as having PD-L1 expression of < 5% (PD-L1 stained tumor-
- infiltrating IC covering < 5% of the tumor area).
- Among the 32 patients with PD-L1 expression of  $\geq$  5%, median age was 67 years, 81% were
- male, 19% female, and 88% were White. Twenty-eight percent of patients had non-bladder
- vrothelial carcinoma and 56% had visceral metastases. Seventy-two percent of patients had an
- ECOG PS of 0 or 1. Reasons for ineligibility for cisplatin-containing chemotherapy were: 66%
- had impaired renal function, 28% had an ECOG PS of 2, 16% had a hearing loss  $\ge$  25 dB, and
- 781 9% had Grades 2-4 peripheral neuropathy at baseline. Thirty-one percent of patients had disease
- 782 progression following prior platinum-containing neoadjuvant or adjuvant chemotherapy.
- 783 Confirmed ORR in all patients and the two PD-L1 subgroups are summarized in Table 14. The
- median follow-up time for this study was 14.4 months. In 24 patients with disease progression
- following neoadjuvant or adjuvant therapy, the ORR was 33% (95% CI: 16%, 55%).

	All Patients	PD-L1 Expression Subgroups			
	N = 119	PD-L1 Expression of < 5% in ICs <sup>1</sup> N = 87	PD-L1 Expression of ≥ 5% in ICs <sup>1</sup> N = 32		
Number of IRF-assessed Confirmed Responders	28	19	9		
ORR % (95% CI)	23.5% (16.2, 32.2)	21.8% (13.7, 32)	28.1% (13.8, 46.8)		
Complete Response (CR) (%)	6.7%	6.9%	6.3%		
Partial Response (PR) (%)	16.8%	14.9%	21.9%		
Median DoR, months	NR	NR	NR		
(range)	(3.7, 16.6+)	(3.7, 16.6+)	(8.1, 15.6+)		
NR = Not reached + Denotes a censored value					

<sup>1</sup> PD-L1 expression in tumor-infiltrating immune cells (ICs)

787

788 IMvigor130 (NCT02807636) is an ongoing multicenter, randomized study in previously

virtual and the static uncertain of the static uncerta

chemotherapy. The study contains three arms: TECENTRIQ monotherapy, TECENTRIQ with

platinum-based chemotherapy (i.e., cisplatin or carboplatin with gemcitabine), and platinum-

based chemotherapy alone (comparator). Both cisplatin-eligible and cisplatin-ineligible patients
 are included in the study. Tumor specimens were evaluated prospectively using the VENTANA

are included in the study. Tumor specimens were evaluated prospectively using the VENTANA
 PD-L1 (SP142) Assay at a central laboratory. The independent Data Monitoring Committee

(iDMC) for the study conducted a review of early data and found that patients classified as

having PD-L1 expression of <5% when treated with TECENTRIQ monotherapy had decreased

survival compared to those who received platinum-based chemotherapy. The iDMC

recommended closure of the monotherapy arm to further accrual of patients with low PD-L1

expression, however, no other changes were recommended for the study, including any change

800 of therapy for patients who had already been randomized to and were receiving treatment in the

801 monotherapy arm.

802 Previously Treated Locally Advanced or Metastatic Urothelial Carcinoma

803 The efficacy of TECENTRIQ was investigated in IMvigor210 (Cohort 2) (NCT02108652), a

804 multicenter, open-label, single-arm trial that included 310 patients with locally advanced or

805 metastatic urothelial carcinoma who had disease progression during or following a platinum-

806 containing chemotherapy regimen or who had disease progression within 12 months of treatment

807 with a platinum-containing neoadjuvant or adjuvant chemotherapy regimen. This study excluded

808 patients who had: a history of autoimmune disease, active or corticosteroid-dependent brain

809 metastases, administration of a live, attenuated vaccine within 28 days prior to enrollment, or

administration of systemic immunostimulatory agents within 6 weeks or systemic

811 immunosuppressive medications within 2 weeks prior to enrollment. Patients received

812 TECENTRIQ 1200 mg intravenously every 3 weeks until unacceptable toxicity or either

radiographic or clinical progression. Tumor response assessments were conducted every 9 weeks

814 for the first 54 weeks and every 12 weeks thereafter. Major efficacy outcome measures included

815 confirmed ORR as assessed by IRF using RECIST v1.1 and DoR.

816 In this study, the median age was 66 years, 78% were male, 91% of patients were White.

817 Twenty-six percent had non-bladder urothelial carcinoma and 78% of patients had visceral

- 818 metastases. Sixty-two percent of patients had an ECOG PS of 1 and 35% of patients had a
- 819 baseline CLcr < 60 mL/min. Nineteen percent of patients had disease progression following prior
- 820 platinum-containing neoadjuvant or adjuvant chemotherapy. Forty-one percent of patients had
- received 2 or more prior systemic regimens in the metastatic setting. Seventy-three percent of
- patients received prior cisplatin, 26% had prior carboplatin, and 1% were treated with other
- 823 platinum-based regimens.
- 824 Tumor specimens were evaluated prospectively using the VENTANA PD-L1 (SP142) Assay at a
- 825 central laboratory and the results were used to define subgroups for pre-specified analyses. Of
- the 310 patients, 32% were classified as having PD-L1 expression of  $\geq$  5%. The remaining 68%
- 827 of patients were classified as having PD-L1 expression of < 5%.
- 828 Confirmed ORR and median DOR in all patients and the two PD-L1 subgroups are summarized
- 829 in Table 15. The median follow-up time for this study was 32.9 months. In 59 patients with
- disease progression following neoadjuvant or adjuvant therapy, the ORR was 22.0% (95% CI:
- 831 12.3%, 34.7%).
- 832

#### Table 15: Efficacy Results in IMvigor210 (Cohort 2)

	All Patients	PD-L1 Expression Subgroups			
	N = 310	PD-L1 Expression of < 5% in IC <sup>1</sup> N = 210	PD-L1 Expression of ≥ 5% in IC <sup>1</sup> N = 100		
Number of IRF-assessed Confirmed Responders	46	20	26		
ORR % (95% CI)	14.8% (11.2, 19.3)	9.5% (5.9, 14.3)	26% (17.7, 35.7)		
Complete Response (CR) (%)	5.5%	2.4%	12.0%		
Partial Response (PR) (%)	9.4%	7.1%	14.0%		
Median DOR, months	27.7	20.9	29.7		
(range)	(2.1+, 33.4+)	(2.1+, 33.4+)	(4.2, 31.2+)		
<ul> <li>+ Denotes a censored value</li> <li><sup>1</sup> PD-L1 expression in tumor-infiltrating immune cells (IC)</li> </ul>					

#### 833

# 834 **14.2 Non-Small Cell Lung Cancer**

#### 835 <u>Metastatic Chemotherapy-Naive Non-Squamous NSCLC</u>

- 836 The efficacy of TECENTRIQ with bevacizumab, paclitaxel, and carboplatin was evaluated in
- 837 IMpower150 (NCT02366143), a multicenter, international, randomized (1:1:1), open-label trial
- in 1202 patients with metastatic non-squamous NSCLC. IMpower150 enrolled patients with
- stage IV non-squamous NSCLC who had received no prior chemotherapy for metastatic disease,
- but could have received prior EGFR or ALK kinase inhibitor if appropriate, regardless of PD-L1
- 841 or T-effector gene (tGE) status and ECOG performance status 0 or 1. The trial excluded patients
- 842 with a history of autoimmune disease, administration of a live attenuated vaccine within 28 days
- 843 prior to randomization, active or untreated CNS metastases, administration of systemic
- 844 immunostimulatory agents within 4 weeks or systemic immunosuppressive medications within 2
- 845 weeks prior to randomization, or clear tumor infiltration into the thoracic great vessels or clear
- 846 cavitation of pulmonary lesions as seen on imaging.
- 847 Randomization was stratified by sex, presence of liver metastases, and PD-L1 expression status
- 848 on tumor cells (TC) and tumor-infiltrating immune cells (IC) as follows: TC3 and any IC vs.

- TC0/1/2 and IC2/3 vs. TC0/1/2 and IC0/1. Patients were randomized to one of the following
   three treatment arms.
- Arm A: TECENTRIQ 1200 mg, paclitaxel 175 mg/m<sup>2</sup> or 200 mg/m<sup>2</sup> and carboplatin AUC 6
   mg/mL/min on Day 1 of each 21-day cycle for a maximum of 4 or 6 cycles
- Arm B: TECENTRIQ 1200 mg, bevacizumab 15 mg/kg, paclitaxel 175 mg/m<sup>2</sup> or 200 mg/m<sup>2</sup>, and carboplatin AUC 6 mg/mL/min on Day 1 of each 21-day cycle for a maximum of 4 or 6 cycles
- Arm C: bevacizumab 15 mg/kg, paclitaxel 175 mg/m<sup>2</sup> or 200 mg/m<sup>2</sup>, and carboplatin AUC 6 mg/mL/min on Day 1 of each 21-day cycle for a maximum of 4 or 6 cycles
- Patients who had not experienced disease progression following the completion or cessation of
   platinum-based chemotherapy, received:
- Arm A: TECENTRIQ 1200 mg intravenously on Day 1 of each 21-day cycle until disease
   progression or unacceptable toxicity
- Arm B: TECENTRIQ 1200 mg and bevacizumab 15 mg/kg intravenously on Day 1 of each
   21-day cycle until disease progression or unacceptable toxicity
- Arm C: bevacizumab 15 mg/kg intravenously on Day 1 of each 21-day cycle until disease
   progression or unacceptable toxicity
- 866 Tumor assessments were conducted every 6 weeks for the first 48 weeks following Cycle 1, Day
- 867 1 and then every 9 weeks thereafter. Tumor specimens were evaluated prior to randomization for
- 868 PD-L1 tumor expression using the VENTANA PD-L1 (SP142) assay at a central laboratory.
- 869 Tumor tissue was collected at baseline for expression of tGE signature and evaluation was
- 870 performed using a clinical trial assay in a central laboratory prior to the analysis of efficacy
- 871 outcome measures.
- 872 The major efficacy outcome measures for comparison of Arms B and C were progression free
- 873 survival (PFS) by RECIST v1.1 in the tGE-WT (patients with high expression of T-effector gene
- signature [tGE], excluding those with EGFR- and ALK-positive NSCLC [WT]) and in the ITT-
- 875 WT subpopulations and overall survival (OS) in the ITT-WT subpopulation. Additional efficacy
- outcome measures for comparison of Arms B and C or Arms A and C were PFS and OS in the
- 877 ITT population, OS in the tGE-WT subpopulation, and ORR/DoR in the tGE-WT and ITT-WT
- 878 subpopulations.
- A total of 1202 patients were enrolled across the three arms of whom 1045 were in the ITT-WT
- subpopulation and 447 were in the tGE-WT subpopulation. The demographic information is
- 881 limited to the 800 patients enrolled in Arms B and C where efficacy has been demonstrated. The
- median age was 63 years (range: 31 to 90), and 60% of patients were male. The majority of
- patients were White (82%), 13% of patients were Asian, 10% were Hispanic, and 2% of patients
- 884 were Black. Clinical sites in Asia (enrolling 13% of the study population) received paclitaxel at a
- dose of 175 mg/m<sup>2</sup> while the remaining 87% received paclitaxel at a dose of 200 mg/m<sup>2</sup>.
- 886 Approximately 14% of patients had liver metastases at baseline, and most patients were current
- or previous smokers (80%). Baseline ECOG performance status was 0 (43%) or 1 (57%). PD-L1 was  $TC_{2}^{(2)}$  and any IC in 12%.  $TC_{2}^{(1)}$  and  $IC_{2}^{(2)}$  in 12%. and  $IC_{2}^{(2)}$  in 12%.
- was TC3 and any IC in 12%, TC0/1/2 and IC2/3 in 13%, and TC0/1/2 and IC0/1 in 75%. The
   demographics for the 696 patients in the ITT-WT subpopulation were similar to the ITT
- population except for the absence of patients with EGFR- or ALK-positive NSCLC.
- 891 The trial demonstrated a statistically significant improvement in PFS between Arms B and C in
- both the tGE-WT and ITT-WT subpopulations, but did not demonstrate a significant difference
- for either subpopulation between Arms A and C based on the final PFS analyses. In the interim
- analysis of OS, a statistically significant improvement was observed for Arm B compared to
- 895 Arm C, but not for Arm A compared to Arm C. Efficacy results for the ITT-WT subpopulation
- are presented in Table 16 and Figure 1.

Tał	ole	16:	Efficacy	<b>Results</b>	in	ITT	-WT	Pop	oulation	in	IM	power1	15(	)

	Arm C: Bevacizumab, Paclitaxel and Carboplatin	Arm B: TECENTRIQ with Bevacizumab, Paclitaxel, and	Arm A: TECENTRIQ with Paclitaxel, and Carboplatin	
	N = 337	Carboplatin N = 359	N = 349	
<b>Overall Survival</b> <sup>1</sup>				
Deaths (%)	197 (59%)	179 (50%)	179 (51%)	
Median, months	14.7	19.2	19.4	
(95% CI)	(13.3, 16.9)	(17.0, 23.8)	(15.7, 21.3)	
Hazard ratio <sup>2</sup> (95% CI)		0.78 (0.64, 0.96)	0.84 (0.72, 1.08)	
p-value <sup>3</sup>		$0.016^4$	$0.204^{5}$	
<b>Progression-Free Survival</b> <sup>6</sup>				
Number of events (%)	247 (73%)	247 (69%)	245 (70%)	
Median, months	7.0	8.5	6.7	
(95% CI)	(6.3, 7.9)	(7.3, 9.7)	(5.6, 6.9)	
Hazard ratio <sup>2</sup> (95% CI)		0.71 (0.59, 0.85)	0.94 (0.79, 1.13)	
p-value <sup>3</sup>		0.00027	0.5219	
<b>Objective Response Rate</b> <sup>6</sup>				
Number of responders (%)	142 (42%)	196 (55%)	150 (43%)	
(95% CI)	(37, 48)	(49, 60)	(38, 48)	
Complete response	3 (1%)	14 (4%)	9 (3%)	
Partial response	139 (41%)	182 (51%)	141 (40%)	
<b>Duration of Response</b> <sup>6</sup>	n = 142	n = 196	n = 150	
Median (months)	6.5	10.8	9.5	
(95% CI)	(5.6, 7.6)	(8.4, 13.9)	(7.0, 13.0)	

<sup>1</sup>Based on OS interim analysis .

<sup>2</sup>Stratified by sex, presence of liver metastases, and PD-L1 expression status on TC and IC

<sup>3</sup>Based on the stratified log-rank test compared to Arm C

<sup>4</sup>Compared to the allocated  $\alpha$ =0.0174 (two sided) for this interim analysis.

<sup>5</sup>Compared to the allocated  $\alpha$ =0.0128 (two sided) for this interim analysis.

<sup>6</sup>As determined by independent review facility (IRF) per RECIST v1.1 (Response Evaluation Criteria in Solid Tumors v1.1) <sup>7</sup>Compared to the allocated  $\alpha$ =0.006 (two sided) for the final PFS analysis.

CI=confidence interval



899

- 900 Exploratory analyses showed that the subset of patients in the four drug regimen arm who were
- ADA positive by week 4 (30%) appeared to have similar efficacy (effect on overall survival) as
- 902 compared to patients who tested negative for treatment-emergent ADA by week 4 (70%) [see
- 903 Adverse Reactions (6.2), Clinical Pharmacology (12.3)]. In an exploratory analysis, propensity
- score matching was conducted to compare ADA positive patients in the TECENTRIQ,
- 905 bevacizumab, paclitaxel, and carboplatin arm with a matched population in the bevacizumab,
- 906 paclitaxel, and carboplatin arm. Similarly ADA negative patients in the TECENTRIQ,
- 907 bevacizumab, paclitaxel, and carboplatin arm were compared with a matched population in the
- 908 bevacizumab, paclitaxel, and carboplatin arm. Propensity score matching factors were: baseline
- 909 sum of longest tumor size (BSLD), baseline ECOG, baseline albumin, baseline LDH, sex, tobacco
- 910 history, metastatic site, TC level, and IC level. The hazard ratio comparing the ADA-positive
- 911 subgroup with its matched control was 0.69 (95% CI: 0.44, 1.07). The hazard ratio comparing the
- ADA-negative subgroup with its matched control was 0.64 (95% CI: 0.46, 0.90).
- 913 Previously Treated Metastatic NSCLC
- 914 The efficacy of TECENTRIQ was evaluated in a multicenter, international, randomized (1:1),
- 915 open-label study (OAK; NCT02008227) conducted in patients with locally advanced or
- 916 metastatic NSCLC whose disease progressed during or following a platinum-containing regimen.
- 917 Patients with a history of autoimmune disease, symptomatic or corticosteroid-dependent brain
- 918 metastases, or requiring systemic immunosuppression within 2 weeks prior to enrollment were
- 919 ineligible. Randomization was stratified by PD-L1 expression tumor-infiltrating immune cells
- 920 (IC), the number of prior chemotherapy regimens (1 vs. 2), and histology (squamous vs. non-
- 921 squamous).
- 922 Patients were randomized to receive TECENTRIQ 1200 mg intravenously every 3 weeks until
- 923 unacceptable toxicity, radiographic progression, or clinical progression or docetaxel 75  $mg/m^2$
- 924 intravenously every 3 weeks until unacceptable toxicity or disease progression. Tumor
- 925 assessments were conducted every 6 weeks for the first 36 weeks and every 9 weeks thereafter.
- 926 The major efficacy outcome measure was overall survival (OS) in the first 850 randomized
- patients and OS in the subgroup of patients with PD-L1-expressing tumors (defined as  $\geq 1\%$  PD-
- 928 L1 expression on tumor cells [TC] or immune cells [IC]). Additional efficacy outcome measures

- 929 were OS in all randomized patients (n = 1225), OS in subgroups based on PD-L1 expression,
- 930 overall response rate (ORR), and progression free survival as assessed by the investigator per 931 PECIST v 1 1
- 931 RECIST v.1.1.
- Among the first 850 randomized patients, the median age was 64 years (33 to 85 years) and 47%
- 933 were  $\geq 65$  years old; 61% were male; 70% were White and 21% were Asian; 15% were current
- smokers and 67% were former smokers; and 37% had baseline ECOG PS of 0 and 63% had a
- 935 baseline ECOG PS of 1. Nearly all (94%) had metastatic disease, 74% had non-squamous
- histology, 75% had received only one prior platinum-based chemotherapy regimen, and 55% of
- 937 patients had PD-L1-expressing tumors.
- 938 Efficacy results are presented in Table 17 and Figure 2.
- 939

Table 17:	Efficacy	Results	in	OAK
-----------	----------	---------	----	-----

	TECENTRIQ	Docetaxel
Overall Survival in first 850 patients		
Number of patients	N=425	N=425
Deaths (%)	271 (64%)	298 (70%)
Median, months	13.8	9.6
(95% CI)	(11.8, 15.7)	(8.6, 11.2)
Hazard ratio <sup>1</sup> (95% CI)	0.74 (0.6	3, 0.87)
p-value <sup>2</sup>	0.00	04 <sup>3</sup>
Progression-Free Survival		
Number of Patients	N=425	N=425
Events (%)	380 (89%)	375 (88%)
Progression (%)	332 (78%)	290 (68%)
Deaths (%)	48 (11%)	85 (20%)
Median, months	2.8	4.0
(95% CI)	(2.6, 3.0)	(3.3, 4.2)
Hazard ratio <sup>1</sup> (95% CI)	0.95 (0.8	2, 1.10)
Overall Response Rate <sup>4</sup>		
Number of Patients	N=425	N=425
ORR, n (%)	58 (14%)	57 (13%)
(95% CI)	(11%, 17%)	(10%, 17%)
Complete response	6 (1%)	1 (0.2%)
Partial response	52 (12%)	56 (13%)
Duration of Response <sup>3</sup>	N=58	N=57
Median (months)	16.3	6.2
(95% CI)	(10.0, NE)	(4.9, 7.6)
Overall Survival in all 1225 patients		
Number of patients	N=613	N=612
Deaths (%)	384 (63%)	409 (67%)
Median, months	13.3	9.8
(95% CI)	(11.3, 14.9)	(8.9, 11.3)
1		

	TECENTRIQ	Docetaxel		
Hazard ratio <sup>1</sup> (95% CI)	0.79 (0.69	9, 0.91)		
p-value <sup>2</sup>	0.00135			
<sup>1</sup> Stratified by PD-L1 expression in tumor infiltrating immune cells, the number of prior chemotherapy regimens, and histology				
<sup>2</sup> Based on the stratified log-rank test				
<sup>3</sup> Compared to the pre-specified allocated $\alpha$ of 0.03 for this analysis				
<sup>4</sup> Per RECIST v1.1 (Response Evaluation Criteria in Solid Tumors v1.1)				
<sup>5</sup> Compared to the allocated α of 0.0177 for this interim analysis based on 86% information using O'Brien-Fleming				
boundary				
CI=confidence interval; NE=not estimable				

#### 940 Figure 2: Kaplan-Meier Curves of Overall Survival in the First 850 Patients Randomized





942

943 Tumor specimens were evaluated prospectively using the VENTANA PD-L1 (SP142) Assay at a

944 central laboratory and the results were used to define the PD-L1 expression subgroups for pre-

945 specified analyses. Of the 850 patients, 16% were classified as having high PD-L1 expression,

946 defined as having PD-L1 expression on  $\geq$  50% of TC or  $\geq$  10% of IC. In an exploratory efficacy

subgroup analysis of OS based on PD-L1 expression, the hazard ratio was 0.41 (95% CI: 0.27,
0.64) in the high PD-L1 expression subgroup and 0.82 (95% CI: 0.68, 0.98) in patients who did

949 not have high PD-L1 expression.

950 Exploratory analyses showed that the subset of patients who were ADA positive by week 4

951 (21%) appeared to have less efficacy (effect on overall survival) as compared to patients who

tested negative for treatment-emergent ADA by week 4 (79%) [see Adverse Reactions (6.2),

953 *Clinical Pharmacology (12.3)].* ADA positive patients by week 4 appeared to have similar OS

954 compared to docetaxel-treated patients. In an exploratory analysis, propensity score matching

955 was conducted to compare ADA positive patients in the atezolizumab arm with a matched

population in the docetaxel arm and ADA negative patients in the atezolizumab arm with a

957 matched population in the docetaxel arm. Propensity score matching factors were: baseline sum

958 of longest tumor size (BSLD), baseline ECOG, histology (squamous vs. non-squamous),

baseline albumin, baseline LDH, gender, tobacco history, metastases status (advanced or local),

960 metastatic site, TC level, and IC level. The hazard ratio comparing the ADA positive subgroup

- 961 with its matched control was 0.89 (95% CI: 0.61, 1.3). The hazard ratio comparing the ADA
- negative subgroup with its matched control was 0.68 (95% CI: 0.55, 0.83).

# 963 14.3 Locally Advanced or Metastatic Triple-Negative Breast Cancer

964 The efficacy of TECENTRIQ in combination with paclitaxel protein-bound was investigated in

965 IMpassion130 (NCT02425891), a multicenter, international, double-blinded, placebo-controlled,

- 966 randomized trial that included 902 unresectable locally advanced or metastatic triple-negative
- 967 breast cancer patients that had not received prior chemotherapy for metastatic disease. Patients
   968 were stratified by presence of liver metastases, prior taxane treatment, and by PD-L1 expression
- 968 were stratified by presence of fiver inetastases, prior taxane treatment, and by PD-L1 expression 969 status in tumor infiltrating immune cells (IC) (PD-L1 stained tumor-infiltrating immune cells
- 970 [IC] <1% of tumor area vs.  $\geq$  1% of the tumor area) by the VENTANA PD-L1 (SP142) Assay.
- 971 Of the 902 patients in the intent to treat population (ITT), 41% (369 patients) were classified as
- 972 PD-L1 expression  $\geq$  1%. Patients were randomized (1:1) to receive either TECENTRIQ (840
- 973 mg) or placebo intravenous infusions on Days 1 and 15 of every 28-day cycle, plus paclitaxel
- protein-bound (100 mg/m<sup>2</sup>) administered via intravenous infusion on Days 1, 8 and 15 of every
   28-day cycle. Patients received treatment until radiographic disease progression per RECIST
- 975 28-day cycle. Patients received treatment until radiographic976 v1.1, or unacceptable toxicity.
  - 977 Patients were excluded if they had a history of autoimmune disease, administration of a live
  - 978 attenuated vaccine within 4 weeks prior to randomization, administration of systemic
  - 979 immunostimulatory agents within 4 weeks or systemic immunosuppressive medications within 2
  - 980 weeks prior to randomization; or untreated or corticosteroid-dependent brain metastases. Tumor

assessments were performed every 8 weeks ( $\pm 1$  week) for the first 12 months after Cycle 1, day

- 982 1 and every 12 weeks ( $\pm 1$  week) thereafter.
- In IMpassion130, the median age was 55 years (range: 20-86). Overall, most patients were
- women (99.6%) and the majority of patients were white (68%), Asian (18%), Black or African
- American (7%), and American Indian or Alaskan Native (4.4%). The demographic and baseline
- 986 disease characteristics of the study population were well balanced between the treatment arms.
- 987 Baseline ECOG performance status was 0 (58%) or 1 (41%). Overall, 41% of enrolled patients
- had PD-L1 expression  $\geq 1\%$ , 27% had liver metastases and 7% brain metastases at baseline.
- Approximately half the patients had received a taxane (51%) or anthracycline (54%) in the (neo)adjuvant setting. Patient demographics and baseline tumor disease in the PD-L1 expressing
- 990 (neo)adjuvant setting. Patient demographics and baseline tumor disease in the PD-L
   991 population were generally representative of the broader study population.
- 992 Tumor specimens (archival or fresh) were evaluated prospectively using the VENTANA PD-L1
- 993 (SP142) Assay at a central laboratory and the results were used as a stratification factor for
- randomization and to define the PD-L1 expression subgroups for pre-specified analyses.

The major efficacy outcomes were investigator-assessed progression free survival (PFS) in the ITT and PD-L1 expressing patient population per RECIST v1.1 and overall survival (OS) in the ITT population. Overall survival data were immature with 43% deaths in the ITT population. The efficacy results of IMpassion130 for the patient population with PD-L1 expression  $\geq 1\%$  are presented in Table 18 and Figure 3.

# 1000 Table 18: Efficacy Results from IMpassion130 in Patients with PD-L1 Expression $\geq 1\%$

	<b>PD-L1</b> Expression $\geq 1\%^1$				
	TECENTRIQ in combinationPlacebo in combinationwith paclitaxel protein-boundpaclitaxel protein				
<b>Progression-Free Survival</b> <sup>2,3</sup>	(n=185)	(n=184)			
Events (%)	136 (74)	151 (82)			
Median, months	7.4 (6.6, 9.2)	4.8 (3.8, 5.5)			
Stratified Hazard ratio (95% CI) <sup>4</sup>	0.60 (0.48, 0.77)				

p-value	<0.0001				
<b>Objective Response Rate</b> <sup>2,3,5,6</sup>	n=185	n=183			
Number of responders (%)	98 (53)	60 (33)			
(95% CI)	(45.5, 60.3)	(26.0, 40.1)			
Complete response (%)	17 (9)	1 (<1)			
Partial response (%)	81 (44)	59 (32)			
Duration of Response <sup>2,3,6</sup>	n=98	n=60			
Median (months)	9.2	6.2			
(95% CI)	(7.5, 11.9)	(5.5, 8.8)			
<ul> <li><sup>1</sup> PD-L1 expression in tumor-infiltrating immune cells (IC)</li> <li><sup>2</sup> As determined by investigator assessment</li> <li><sup>3</sup> per RECIST v1.1 (Response Evaluation Criteria in Solid Tumors v1.1)</li> <li><sup>4</sup> Stratified by presence of liver metastases, and by prior taxane treatment</li> </ul>					
<sup>5</sup> patients with measurable disease at baseline					
<ul> <li>Confirmed responses</li> <li>PFS=Progression-Free Survival; CI=Confidence Interval; ORR=Objective Response Rate; DOR=Duration of Response; NE=Not Estimable</li> </ul>					

1001

# 1002 Figure 3: Kaplan-Meier Plot of Progression-Free-Survival in IMpassion130 in Patients

1003 with PD-L1 Expression  $\geq 1\%$ 



1004

1005

#### 1006 14.4 Small Cell Lung Cancer

1007 The efficacy of TECENTRIQ with carboplatin and etoposide was investigated in IMpower133

1008 (NCT02763579), a randomized (1:1), multicenter, double-blind, placebo-controlled trial in 403

1009 patients with ES-SCLC. IMpower133 enrolled patients with ES-SCLC who had received no

1010 prior chemotherapy for extensive stage disease and ECOG performance status 0 or 1. The trial

1011 excluded patients with active or untreated CNS metastases, history of autoimmune disease,

administration of a live, attenuated vaccine within 4 weeks prior to randomization, or

1013 administration of systemic immunosuppresive medications within 1 week prior to randomization.

- 1014 Randomization was stratified by sex, ECOG performance status, and presence of brain
- 1015 metastases. Patients were randomized to receive one of the following two treatment arms:
- TECENTRIQ 1200 mg and carboplatin AUC 5 mg/mL/min on Day 1 and etoposide 100 mg/m<sup>2</sup> intravenously on Days 1, 2 and 3 of each 21-day cycle for a maximum of 4 cycles followed by TECENTRIQ 1200 mg once every 3 weeks until disease progression or unacceptable toxicity, or
- placebo and carboplatin AUC 5 mg/mL/min on Day 1 and etoposide 100 mg/m<sup>2</sup>
- intravenously on Days 1, 2, and 3 of each 21-day cycle for a maximum of 4 cycles followed
  by placebo once every 3 weeks until disease progression or unacceptable toxicity.
- 1023 Administration of TECENTRIQ was permitted beyond RECIST-defined disease progression.
- 1024 Tumor assessments were conducted every 6 weeks for the first 48 weeks following Cycle 1, Day
- 1025 1 and then every 9 weeks thereafter. Patients treated beyond disease progression had tumor
- 1026 assessment conducted every 6 weeks until treatment discontinuation.
- 1027 Major efficacy outcome measures were OS and PFS as assessed by investigator per RECIST
- 1028 v1.1 in the intent-to-treat population. Additional efficacy outcome measures included ORR and1029 DoR as assessed by investigator per RECIST v1.1.
- 1030 A total of 403 patients were randomized, including 201 to the TECENTRIQ arm and 202 to the
- 1031 chemotherapy alone arm. The median age was 64 years (range 26 to 90) and 65% were male.
- 1032 The majority of patients were White (80%); 17% were Asian, 4% were Hispanic and 1% were
- 1033 Black. Baseline ECOG performance status was 0 (35%) or 1 (65%); 9% of patients had a history
- 1034 of brain metastases, and 97% were current or previous smokers.
- 1035 Efficacy results are presented in Table 19 and Figure 4.
- 1036

#### Table 19: Efficacy Results from IMpower133

	TECENTRIQ with Carboplatin and Etoposide	Placebo with Carboplatin and Etoposide
Overall Survival	N=201	N=202
Deaths (%)	104 (52%)	134 (66%)
Median, months	12.3	10.3
(95% CI)	(10.8, 15.9)	(9.3, 11.3)
Hazard ratio <sup>3</sup> (95% CI)	0.70 (0.5	54, 0.91)
p-value <sup>4, 5</sup>	0.0	069
<b>Progression-Free Survival</b> <sup>1,2</sup>	N=201	N=202
Number of events (%)	171 (85%)	189 (94%)
Median, months	5.2	4.3
(95% CI)	(4.4, 5.6)	(4.2, 4.5)
Hazard ratio <sup>3</sup> (95% CI)	0.77 (0.6	52, 0.96)
p-value <sup>4, 6</sup>	0.0	170
<b>Objective Response Rate</b> <sup>1,2,7</sup>	N=201	N=202
Number of responders (%)	121 (60%)	130 (64%)
(95% CI)	(53, 67)	(57, 71)
Complete response	5 (2%)	2 (1%)
Partial response	116 (58%)	128 (63%)
<b>Duration of Response</b> <sup>1,2,7</sup>	N=121	N=130
Median (months)	4.2	3.9
(95% CI)	(4.1, 4.5)	(3.1, 4.2)
<sup>1</sup> As determined by investigator assessment		
<sup>2</sup> per RECIST v1.1 (Response Evaluation Criteria	in Solid Tumors v1.1)	
<sup>3</sup> Stratified by sex and ECOG performance status		
<sup>4</sup> Based on the stratified log-rank test		
<sup>3</sup> Compared to the allocated $\alpha$ of 0.0193 for this in	terim analysis based on 78% information u	sing O'Brien-Fleming boundary
$\alpha$ or 0.05 for this analy	y \$1\$.	

<sup>7</sup>Confirmed response

CI=confidence interval

# 1038 Figure 4: Kaplan-Meier Plot of Overall Survival in IMpower133



1039

1037

#### 1040 16 HOW SUPPLIED/STORAGE AND HANDLING

1041 TECENTRIQ injection is a sterile, preservative-free, and colorless to slightly yellow solution for
 1042 intravenous infusion supplied as a carton containing one 840 mg/14 mL single-dose vial (NDC
 1043 50242-918-01) or 1200 mg/20 mL single-dose vial (NDC 50242-917-01).

1044 Store vials under refrigeration at 2°C to 8°C (36°F to 46°F) in original carton to protect from

1045 light. Do not freeze. Do not shake.

#### 1046 17 PATIENT COUNSELING INFORMATION

- 1047 Advise the patient to read the FDA-approved patient labeling (Medication Guide).
- 1048 Immune-Mediated Adverse Reactions
- 1049 Inform patients of the risk of immune-mediated adverse reactions that may require corticosteroid 1050 treatment and interruption or discontinuation of TECENTRIQ, including:
- Pneumonitis: Advise patients to contact their healthcare provider immediately for any new or worsening cough, chest pain, or shortness of breath [see Warnings and Precautions (5.1)].
- Hepatitis: Advise patients to contact their healthcare provider immediately for jaundice,
   severe nausea or vomiting, pain on the right side of abdomen, lethargy, or easy bruising or
   bleeding [see Warnings and Precautions (5.2)].
- Colitis: Advise patients to contact their healthcare provider immediately for diarrhea, blood or mucus in stools, or severe abdominal pain *[see Warnings and Precautions (5.3)]*.

Reference ID: 4429203

- Endocrinopathies: Advise patients to contact their healthcare provider immediately for signs or symptoms of hypophysitis, hyperthyroidism, hypothyroidism, adrenal insufficiency, or type 1 diabetes mellitus, including diabetic ketoacidosis [see Warnings and Precautions (5.4)].
- Other Immune-Mediated Adverse Reactions: Advise patients to contact their healthcare
   provider immediately for signs or symptoms of other potential immune-mediated adverse
   reactions [see Warnings and Precautions (5.5)].
- 1066 Infections
- Advise patients to contact their healthcare provider immediately for signs or symptoms of infection [see Warnings and Precautions (5.6)].
- 1069 Infusion-Related Reactions
- 1070 Advise patients to contact their healthcare provider immediately for signs or symptoms of
- 1071 infusion-related reactions [see Warnings and Precautions (5.7)].
- 1072 Embryo-Fetal Toxicity
- 1073 Advise females of reproductive potential that TECENTRIQ can cause harm to a fetus and to
- 1074 inform their healthcare provider of a known or suspected pregnancy [see Warnings and
- 1075 Precautions (5.8), Use in Specific Populations (8.1, 8.3)].
- 1076 Advise females of reproductive potential to use effective contraception during treatment and for
- at least 5 months after the last dose of TECENTRIQ [see Use in Specific Populations (8.3)].
- 1078 Lactation
- 1079 Advise female patients not to breastfeed while taking TECENTRIQ and for at least 5 months
- 1080 after the last dose [see Use in Specific Populations (8.2)].
- 1081
- 1082
- 1083 Manufactured by:
- 1084 Genentech, Inc.
- 1085 A Member of the Roche Group
- 1086 1 DNA Way
- 1087 South San Francisco, CA 94080-4990
- 1088 U.S. License No. 1048
- 1089 TECENTRIQ is a registered trademark of Genentech, Inc.
- 1090 <sup>©</sup>2019 Genentech, Inc.

#### MEDICATION GUIDE **TECENTRIQ<sup>®</sup>** (te-SEN-trik) (atezolizumab) injection

#### What is the most important information I should know about TECENTRIQ?

TECENTRIQ is a medicine that may treat certain cancers by working with your immune system. TECENTRIQ can cause vour immune system to attack normal organs and tissues and can affect the way they work. These problems can sometimes become serious or life-threatening and can lead to death.

#### Call or see your healthcare provider right away if you get any symptoms of the following problems or these symptoms get worse:

#### Lung problems (pneumonitis). Signs and symptoms of pneumonitis may include:

new or worsening cough shortness of breath •

#### Liver problems (hepatitis). Signs and symptoms of hepatitis may include:

- yellowing of your skin or the whites of your eyes
- severe nausea or vomiting •
- pain on the right side of your stomach area (abdomen)
- drowsiness •

Intestinal problems (colitis). Signs and symptoms of colitis may include:

- diarrhea (loose stools) or more bowel movements than usual ٠
- blood or mucus in your stools or dark, tarry, sticky stools •
- severe stomach area (abdomen) pain or tenderness .

#### Hormone gland problems (especially the thyroid, adrenal glands, pancreas, and pituitary). Signs and symptoms that your hormone glands are not working properly may include:

•

•

•

- headaches that will not go away or unusual headaches •
- extreme tiredness •
- weight gain or weight loss •
- dizziness or fainting •
- ٠ feeling more hungry or thirsty than usual
- hair loss •
- changes in mood or behavior, such as decreased sex • drive, irritability, or forgetfulness

#### **Problems in other organs.** Signs and symptoms may include:

- severe muscle weakness •
- numbness or tingling in hands or feet •
- confusion •
- blurry vision, double vision, or other vision problems •
- changes in mood or behavior •

#### extreme sensitivity to light •

- Severe infections. Signs and symptoms of infection may include:
- fever
- cough •

Severe infusion reactions. Signs and symptoms of infusion reactions may include:

- chills or shaking •
- itching or rash •
- flushina •
- shortness of breath or wheezing .
- swelling of your face or lips
- Getting medical treatment right away may help keep these problems from becoming more serious.

Your healthcare provider will check you for these problems during your treatment with TECENTRIQ. Your healthcare provider may treat you with corticosteroid or hormone replacement medicines. Your healthcare provider may delay or completely stop treatment with TECENTRIQ if you have severe side effects.

- neck stiffness
- eye pain or redness •
- skin blisters or peeling
- chest pain, irregular heartbeat, shortness of breath or swelling of the ankles

chest pain

bleeding or bruising more easily than normal

dark urine (tea colored)

feeling less hungry than usual

- flu-like symptoms
- pain when urinating, frequent urination or back pain
- •

- dizziness fever
- feeling like passing out •
- back or neck pain

feeling cold

constipation

your voice gets deeper

nausea or vomiting

urinating more often than usual

stomach area (abdomen) pain

#### What is TECENTRIQ?

TECENTRIQ is a prescription medicine used to treat adults with:

- a type of bladder and urinary tract cancer called urothelial carcinoma. TECENTRIQ may be used when your bladder cancer has spread or cannot be removed by surgery, and if you have any one of the following conditions:
  - you are not able to take chemotherapy that contains a medicine called cisplatin, and your cancer tests positive for "PD-L1", or
  - o you are not able to take chemotherapy that contains any platinum regardless of "PD-L1" status, or
  - o you have tried chemotherapy that contains platinum, and it did not work or is no longer working.
- a type of lung cancer called non-small cell lung cancer (NSCLC).
  - TECENTRIQ may be used with bevacizumab and the chemotherapy medicines carboplatin and paclitaxel as your first treatment when your lung cancer:
    - $\circ~$  has spread or grown, and
    - o is a type of lung cancer called "non-squamous NSCLC
    - o your tumor does not have an abnormal "EGFR" or "ALK" gene
  - TECENTRIQ may be used alone when your lung cancer:
    - has spread or grown, and
    - you have tried chemotherapy that contains platinum, and it did not work or is no longer working.
    - if your tumor has an abnormal "EGFR" or "ALK" gene, you should have also tried an FDA-approved therapy for tumors with these abnormal genes, and it did not work or is no longer working.
- a type of breast cancer called triple-negative breast cancer (TNBC). TECENTRIQ may be used with the medicine paclitaxel protein-bound when your breast cancer:
  - has spread or cannot be removed by surgery, and
  - o your cancer tests positive for "PD-L1".
- a type of lung cancer called small cell lung cancer (SCLC).

# TECENTRIQ may be used with the chemotherapy medicines carboplatin and etoposide as your first treatment when your lung cancer

is a type called "extensive-stage SCLC," which means that it has spread or grown.

It is not known if TECENTRIQ is safe and effective in children.

#### Before you receive TECENTRIQ, tell your healthcare provider about all of your medical conditions, including if you:

- have immune system problems such as Crohn's disease, ulcerative colitis, or lupus
- have had an organ transplant
- have lung or breathing problems
- have liver problems
- have a condition that affects your nervous system, such as myasthenia gravis or Guillain-Barré syndrome
- are being treated for an infection
- are pregnant or plan to become pregnant. TECENTRIQ can harm your unborn baby. Tell your healthcare provider right away if you become pregnant or think you may be pregnant during treatment with TECENTRIQ.
  - Females who are able to become pregnant:
  - Your healthcare provider should do a pregnancy test before you start treatment with TECENTRIQ.
  - You should use an effective method of birth control during your treatment and for at least 5 months after the last dose of TECENTRIQ.
- are breastfeeding or plan to breastfeed. It is not known if TECENTRIQ passes into your breast milk. Do not breastfeed during treatment and for at least 5 months after the last dose of TECENTRIQ.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

#### How will I receive TECENTRIQ?

- Your healthcare provider will give you TECENTRIQ into your vein through an intravenous (IV) line over 30 to 60 minutes.
- TECENTRIQ is usually given every 2, 3, or 4 weeks.
- Your healthcare provider will decide how many treatments you need.
- Your healthcare provider will test your blood to check you for certain side effects.
- If you miss any appointments, call your healthcare provider as soon as possible to reschedule your appointment.

#### What are the possible side effects of TECENTRIQ?

#### **TECENTRIQ** can cause serious side effects, including:

See "What is the most important information I should know about TECENTRIQ?" •

The most common side effects of TECENTRIQ when used alone include:

- feeling tired or weak
- nausea •

- couah
- shortness of breath

diarrhea

decreased appetite

decreased appetite

The most common side effects of TECENTRIQ when used in lung cancer with other anti-cancer medicines include:

- feeling tired or weak
- nausea •

٠

- hair loss
- constipation •

The most common side effects of TECENTRIQ when used in triple-negative breast cancer with paclitaxel protein-bound include:

- hair loss •
- tingling or numbness in hands or feet •
- feeling tired
- nausea
- diarrhea •
- low red blood cells (anemia) •

- constipation
- cough
- headache
- low white blood cells
- vomitina
- decreased appetite

TECENTRIQ may cause fertility problems in females, which may affect the ability to have children. Talk to your healthcare provider if you have concerns about fertility.

These are not all the possible side effects of TECENTRIQ. Ask your healthcare provider or pharmacist for more information. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

#### General information about the safe and effective use of TECENTRIQ.

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. If you would like more information about TECENTRIQ, talk with your healthcare provider. You can ask your healthcare provider for information about TECENTRIQ that is written for health professionals.

#### What are the ingredients in TECENTRIQ?

Active ingredient: atezolizumab

Inactive ingredients: glacial acetic acid, L-histidine, polysorbate 20 and sucrose,

Manufactured by: Genentech, Inc., A Member of the Roche Group, 1 DNA Way, South San Francisco, CA 94080-4990 USA

U.S. License No. 1048 TECENTRIQ is a registered trademark of Genentech, Inc. For more information, call 1-844-832-3687 or go to www.TECENTRIQ.com

This Medication Guide has been approved by the U.S. Food and Drug Administration.

Revised: 5/2019