Atezolizumab 1200 / Nab-Paclitaxel 100 / Carboplatin 6, Non-Small Cell Lung Cancer

Protocol-ID: 1238 V2.0 (Complete), ATEZ1200/NPAC100/CRBP6, NSCLC

Indication(s)

- Lung Carcinoma, Non-Small Cell; ICD-10 C34.- non-squamous

Protocol classification

- Classification: current standard
- Intensity: Standard dose
- Therapy mode: First line
- Therapy intention: palliative

Cycles

Cycle length 21 days, recommended cycles: 6

Protocol sequences

- IMpower130: ATEZ1200/NPAC100/CRBP6, NSCLC (PID1238) -|- ATEZ1200 Erh. (PID1272)

Risks

- Emetogenicity (MASCC/ESMO): low (10-30%) Nab-paclitaxel
- Emetogenicity (MASCC/ESMO): high (>90%) Carboplatin combination
- Neutropenia: very high (>41%) °3-4: 44%
- Thrombocytopenia below 50 000/µl: very high (>41%) °3-4: 45%
- Anemia Hb below 8g/dl: high (16-30%) °3-4: 29%
- Diarrhea: CTC AE °3-4: 5%
- Fatigue: CTC AE °3-4: 6%
- Nausea: CTC AE °3-4: 3%

Therapy

Hydration: Balanced Crystalloid Solution **HYD**

Access: peripheral venous

Hydration before, during, or after antitumor therapy

Day	Substance	Dosage	Solution	Appl.	Inf. time	Procedure
1	**Balanced Crystalloid Solution**	500 ml		i.v.	60 min	60 min before Atezolizumab (d1)
8,15	**Balanced Crystalloid Solution**	500 ml		i.v.	60 min	60 min before Nab-paclitaxel (d8,15)

Antiemesis: Emetogenicity high (CRBP), FOSAP, GRAN i.v., DEXA i.v. **AE**

Access: peripheral venous

DGHO 2016, DKG 2016, MASCC/ESMO 2016, carboplatin-containing combination therapies

Day	Substance	Dosage	Solution	Appl.	Inf. time	Procedure
1	**Fosaprepitant**	150 mg	NaCl 0.9% 150 ml	i.v.	20 min	30 min before Atezolizumab (d1)
1	**Dexamethasone**	12 mg	NaCl 0.9% 50 ml	i.v.	5 min	30 min before Atezolizumab (d1)
1	**Granisetron**	1 mg	NaCl 0.9% 50 ml	i.v.	5 min	15 min before Atezolizumab (d1)
8,15	**Granisetron**	1 mg	NaCl 0.9% 50 ml	i.v.	5 min	15 min before Nab-paclitaxel (d8,15)

Antineoplastic therapy: ATEZ1200/NPAC100/CRBP6 **CTX**

Access: peripheral venous

Atezolizumab, Nab-Paclitaxel, Carboplatin in Non-Small Cell Lung Cancer

Day	Substance	Dosage	Solution	Appl.	Inf. time	Procedure
1	**Atezolizumab**	1200 mg	NaCl 0.9% 250 ml	i.v.	60 min	Sequence
If the first infusion was well tolerated, the second infusion can be given over 30 minutes.						
1,8,15	**Nab-paclitaxel**	100 mg/m² BSA	none	i.v.	30 min	Sequence
1	**Carboplatin**	6 AUC	Dextrose 5% 250 ml	i.v.	30 min	Sequence

Substance links

Links to substances are found here.

Concomitant therapy supplements

For highly emetogenic chemotherapy, additional olanzapine is recommended in the acute (day 1) and delayed phases (days 2-4) at a dosing of 5-10 mg per day (NCCN, ESMO, ASCO, Onkopedia; as of 6/24).
Granisetron instead of Dexamethasone for antiemesis on days 8 and 15 to avoid immunosuppression and the risk of infection due to Dexamethasone exposure.

Notes

4 or 6 induction cycles were administered, after which patients received atezolizumab as maintenance therapy.
Therapy is continued until reduction of clinical benefit or the occurrence of undesirable side effects.

Cycle diagram

Hydration: Balanced Crystalloid Solution

	Week 1 / d							Week 2 / d							Week 3 / d						
Substance	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Balanced Crystalloid Solution (i.v.)	■																				
Balanced Crystalloid Solution (i.v.)								■							■						

Antiemesis: Emetogenicity high (CRBP), FOSAP, GRAN i.v., DEXA i.v.

	Week 1 / d							Week 2 / d							Week 3 / d						
Substance	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Fosaprepitant (i.v.)	■																				
Dexamethasone (i.v.)	■																				
Granisetron (i.v.)	■																				
Granisetron (i.v.)								■							■						

Antineoplastic therapy: ATEZ1200/NPAC100/CRBP6

	Week 1 / d							Week 2 / d							Week 3 / d						
Substance	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Atezolizumab (i.v.)																					
Nab-paclitaxel (i.v.)																					
Carboplatin (i.v.)																					

Cycles

Cycle length 21 days, recommended cycles: 6

Controls:

- Blood count: on day 1 and subsequently weekly
- Oxygen saturation at rest and under stress In high-risk patients, lung function, CO2 diffusion capacity, CT thorax if necessary
- Hepatitis (A,B,C) screening: anti-HAV IgM, HBs-Ag, anti-HBc, anti-HCV
- CMV, EBV, HIV, tuberculosis screening
- ECG Risk of developing a conduction disorder under Nab-Paclitaxel therapy, ECG check every 3 cycles
- Day 1: Na^{+}, K^{+}, Ca^{2+}, Mg^{2+}
- Day 1: Creatinine, glomerular filtration rate (GFR) Carboplatin dose calculation according to AUC and Calvert's formula; for normal renal function, expect a maximum GFR of 125 ml/min to avoid overdoses.
- Day 1: GOT, GPT, GGT, Bilirubin, AP, Cholinesterase
- Day 1: Lipase
- Day 1: Troponin T, CK, LDH
- Day 1: TSH, fT4, cortisol basal, blood glucose (HbA1c) optional and especially if clinically suspected: fT3, ACTH, DHEA-S, IGF1, prolactin, LH/FSH, estradiol (in women), every 6 weeks to 3 months after the end of immunotherapy and every 3 months thereafter.
- Day 1: Urine status

Original indication

non-small cell lung cancer, adeno-, stage IV, first line, ECOG 0-1

Original author

West H (2019)

Origin

Thoracic Oncology Program, Swedish Cancer Institute, Seattle, USA, IMpower130

References

- West H, Atezolizumab in combination with carboplatin plus nab-paclitaxel chemotherapy compared with chemotherapy alone as first-line treatment for metastatic non-squamous non-small-cell lung cancer (IMpower130): a multicentre, randomised, open-label, phase 3 trial. Lancet Oncol 2019 Jul;20(7):924-937. doi: 10.1016/S1470-2045(19)30167-6. PMID: 31122901. [PMID]
- Arbour KC, Impact of Baseline Steroids on Efficacy of Programmed Cell Death-1 and Programmed Death-Ligand 1 Blockade in Patients With Non-Small-Cell Lung Cancer. J Clin Oncol 2018 Oct 01;36(28):2872-2878. doi: 10.1200/JCO.2018.79.0006. PMID: 30125216. [PMID]

Recommendations

- 01/2023: European Society for Medical Oncology
- 02/2024: National Comprehensive Cancer Network

Status

Valid since 2025-07-08, Version 2.0, last updated 2025-07-08

Last modification: V2.0: Correction of the Nab-Paclitaxel-Carboplatin sequence according to the approval. V1.2: Addition of the corticosteroid under immunotherapy V1.1: Cato test done. Removal of corticosteroid according to Della Corte 2019 /

Arbour 2018, replacement of Granisetron with Palonosetron during immunotherapy. V1.0: Cato test done. V0.1: Runtimes according to summary of product characteristics.

Important notice