Pola-R-CHP - Polatuzumab Vedotin 1.8 / Rituximab 375 / Cyclophosphamide 750 / Doxorubicin 50 / Prednisolone 100, diffuse large B-non-Hodgkin Lymphoma, cycle 1-6

Protocol-ID: 1920 V1.0 (Short), Pola-R-CHP (POLVED1.8/RITU375/CYCL750/DOXO50/PRED100), DLBCL, C1-6

Indication(s)

- NHL, B-Cell Type, Diffuse Large Cell; ICD-10 C83.3

Protocol classification

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

Cycles

Cycle length 21 days, recommended cycles: 6

Protocol sequences

- POLARIX: Pola-R-CHP (POLVED1.8/RITU375/CYCL750/DOXO50/PRED100), DLBCL, C1-6 (PID1920) -|- RITU375, C7-8 (PID1921)

Risks

- Emetogenicity (MASCC/ESMO): moderate (30-90%)
- Neutropenia: very high (>41%)
- Febrile Neutropenia: high (>20%)
- Anemia Hb below 8g/dl: moderate (6-15%)
- Diarrhea: CTC AE °1-2: 27%; °3-4: 4%
- Headache: CTC AE °1-2: 12%; °3-4: 1%
- Neuropathy: CTC AE °1-2: 52%; °3-4: 2%
- Asthenia: CTC AE °1-2: 10%; °3-4: 2%
- Constipation: CTC AE °1-2: 28%; °3-4: 1%
- Pyrexia: CTC AE °1-2: 14%; °3-4: 2%

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 Polatuzumab Vedotin

Antiemesis: Emetogenicity moderate, GRAN i.v., DEXA i.v. **AE**

Access: peripheral venous

ASCO 2015, DGHO 2016, DKG 2016, MASCC/ESMO 2016, if palonosetron not available

Day	Substance	Dosage	Solution	Appl.	Inf. time	Procedure
1	**Granisetron**	1 mg	NaCl 0.9% 50 ml	i.v.	5 min	15 min before Cyclophosphamide (d1)

or other 5-HT3 receptor antagonist

Allergy prophylaxis: Rituximab (paracetamol, Dimetinden, Prednisolone i.v.) **AP**

Access: peripheral venous

Day	Substance	Dosage	Solution	Appl.	Inf. time	Procedure
1	**Paracetamol**	1000 mg		p.o.		60 min before Polatuzumab Vedotin
1	**Dimetinden**	4 mg	NaCl 0.9% 50 ml	i.v.	5 min	30 min before Polatuzumab Vedotin
1	**Prednisolone**	100 mg	NaCl 0.9% 50 ml	i.v.	15 min	60 min before Polatuzumab Vedotin

Supportive therapy: Mesna i.v., hour 0 (pre), p.o. 2 h, 6 h after onset Cyclophosphamide **SUP**

Access: peripheral venous

Mesna 0h,2h,6h, prophylaxis of urinary tract toxicity by Cyclophosphamide. At the time of oxazaphosphorin injection, 20% of the oxazaphosphorin dose is injected simultaneously as Mesna. 2 and 6 h after onset, oral Medication of 40% of the oxazaphosporin dose, summary of product characteristics.

Day	Substance	Dosage	Solution	Appl.	Inf. time	Procedure
1	**Mesna**	150 mg/m² BSA		i.v.	1 min	1 min before Cyclophosphamide (d1)
1	**Mesna**	300 mg/m² BSA		p.o.		1 h after Cyclophosphamide (d1)
1	**Mesna**	300 mg/m² BSA		p.o.		5 h after Cyclophosphamide (d1)

Antineoplastic therapy: Pola-R-CHP **CTX**

Access: central venous

Day	Substance	Dosage	Solution	Appl.	Inf. time	Procedure
2-5	**Prednisolone**	100 mg		p.o.		1-0-0-0
1	**Polatuzumab vedotin**	1.8 mg/kg bw	NaCl 0.9% 150 ml	i.v.	90 min	Sequence
If the previous infusion was well tolerated, the subsequent dose of polatuzumab vedotin may be administered as a 30-minute infusion.						
1	**Rituximab**	375 mg/m² BSA	NaCl 0.9% 500 ml	i.v.	4 h	Sequence
Init. Infusion rate 50mg/h; it can be increased by 50mg/h every 30min to max. 400mg/h. Further infusions: init. Infusion speed 100mg/h, which can be increased by 100mg/h every 30min to max. 400mg/h.						
1	**Cyclophosphamide**	750 mg/m² BSA	NaCl 0.9% 500 ml	i.v.	1 h	Sequence
1	**Doxorubicin**	50 mg/m² BSA	Dextrose 5% 250 ml	i.v.	30 min	Sequence

Hematopoietic growth factors: FN risk above 20%, G-CSF long-acting, pegylated **HW**

Access: - none -

Risk of febrile neutropenia (FN) >20%, ASCO 2015, DKG 2016

Day	Substance	Dosage	Solution	Appl.	Inf. time	Procedure
2	**Pegfilgrastim**	6 mg		subc	Bolus	24 h after Doxorubicin (d1)

or other long-acting G-CSF

Substance links

Links to substances are found here.

Concomitant therapy supplements

Prednisolone in allergy prophylaxis is equivalent to Prednisolone in day 1 therapy.

Warnings

If an infusion-related reaction occurs in a patient, slow the infusion rate of Polatuzumab Vedotin or discontinue use. Discontinue use immediately and permanently if a life-threatening reaction occurs in a patient.
Doxorubicin: increased risk of cardiomyopathy, maximum cumulative dose 450-550 mg/m² KOF. In mediastinal irradiation, arterial hypertension for more than 5 years, age over 70 years or previous cardiac damage, maximum 400 mg/m².
For DOXO extravasation: dry cold (not just before or after Dexrazoxane infusion) on day of extravasation. Dexrazoxane i.v. for 3 days: 2 days 1000 mg/m², 3rd day 500 mg/m², do not use in parallel with DMSO. First infusion as soon as possible and within the first 6 hours.

References

- Tilly H, Polatuzumab Vedotin in Previously Untreated Diffuse Large B-Cell Lymphoma. N Engl J Med 2022 Jan 27;386(4):351-363. doi: 10.1056/NEJMoa2115304. PMID: 34904799. [PMID]

Recommendations

- 04/2024: National Comprehensive Cancer Network

Valid since: 07.01.2022