LymphomaHub

HL

# Pembrolizumab consolidation after ASCT for R/R cHL: Results from a phase II trial

**Sylvia Agathou** | Apr 24, 2019

On 5 April 2019, Philippe Armand from Dana-Farber Cancer Institute, Boston, MA, USA, and colleagues, published in *Blood* results from a phase II clinical trial (NCT02362997) that investigated the potential benefit of pembrolizumab treatment following autologous stem cell transplantation (ASCT) in patients with relapsed/refractory classical Hodgkin lymphoma (R/R cHL).

Pembrolizumab is a humanized IgG4 anti-programmed cell death-1 (PD-1) antibody. Since cHL is vulnerable to PD-1 blockade, the investigators sought to assess whether pembrolizumab is an efficient post-ASCT consolidation therapy for patients with R/R cHL. The primary endpoint of the study was the hypothesis that progression-free survival (PFS) at 18 months after ASCT would improve with pembrolizumab from 60% to 80%. Secondary endpoints included safety, response rates, and overall survival at 18 months post-ASCT.

**Study design & baseline characteristics**

- N = 30 patients with R/R cHL, who had chemosensitive disease, have had to receive ASCT and had an Eastern Cooperative Oncology Group (ECOG) performance status < 2. Eligible patients could not have received > 3 prior treatment lines (not counting ASCT) or any other treatment between ASCT and enrolment to the trial
- Treatment plan:
  - Patients had to begin study treatment no later than 21 days after ASCT discharge
  - Pembrolizumab: all patients received 200 mg of pembrolizumab intravenously, every three weeks for up to 8 cycles
  - Dose modifications were not allowed but doses could be delayed up to 12 weeks due to toxicity
  - Positron emission tomography (PET) and computed tomography (CT) scans for tumor assessment were performed at baseline, at treatment Weeks 10 and 22 and at 12 and 18 months post-ASCT
- Median patient age (range): 33 (20–69) years
- Most common front-line therapy was adriamycin, bleomycin, vinblastine, dacarbazine (ABVD; 77% of patients)
- Most common salvage therapy was ifosfamide, carboplatin, and etoposide (ICE; 50% of patients)
- Patients who had previously received PD-1 blockade as part of salvage therapy: 20% (n = 6)
- All patients received carmustine, etoposide, cytarabine and melphalan (BEAM) for ASCT conditioning

**Key findings**

- Patients who completed all planned eight treatment cycles: 77% (n = 23)
  - Reasons for not completing all planned cycles:

- Patients choice: n = 2
- Toxicity: n = 4
- Progressive disease: n = 1

- After ASCT:
  - Two patients had residual disease on PET-CT. Both were in complete response (CR) after three cycles of pembrolizumab. One patient remained in CR after 18 months and the other patient was in CR at 12 months and then lost to follow-up
- At 12 months follow-up:
  - Patients remaining in CR: 87% of patients (n = 26)
- At 18 months follow-up:
  - Patients remaining in CR: 83% of patients
  - Patients who relapsed: 17% (n = 5)
  - 18-month PFS rate: 77%
- 19-month PFS: 81% (95% CI, 60–92%)
- 19-month OS: 100%

**Safety**

- Patients who experienced at least one Grade ≥ 2 adverse event (AE): 80% of patients (n = 24)
- Patients who experienced at least one Grade ≥ 3 AE: 30% of patients (n = 9)
- Total number of Grade 3 treatment-emergent AEs (TEAEs): n = 14
- Total number of Grade 4 TEAEs: n = 6
- No Grade 5 AEs were reported
- Most common immune-related Grade ≥ 2 AEs were:
  - Pneumonitis
  - Cough or dyspnea
- AEs leading to discontinuation: n = 5 (one Grade 2 pneumonitis, one Grade 2 diplopia, one Grade 3 pneumonitis, two Grade 3 transaminitis)
  - By patient choice: n = 1
  - Per protocol: n = 4

**Conclusion**

Pembrolizumab as consolidation treatment after ASCT had an acceptable safety profile and resulted in high PFS in patients with R/R cHL

**References**

1. Armand P. *et al.* PD-1 Blockade with Pembrolizumab for Classical Hodgkin Lymphoma after Autologous Stem Cell Transplantation. *Blood.* 2019 Apr 5. pii: blood.2019000215. DOI: 10.1182/blood.2019000215 [Epub ahead of print].

---