Classical Hodgkin Lymphoma; Real-World Observations from Physicians, Patients, and Caregivers on the Disease and Its Treatment (CONNECT): Observations of Physicians on Treatment and Interim PET-Adapted Regimens

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Background

- As of April 2021, National Comprehensive Cancer Network (NCCN) guidelines recommend 1 of 3 frontline (1L) regimens for advanced (stage III or IV) classical Hodgkin lymphoma (cHL)[1]:
  - ABVD (doxorubicin, bleomycin, vinblastine, dacarbazine)
  - A+AVD (brentuximab vedotin, doxorubicin, vinblastine, dacarbazine)
  - Escalated BEACOPP (escalated doses of bleomycin, etoposide, doxorubicin, cyclophosphamide, vincristine, procarbazine, prednisone)
- In the United States (US), the most frequently prescribed 1L regimen for stage III or IV cHL is ABVD[2-4] although approximately 30% of these patients will be either refractory to or relapse following ABVD treatment[5-7]
- To minimize exposure to bleomycin, positron emission tomography (PET)-adapted treatment strategies, such as those employed in the RATHL and SWOG S0816 trials, have emerged as potential alternatives to 6 cycles of ABVD[2,8-11]
  - The PET-adapted treatment approach in the 1L setting consists of refining treatment based on an interim PET/CT scan after 2 cycles of ABVD, with escalation or de-escalation of therapy for patients with a positive or negative interim PET scan, respectively[10,12,13]
  - However, physicians in community practice settings may face challenges utilizing an interim PET-adapted treatment approach as timely and standardized interpretation of PET scan results are required to inform a change in treatment regimen[14]

Objective

- As part of the CONNECT study, the first real-world survey of physicians, patients, and caregivers about cHL, we surveyed physicians on their cHL treatment decision-making process and how PET/CT scan access, reimbursement, and comprehension influence their treatment choices

Methods

Study Design

- The CONNECT physician survey was a double-blind, online survey administered from October 19, 2020, to November 16, 2020
  - Participating physicians were blinded to the study sponsor and participant identities were blinded to the sponsor and researchers
  - The survey was reviewed and approved by the New England Institutional Review Board

Participants

- Physicians were recruited using a large online panel of healthcare providers in the United States that leverages multiple sources of physician recruitment
- Eligible physicians
  - Included medical oncologists, hematologist/oncologists, or hematologists with ≥2 years medical practice experience
  - Treated ≥1 adult (aged ≥18 years) with stage III or IV cHL and ≥1 adult with cHL in the 1L setting within the past 12 months
- Recruited physicians were invited to take part in the survey via email

Statistical Analysis

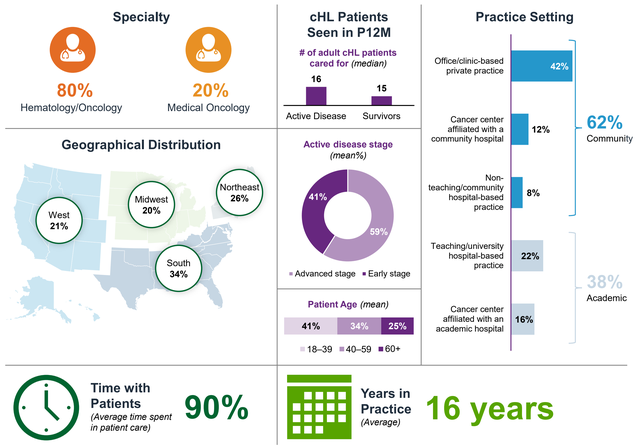
- Quantitative data were summarized as mean and standard deviation or median and range
- Categorical data were reported as individual totals or percentages
- Non-mutually exclusive data were reported as a number and percentage of total sample size

Results

Participant Characteristics

- 301 physicians throughout the US participated (**Figure 1**)

Figure 1. Overview of Participating Physicians

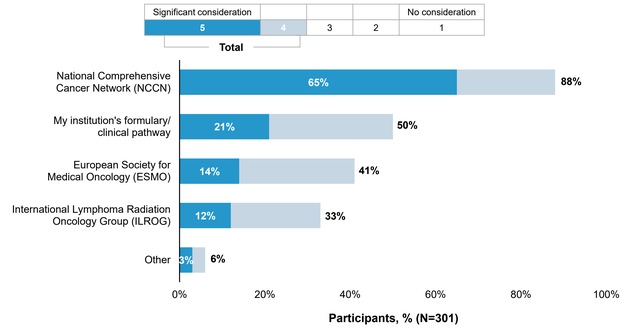


Abbreviation: cHL, classical Hodgkin lymphoma; P12M, past 12 months.

Guideline Consideration

- When treating patients with cHL, most physicians report giving NCCN guidelines some/significant consideration (**Figure 2**)

Figure 2. Guidelines Considered by Physicians When Treating cHL

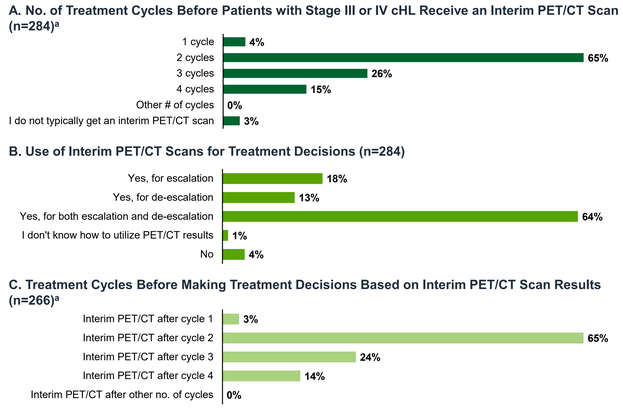


Note: Response based on the percentage of physicians selecting either a 4 or 5 on the 5-point scale shown. Question was asked as follows: When treating cHL, how much do you consider the following guidelines? **Abbreviation:** cHL, classical Hodgkin lymphoma.

PET/CT Scan Usage and Impact on Treatment

- PET/CT was almost universally used to diagnose/stage cHL. Of these physicians,
  - 97% typically order an interim PET/CT scan for stage III or IV cHL with 65% typically ordering an interim PET/CT scan after cycle 2; 41% order an interim PET/CT after cycles 3 or 4 (**Figure 3A**)
  - 64% use interim PET/CT scans for both escalating and de-escalating treatment (**Figure 3B**)
  - 65% of physicians who use an interim PET/CT scan to make treatment decisions (n=266) make that decision after cycle 2 and 38% after cycle 3 or 4 (**Figure 3C**)

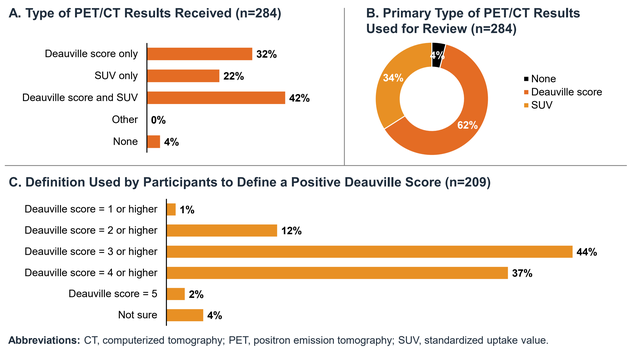
Figure 3. Self-Reported PET/CT Scan Utilization



[a] Responses are not mutually exclusive.
Abbreviations: cHL, classical Hodgkin lymphoma; CT, computerized tomography; no., number; PET, positron emission tomography.

- Among physicians using PET/CT scans, 42% receive both a Deauville score and a standardized uptake value (SUV; **Figure 4A**)
  - 62% use the Deauville score as the primary system for reviewing PET/CT results (**Figure 4B**)
  - 19% reported challenges interpreting PET/CT results
- Among physicians receiving a Deauville score (n=152), consensus is limited on what defined a positive scan (**Figure 4C**)

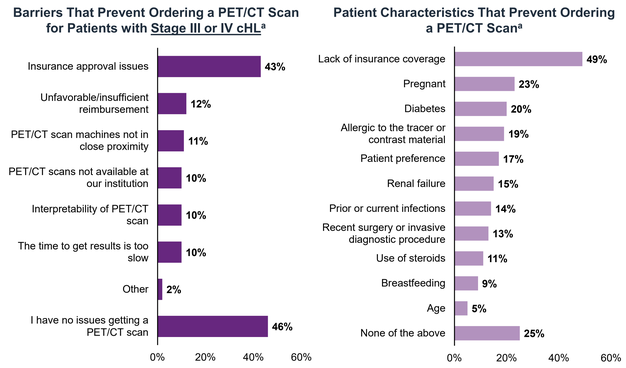
Figure 4. PET/CT Results Received and Interpretation



Abbreviations: CT, computerized tomography; PET, positron emission tomography; SUV, standardized uptake value.

- Of the 284 physicians using PET/CT scans:
  - 16% report challenges obtaining a PET/CT scan
  - 54% report trouble obtaining a PET/CT scan for patients with stage III or IV cHL
    - These physicians (n=152) report being unable to get a PET/CT scan 20% of the time, on average
  - 86% typically receive results within 2 business days; 14% receive results within 3-5 business days
  - 21% report that delays in obtaining PET/CT scan results affect their ability to use a PET-adaptive approach
  - 43% report that insurance approval issues are a barrier to PET/CT scans for patients with stage III or IV cHL; 49% report being prevented from ordering a PET/CT scan due to lack of insurance coverage (**Figure 5**)

Figure 5. Barriers and Patient Characteristics that Prevent a PET/CT Scan (n=284)



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- In the absence of a PET/CT scan, 36% of physicians use an interim biopsy and 63% an interim CT scan to inform treatment choices
- Among all physicians, 36% reported increased difficulty in getting patients with cHL access to PET/CT scans due to COVID-19

Limitations

- As this was an opt-in group of survey participants, results may not be applicable to all physicians who treat patients with cHL

Conclusions

- Although physicians consider NCCN guidelines when treating cHL, interim PET/CT scans are not universally obtained after cycle 2 for patients with stage III or IV cHL, with 65% of physicians who use PET/CT scans obtaining an interim PET/CT scan after cycle 2 for stage III or IV cHL
- When PET/CT scans are obtained, Deauville scores are commonly provided; however, there is variability in what is deemed a positive or negative Deauville score
- Challenges in obtaining PET/CT scans, with increased difficulty during COVID-19, were reported
- Insurance issues were the most commonly cited barrier to obtaining PET/CT scans
- Practical challenges exist on obtaining and interpreting interim PET/CT scans for patients with cHL

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