TPS9608 **Poster Session**

Lymph node excision (LNEx) for patients with stage III melanoma with one clinically positive node: Excision of Lymph Node trial (EXCILYNT).

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Background: When melanoma metastases are detected clinically in regional lymph nodes (cLNs) without distant metastasis, standard surgical management is therapeutic lymph node dissection (TLND), which can cause lifelong lymphedema, delay return of function, and reduce quality of life (QOL). Among patients with cLN, 40-50% have metastasis confined to just 1 LN. The goal of this trial is to test a limited lymph node excision (LNEx) for patients with 1 cLN. In a multicenter retrospective analysis of 21 patients treated with LNEx rather than TLND, only 1 (4.8%) developed a LN recurrence in the same node basin, prior to distant disease (same node basin-only recurrence: sNBoR) over ~3 years. Also, only 1 (4.8%) developed lymphedema. To provide more precise estimates of sNBoR and lymphedema rates in a prospective study, and to collect data on HRQOL and return to normal activity after surgery, the EXCILyNT trial was initiated in 2024. The primary hypothesis is that LNEx will provide regional control, with sNBoR of ≤5% at 3 years. The secondary hypothesis is that LNEx will induce lymphedema in ≤6% at 3 years. Exploratory objectives are to assess overall morbidity and HRQOL, to identify features of tumors that may most accurately identify patients with only 1 pathologic LN, and to estimate overall DFS, MSS, and overall survival rates. **Methods:** EXCILyNT is a multicenter, phase II clinical trial for patients with 1 cLN, enrolled on either of two cohorts. All are treated surgically with LNEx: those undergoing surgery first (cohort 1) and those treated with neoadjuvant systemic therapy prior to LNEx (cohort 2). Participants on cohort 2 may receive standard of care neoadjuvant therapy or may be concurrently enrolled in a clinical trial of neoadjuvant therapy, as long as that trial does not mandate TLND. Major eligibility criteria: informed consent, age ≥18 years, ECOG PS 0-2, confirmed metastatic melanoma to only 1 cLN in the axilla, groin, or iliac basin; able to undergo LNEx. The following are excluded: prior LND or radiation therapy of the cLN basin; in-transit or satellite metastases within 1 year; distant metastasis; pre-existing lymphedema that precludes assessment of lymphedema; systemic or intratumoral therapy within 3 months of enrollment. Correlative studies include: evaluation of tumor-involved nodes for immune infiltrates, tumor cell proliferation rates, and somatic mutations; serum collection for cell-free tumor DNA; Health-related quality of life (HRQOL) surveys, FACT-M and Work Productivity and Activity (WPAI) Questionnaire: General health (WPAI:GH) V2.0. The target sample size of 60 eligible participants is chosen to estimate the 3-year rate of sNBoR with an upper CI precision of 7.5% (upper CI limit of 12.5%) using a one-sided Clopper-Pearson exact test. Enrollment is planned to include 7 centers. Thus far, 12 of planned 60 patients have been enrolled at the first 2 centers. Clinical trial information: NCT05839912. Research Sponsor: Philanthropy.