Methods A retrospective study on 105 patients with early-stage TNBC who did not undergo neoadjuvant systemic therapy in Vietnam National Cancer hospital from January 2018 to May 2019. TILs assessment and the density of CD8+ TILs on IHC in intratumoural (iTILs) and stromal compartments (sTILs) were evaluated on surgical specimens. The relationship between clinicopathological features and immunoreactivity was evaluated with Pearson’s Chi squared test or Fisher’s exact test using median TIL value as the cut-off. Overall survival (OS) was analyzed using the Kaplan-Meier method, log-rank statistics and multivariable Cox regression.

Results The univariate analysis demonstrated that significant prognostic factors were T stage (p=0.000), N status (p=0.000), Her2 status (negative or Her2-low) (p=0.006) and TILs (p=0.002). The 5 year OS of patients with high TILs was significantly higher than those with low TILs (94.6% vs. 67.7%, P=0.002). Cox regression multivariate analysis showed that independent predictors of OS were TILs (p=0.03; HR=0.25; 95%CI 0.07–0.89) and CD8+ iTILs (p=0.04; HR=0.20 95%CI 0.04–0.93). There was also a correlation between TILs and Her2 status (P=0.02) where low TILs were associated with Her2-low status, infiltration of CD8+ sTILs and T stage (p=0.04).

Conclusion/Implications High TILs and CD8+ iTILs were associated with better prognosis in early-stage TNBC patients. We recommend their inclusion in routine pathological reports.

Further research is needed to explore the potential of TILs as predictive markers for immunotherapy in TNBC.

Abstract EP025/#623 Figure 1 Kaplan-Meier curves for OS according to TILs categories defined by median TIL value as the cut-off

Abstract EP025/#623 Figure 2 Kaplan-Meier curves for OS according to CD8+ iTILs categories defined by median iTILs value as the cut-off