The Cancer Genome Atlas (TCGA) dataset was evaluated for (Figure 2):

- RORγ agonist treatment of PBMCs from NSCLC patients increased expression of target genes IL-17A and IL-26 (Figure 9A/B).
- Taken together, these analyses suggest that immune cells from NSCLC patients respond to RORγ agonist treatment (Figure 4A/B) and may respond to RORγ agonists.

**REFERENCES**


**CONCLUSIONS**

- NSCLC tumors highly express RORγ and RORδ inducing genes, and this expression is correlated with improved patient survival.
- High levels of TILs and high mutational burden, both associated with immunotherapy efficacy, occur in NSCLC.
- Bioinformatic analyses suggest that immune cells from NSCLC patients are likely to respond to RORγ agonist treatment. This was supported by experimental data showing PBMCs from NSCLC patients expressing increased IL-17A and IL-26 in response to RORγ agonist treatment.
- These analyses support the inclusion of patients with NSCLC in an ongoing Phase 2 clinical trial at LBC-55716 (Table 1).

**Table 1. Tumors selected for Phase 2a Expansion**

- Non-small cell lung cancer
- Gastroesophageal cancer
- Head and neck squamous cell carcinoma
- Ovarian cancer
- Bladder cell carcinoma
- Urothelial carcinoma

**Figure 9. PBMC expression of target genes IL-17A and IL-26**

A. RORγ treated
B. RORγ untreated