FPN 151 TiP

Phase 3 trial ResQ201A of NAI plus tislelizumab and docetaxel vs. docetaxel monotherapy for advanced or metastatic NSCLC resistant to ICI therapy

elcc European Lung Cancer Congress 2026
COPENHAGEN DENMARK
25-28 MARCH 2026

Andreas Saltos[1], Edgardo Santos[2], Eric Shaefer[3], Daniel Morgensztern[4], Daniel Breadner[5]*, Paul Bhar[6], Hui Zhang[6], Courtney Lewis[6], Leylah Drusbosky[6], Sandeep Reddy[6], Patrick Soon Shiong[6]

[1]Moffitt Cancer Center, Tampa, FL; [2]The Oncology Institute of Hope and Innovation, Ft. Lauderdale, FL; [3]Highlands Oncology, Fayetteville, AR; [4]Siteman Cancer Center, St. Louis, MO; [5]London Health Sciences Centre, London, ON; [6]ImmunityBio, Inc., Culver City, CA

BACKGROUND

- Immune checkpoint inhibitors (ICIs) that target PD-1 or PD-L1 are approved for use as monotherapy and in combination with chemotherapy in advanced NSCLC. Unfortunately, most patients experience progressive disease with limited treatment options, warranting better options following progression on an ICI.
- Findings from Phase 2 studies have demonstrated the potential for the IL-15 receptor agonist nogapendekin alfa inbakicept (NAI; or N-803) to prolong progression-free survival (PFS) and overall survival (OS) when used in combination with an ICI.[1,2]
- NAI, acting as a lymphocyte stimulating agent that proliferates and activates NK and T cells[2], is anticipated to contribute to the efficacy of docetaxel plus tislelizumab therapy in ICI-resistant NSCLC and prolong survival as shown in QUILT-3.055 when administered without chemotherapy.
- ResQ201A[5] is informed by the QUILT-3.055 trial wherein mOS was prolonged with NAI at 14.3 months overall among patients with NSCLC. Most patients (80%) exceeded and/or maintained an ALC of 1,200 cells/μL which was associated with prolonged mOS compared to patients who failed to achieve ALC>1,200 cells/μL (mOS 15.8 months vs. 11.5 months, [p=0.0057]) and over half (60%) treated with NAI experienced lymphopenia reversal during treatment. Participants with a baseline ALC≥1,200 cells/μL and a group mean ALC≥1500 cells/μL at each on-treatment time point (N=44) had **greater prolonged OS** (21.1 months, 95% CI: 13.9. 42.1), with some achieving OS up to 4 years. This is a meaningful improvement compared to historical mOS of 7-9 months on docetaxel. [6]
- In ResQ201A, monotherapy docetaxel, standard 2nd line therapy for NSCLC, is being compared to combination therapy with NAI, anti-PD-1 tislelizumab, and 2 cycles of docetaxel.[4]

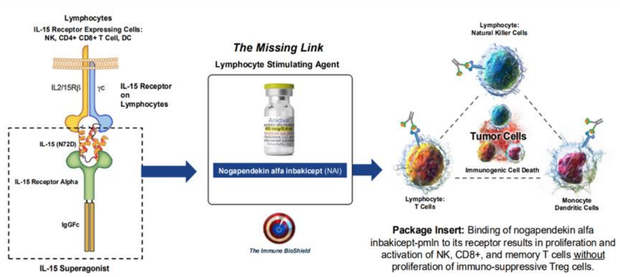

Figure 1: Nogapendekin alfa inbakicept (NAI) Structure & MOA[2]

TRIAL DESIGN

Randomized, Open-label, Phase III Clinical Trial of N-803/NAI Plus Tislelizumab and Docetaxel versus Docetaxel Monotherapy in Participants with Advanced or Metastatic Non-Small Cell Lung Cancer who have Acquired Resistance to Immune Checkpoint Inhibitor Therapy[5]

N=462

Key Inclusion Criteria:

- Age ≥ 18 years
- Ability to provide informed consent
- Pathologically-confirmed stage IV NSCLC with acquired resistance to an ICI (PD after an initial response or stable disease (SD) (≥ 6 mo. duration) to a single line of anti-PD-(L)1 with or without anti-CTLA-4 or chemotherapy
- ECOG performance status of 0 to 2
- Measurable tumor lesions according to RECIST v1.1

Stratification:

- **Histology** *Squamous or non-squamous NSCLC*
- **Geographical Region** *North America, Europe, Asia, Other*
- **Actionable Genomic Alteration** *EGFR, ROS, Other, None*

2:1 Randomization

Experimental Arm:

- Induction: 3-week cycles NAI [SC 1.2 mg], tislelizumab [IV 200 mg] plus docetaxel [IV 75 mg/m^2]
- Maintenance: Repeated 3-week cycles of NAI [SC 1.2 mg] and tislelizumab [IV 200 mg] without docetaxel

N=308

Control Arm:

- Repeated 3-week cycles with docetaxel [IV 75 mg/m^2]

N=154

Key Exclusion Criteria:
Systemic autoimmune disease, history of organ transplant, and positive for *ALK* rearrangement.

Treatment until disease progression, unacceptable toxicity, withdrawal of consent, or if the investigator feels it is no longer in their best interest to continue treatment.

ENDPOINTS

Primary:

- OS by Kaplan-Meier with treatment arm comparison based on the stratified log-rank test and OS hazard ratio (and 95% CI) summarized based on the stratified Cox proportional hazard model, both stratified by the randomization strata.

Secondary:

- Immune disease control rate (iDCR – iCR + iPR + iSD [≥ 2 months]) per iRECIST; progression-free survival (iPFS), overall response rate (iORR) and duration of response (iDOR).
- Safety assessed by AEs and SAEs graded using the NCI CTCAE v5.0.

Exploratory:

- Disease-specific survival (DSS), defined as time from randomization to death resulting from NSCLC & PFS, DOR, DCR, ORR per RECIST v1.1
- Assess whole slide images and tumor molecular profiles and correlate with participant outcomes.
- Collect blood for analyses, which may include ctDNA testing.

REFERENCES

1. Wrangle, J. *Lancet Oncol.* 2018;19(5):694-704; and *J. Thorac. Oncol.* 2024; 19(10) Suppl.
2. NAI Package Insert, FDA April 2024 – Section 12.1 Mechanism of Action.
3. Wrangle, J. 2024, September 8. QUILT 3.055 IL15 Superagonist (N-803, Anktiva) + Checkpoint Inhibitor (CPI) Prolongs OS in 2nd Line or Greater NSCLC Patients Failing CPI. 2024 World Congress on Lung Cancer, San Diego, CA.
4. Wangle 2021 *JAMA Oncol* 7.
5. ResQ201A: Clinical Trial Of N-803 Plus tislelizumab and Docetaxel Versus Docetaxel Monotherapy In Participants With Advanced Or Metastatic Non-Small Cell Lung Cancer (ClinicalTrials.gov identifier: NCT06745908)
6. Soon-Shiong, P. 2025, September 7. NAI, an IL-15 Superagonist, a New Class of Lymphocyte Stimulating Agent (LSA) Prolongs OS in NSCLC by Reversing Lymphopenia. 2025 World Congress on Lung Cancer, Barcelona, Spain.

Download PDF & Related Articles
ELCC 2025
Info@ImmunityBio.com

Presenting Author COI: Consultancy with ImmunityBio, Merck, AstraZeneca, Pfizer, Amgen and Boehringer Ingelheim