Supplemental Material

Supplementary Study Periods

STUDY SCHEDULE

Examination	Baseline (screen)[a]	Neoadjuvant RX		Evaluation post pembro[k]	Surgery	Post-Surgery
		Cycle1	Cycle 2			
Day	30 to 0	1 (+/- 3 days)	22 (+/- 3 days)	pre-surgery	29 – 56 (from C1D1)	2-6 wks. post Surgery
Informed Consent	X					
Eligibility	X					
Medical Hx/Demo/	X					
Height	X					
Vital Signs	X	X	X	X		X
Weight/BSA	X	X	X	X		X
Physical Exam	X	X	X	X		X
Performance Status	X	X	X	X		X
Hematology [b,c,e]	X	X	X	X		X
Chemistries[b,d,e]	X	X	X	X		X
Serum Beta HCG[h]	X	X[h]				
Calculated	X					
Thyroid Functions	X					
PT(INR), aPTT[e]						
Urinalysis	X					
PFTs (FEV1/DLCO) [e]	X					
Radiologic Eval[g]	X			X[g]		X[g]
Medical & Surgical	X			X		
EKG	X					

Tumor Histology	X					
Adverse Events						
Concomitant Meds	X	X	X	X		X
Pembrolizumab		X	X			
Blood Sampling [j]	X[j]			X[j]		X[j]
Surgical Specimen[p]					X	
Tumor Biopsy Slides[n]					X	

Examination	**STD ADJ CT/RT [L]**	**Adjuvant Pembrolizumab[m]**				**EOS[s]** Follow-Up
		Cycle 1[m]	**Cycle 2**	**Cycle 3**	**Cycle 4**	
Day						≥30 d post
Informed Consent						
Eligibility						
Medical History/Demo-						
Vital Signs						
Physical Exam						
Performance Status						
Hematology [b,c,e]						
Chemistries[b,d,e]						
Serum Beta HCG[h]		X				
Thyroid Functions						

PT(INR), aPTT[e]						
Urinalysis						
PFTs (FEV1/DLCO) [e]						
Radiologic Evaluation[g]						
Med/surg Evaluation						
EKG						
Tumor Histology						
Adverse Events		X	X	X	X	X
Concomitant Meds		X	X	X	X	X
Pembrolizumab		X	X	X	X	
Blood Sampling [j]						X[j]
Surgical Specimen[p]						
Tumor Biopsy Slides[n]						

To allow for patient and investigator schedules, holidays, weather or other emergencies requiring facilities to be closed, visits can be performed ±3 days of scheduled visit

a Pre-enrollment baseline (screen) assessments are to be performed within -30 to 0 days unless otherwise specified.

b May be obtained within 3 days of pembrolizumab dosing

c Hematology values to include Hgb/Hct, WBC with auto or manual differential, platelets

d Chemistries to include Na^+, K^+, Cl^-, total protein, albumin, calcium, glucose, BUN, creatinine, total bilirubin (direct bilirubin if total is elevated above upper limit of normal), alkaline phosphatase, SGOT, SGPT, LDH, uric acid, magnesium, phosphorus. **e** Baseline required labs to be performed within 30 days of enrollment Pre-study tests may be used for day 1, cycle 1 tests if obtained within 14 days of day 1 cycle 1 treatment. PFT's per institutional standards.

f Calculated creatinine clearance (see appendix D)

[g] Radiologic evaluation: pre-treatment clinical staging PET/CT of chest/abdomen, brain MRI or CT as per standard of care (these may be performed up to 42 days); after completing cycle#2 Pembrolizumab therapy (prior to surgery) chest CT; post- surgery recommend chest CT every 3-4 months (or per institutional standard of care) for 2 years

[h] All WOCBP MUST test negative for pregnancy within 48 hours prior to any initial study procedure based on a serum pregnancy test. If subject uses appropriate contraceptive methods (section 6.2) from the time of the initial serum pregnancy test, then the subsequent pregnancy test can be done within 72 hours before receiving pembrolizumab. If appropriate contraceptive methods are not begun immediately with the first serum pregnancy test, then subsequent serum pregnancy tests must be done within 48 hours prior to the study drug administration. If the pregnancy test is positive, the subject must not receive pembrolizumab and must not be enrolled in the study, or will be removed from treatment.

[j] **Blood** samples to assess activated CD8+ T cells with specificity against tumor antigens and CD4 and CD8 functional memory. **Collection 1**: Baseline: pre-dose #1 pembrolizumab**. Collection 2 : After second dose of Pembrolizumab** (cycle 2) and prior to surgery. **Collection 3**: 2-6 weeks after surgery. **Collection #4**: Three to 6 weeks after last dose of adjuvant pembrolizumab. 4 tubes of 8.5 ml each (ACD anti-coagulated Vacutainer yellow tops).

[k] Evaluation Post pembrolizumab prior to surgery. Final visit (if $\leq$ grade 1 toxicity) for those subjects that come off treatment early for progression of disease, intolerance to protocol therapy, for other reasons, or patient withdraws consent; safety evaluation should occur 30 days (+/- 5days) after last dose pembrolizumab or before initiation of a new anti-neoplastic cancer treatment (whichever comes first).

[L] **Post-op standard therapy**, including adjuvant CT and RT, based on final pathologic stage of cancer, tumor margins, and other standard clinical criteria. Post-op therapy is non-study specific and can be given through the primary oncology team.

[m] Adjuvant **Pembrolizumab**: Patients who receive both adj CT plus adj RT should start Pembrolizumab within 8 months of surgery. Patients who receive only one modality of adj therapy (e.g. CT alone or RT alone) should start Pembrolizumab within 6 months of surgery Patients who do not receive any adjuvant therapy should start Pembrolizumab within 4 months of surgery.

n Tumor Biopsy Slides (appendix I)

p Surgery to occur at 4-8 weeks (29-56 days). If dose # 2 pembrolizumab delayed, there is to be at least 2 days between this infusion and surgery. Tumor Specimen collection (appendices G & H)

[R]**Post-Surgery F/U visit:** Two to 6 weeks following surgery. Subjects with bulky residual adenopathy such that resection was not attempted will be removed from protocol therapy and should receive standard oncology care as deemed appropriate by the treating physician. Subjects with positive surgical margins or N2 disease will be removed from protocol and considered for standard of care post-operative radiation +/- standard chemotherapy as deemed appropriate by their physician. Subjects who are completely resected or who refuse or cannot receive adjuvant chemotherapy will be given the option of receiving adjuvant pembrozulimab. Collection #3 research blood sample 2-6 weeks after surgery prior to initiation of adjuvant CT.

[S]**End of Study Visit**: End of study evaluation is to occur approximately 30 days or more after adjuvant Pembrolizumab treatment. SAEs will be collected for 90 days after the end of treatment. Final research blood sample will be collected (collection #4). Chest CT if applicable (per radiologic evaluation, Appendix A)

[T]**Follow-Up**: Patients should have follow-up every 3-4 months as per standard care(of the treating institution (recurrence and survival) for 2 years unless patient has experienced > grade 1 toxicity related to Pembrolizumab (in which case follow until resolution of the AE to Grade 0-1, patient deemed stable by investigator, or new anti-neoplastic therapy has begun.). After 2 years follow every 6 months for up to five years. These evaluations may be coordinated with visits for radiologic disease evaluation or occur via phone follow-up. Lab assessments will be at the discretion of treating physician.

[*] Upon lung cancer relapse, radiologic imaging of sites of failure is at the discretion of the treating physician.

Supplementary Materials- Statistical Analysis

Surgery feasibility rate, the primary endpoint of the trial, will be analyzed using the data from all evaluable patients, who are defined as the patients who meet eligibility criteria and has received at least 1 dose of pembrolizumab. The surgery feasibility rate of neoadjuvant pembrolizumab as well as its confidence interval will be estimated.

Secondary Objectives

All secondary objectives are considered exploratory in nature, and type I error will not be controlled for multiplicity. P-values for these statistical tests will be provided for descriptive purposes. However, if a statistical test on a secondary outcome is significant at the 2-sided significance level of 0.01, the finding will be considered worthy of future investigation.

1) We will estimate the rate of objective response rate for the protocol treatment. The definition of objective response will be measured by RECIST 1.1. The objective response rate (ORR=CR+PR) along with its 95% exact confidence interval will be estimated.

2) We will evaluate disease-free survival and patterns of metastases after protocol treatment. Disease-free survival (DFS) is defined as the time from surgical resection to disease recurrence (first disease recurrence or death, whichever comes first) after surgery. The Kaplan-Meier estimator will be used to estimate median DFS and its confidence interval. The frequencies of metastases by site will be tabulated.

3) Blood based biomarkers will be evaluated for the changes before and after the protocol treatment. The association of the baseline value and the changes of these biomarkers with clinical outcomes, such as objective response, overall survival and disease-free survival, will be evaluated using logistics regression and Cox models.

4) We will determine the percentage of patients with "detectable" (percentage of ≥ 0.05% with each value also being at least twice that of the background unstimulated control value) tumor infiltrating lymphocytes (TILs) after protocol treatment. The percentage of patients with TILs for patients who have surgical resection and its exact confidence interval will also be estimated.

5) We will evaluate whether presence, quantity or quality of detectable TILs is associated with pathologic response to neoadjuvant therapy. A Fisher exact test will be used to evaluate the association of both the presence and the quality of TILs with pathologic tumor response to neoadjuvant therapy. A Wilcoxon rank sum test will be used to test the association of the quantity of TILs and pathologic response to neoadjuvant therapy.

6) Treatment-related adverse events will be summarized by type and grade.

7) The proportion of patients with detectable circulating T cells specific against TAA after the protocol treatment will be estimated and its confidence interval will be provided. An exact binominal test will be used to test the increase in the proportion of patients with detectable circulating T cells specific against TAA after the protocol treatment relative to baseline.

8) Estimate the rate of pathologic response for neoadjuvant pembrolizumab in early stage NSCLC. The pathologic response rate along with its 95% exact confidence interval will be estimated.

9) Determine if the immunomodulatory effects of neoadjuvant chemotherapy plus pembrolizumab impact the suppressive mechanisms, restoring functional reactivity to important anti-tumor effector cell populations. Functional TAA-specific T cell reactivity's will be measured in the blood at 4 time points: Collection 1, 2, 3 and 4. A Wilcoxon rank sum test will be used to test for differences from baseline, as well as for any association between each reactivity measure and pathologic response to neoadjuvant therapy.

10) Explore an alternative definition for detectability suitable for expression values generated using Boolean gating, and determine the percentage of patients with circulating T cells meeting this definition. The percentage of patients with circulating T cells meeting the new definition of detectable and its 95% exact confidence interval.

11) Perform gene expression analysis on tumor to elucidate genes associated with function and modulation of the PD-1/PD-L1 axis.

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125 **Supplementary Table S1.** Eligibility Criteria with Inclusion and Exclusion Criteria

<table>
<tr><td>Inclusion

Criteria</td><td>-Histologically cytologically confirmed NSCLC.
-Clinical stage IB (≥3cm per CT), Stage IIA/IIB, or Stage IIIA (N0-2) amenable to surgical resection.
-Primary tumor ≥ 3 cm (for all stages entered) to increase the likelihood that excess tumor will be available after resection.
-Patient must be deemed a surgical candidate as documented by surgeon within their respective institutional standards.
-ECOG performance status of 0 or 1 (Appendix C).
-NO prior chemotherapy, radiation therapy or biologic/targeted therapy for current diagnosis of lung cancer.
-Age ≥18 years.
-No active invasive malignancy in the past 2 years other than non-melanoma skin cancer. Cancers that are in-situ are not considered invasive.
-Signed written informed consent including HIPAA according to institutional guidelines.
-Adequate Organ Function:
<table><tr><td>System</td><td>Laboratory Value</td></tr><tr><td>Hematological</td><td></td></tr><tr><td>Absolute neutrophil count (ANC)

or AGC</td><td>≥1500 per uL</td></tr><tr><td>Platelets</td><td>≥100,000 per uL</td></tr></table></td></tr>
</table>

Hemoglobin	≥9 g/dL or ≥5.6 mmol/L without transfusion or EPO dependency (within 7 days of assessment)
Renal	
Serum creatinine **OR** Measured or calculated creatinine clearance (GFR can also be used in place of creatinine or CrCl)	≤1.5 X upper limit of normal (ULN) **OR** ≥60 mL/min for subject with creatinine levels > 1.5 X institutional ULN
Hepatic	
Serum total bilirubin	≤ 1.5 X ULN **OR**
	Direct bilirubin ≤ ULN for subjects with total bilirubin levels > 1.5 ULN
AST (SGOT) and ALT (SGPT)	≤ 2.5 X ULN
Albumin	≥2.5 mg/dL
Coagulation	
International Normalized Ratio (INR) or Prothrombin Time (PT) Activated Partial Thromboplastin Time (aPTT)	≤1.5 X ULN unless subject is receiving anticoagulant therapy as long as PT or PTT is within therapeutic range of intended use of anticoagulants ≤1.5 X ULN unless subject is receiving anticoagulant therapy as long as PT or PTT is within therapeutic range of intended use of anticoagulants
[a]Creatinine clearance should be calculated per institutional standard. (Appendix D)	

	-Females of child-bearing potential (not surgically sterilized or postmenopausal [a woman who is ≥ 45 years of age and has not had menses for greater than 1 year]) must test negative for pregnancy within 48 hours prior to any initial study procedure based on a serum pregnancy test. Both sexually active males and females of reproductive potential must agree to use a reliable method of birth control, as determined by the patient and their health care team, during the study and for 120 days following the last dose of study drug. If subject uses appropriate contraceptive methods (the use of two forms at the same time) from the time of the initial serum pregnancy test, then the subsequent pregnancy test can be done within 72 hours of receiving study drug administration. If appropriate; contraceptive measures are not begun immediately with the first serum pregnancy test, then subsequent serum pregnancy tests must be done within 48 hours prior to the study drug administration. -Patients must agree to research blood sampling to participate in study. -Have measurable disease based on RECIST 1.1. -FEV1 and DLCO ≥ 40% predicted (or per institutional standard).
Exclusion Criteria	-Treatment within the last 30 days with a drug that has not received regulatory approval for any indication at the time of study entry or used an investigational device within 4 weeks of the first dose of treatment. -Has a known history of active TB (Bacillus Tuberculosis). -Hypersensitivity to pembrolizumab or any of its excipients. -Concurrent administration of any other anti-tumor therapy. -Has received prior therapy with an anti-PD-1, anti-PD-L-1, or anti-PD-L2 agent.

	-Has known active Hepatitis B (e.g., HBsAg reactive) or Hepatitis C (e.g., HCV RNA [qualitative]. -Inability to comply with protocol or study procedures. -Active infection requiring antibiotics, antifungal or antiviral agents, that in the opinion of the investigator would compromise the patient's ability to tolerate therapy. -Has known history of, or any evidence of active, non-infectious pneumonitis that required steroids (steroid treatment of COPD or asthma allowed). -Has a known history of Human Immunodeficiency Virus (HIV) (HIV 1/2 antibodies). -Has active autoimmune disease that has required systemic treatment in the past 2 years (i.e. with use of disease modifying agents, corticosteroids or immunosuppressive drugs). Replacement therapy (e.g. thyroxine, insulin or physiologic corticosteroid replacement therapy for adrenal or pituitary insufficiency etc.) is not considered a form of system treatment. Patients with a history of inflammatory bowel disease, including ulcerative colitis and Crohn's Disease, are excluded from this study, as are patients with a history of symptomatic disease (e.g., rheumatoid arthritis, systemic progressive sclerosis [scleroderma], systemic lupus erythematosus, autoimmune vasculitis [e.g., Wegener's Granulomatosis]); motor neuropathy considered of autoimmune origin (e.g. Guillain-Barre Syndrome and Myasthenia Gravis). -Has a diagnosis of immunodeficiency or is receiving systemic steroid therapy or any other form of immunosuppressive therapy within 7 days prior to the first dose of trial treatment. -Has a known additional invasive malignancy that is progressing or requires active treatment. Exceptions include basal cell carcinoma of the skin or squamous cell carcinoma of the skin that has undergone potentially curative therapy or in situ cervical

	cancer. -Is pregnant or breastfeeding, or expecting to conceive or father children within the projected duration of the trial, starting with the pre-screening or screening visit through 120 days after the last dose of trial treatment. -Has had major surgery (other than definitive lung cancer surgery) within two weeks of study or other serious concomitant disorders that in the opinion of the investigator would compromise the safety of the patient or compromise the patient's ability to complete the study. -Has received any non-oncology vaccine therapy used for prevention of infectious diseases (for up to 30 days before or after any dose of pembrolizumab). *Note: Seasonal influenza vaccines for injection are generally inactivated flu vaccines and are allowed; however, intranasal influenza vaccines (e.g., Flu-Mist®) are live attenuated vaccines and are not allowed.* -Has history of myocardial infarction having occurred less than 6 months before inclusion, any known uncontrolled arrhythmia, symptomatic angina pectoris, active ischemia, or cardiac failure not controlled by medications. Patients with CAD recently treated with surgery and/or stent, if stable without symptomatic angina pectoris, active ischemia are eligible. -Has evidence or a history of interstitial lung disease. -Has known psychiatric or substance abuse disorders that would interfere with cooperation with the requirements of the trial. -Prisoners or subjects who are compulsorily detained involuntarily incarcerated) for treatment of either psychiatric or physical (e.g., infectious) illness.

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Supplementary Table S2. Representativeness of Study Participants Supplementary Table S2: Representativeness of Study Participants	
Cancer type	Lung cancer
Considerations related to:	
Sex	The estimated incidence of lung cancer in the US is similar among males and females with 116,310 and 118, 270 new cases projected for males and females in the US for the year 2024.[1] Between 2017-2021, the age adjusted new cases per 100,000 persons in the US was 54.9 and 44.8 for men and women respectively.[2] The estimated number of deaths in the year 2024 for men and women are grossly similar at 65,790 and 59,280 respectively.[1]
Age	Between 2017 and 2021, the median age of diagnosis of lung cancer in the US was 71. The most frequent age at diagnosis was 65-74 years.[2]
Race/ethnicity	The 5-year- age adjusted incidence of lung cancer per 100,000 persons between 2017-2021 was 55.4, 52.5, 33.7, 26.0 for Non-Hispanic (NH) Whites, NH Blacks, NH Asian/Pacific Islander, NH American Indian/Alaskan Native and Hispanics respectively.[2] Despite less incidence of lung cancer in NH Blacks compared to NH Whites in the US, black men are about 12% more likely to develop lung cancer than white men. Conversely, black women are less likely to develop lung cancer than

	white women.[2]
Geography	In the US, there is an estimated 234,580 new cases of lung cancer for the year 2024. The estimated number of new diagnoses for 2024 is 8920, 1290 and 3880 for North Carolina, New Hampshire and Minnesota respectively. The estimated number of deaths are 4640, 620, 2140 for North Carolina, New Hampshire and Minnesota respectively.
Other considerations	Underrepresentation of ethnic and minority populations in clinical trials limits the internal and external validity of the results and applicability across populations. In large, randomized neoadjuvant immunotherapy lung cancer trials such as Checkmate 816 and Checkmate 77T, race/ethnicity were not reported. In other large studies incorporating neoadjuvant immunotherapy in which ethnicity was reported, such Keynote 671, minority populations were underrepresented with Black patients at ~2% compared to 13.4% of the US Black population.
Overall representativeness of this study	The age distribution of our study is similar to the average age distribution of lung cancer.
	The demographics of this study is not representative of the catchment area. The patient demographics of the cancer centers where this study was conducted between 2018-2022 are as follows: Duke Cancer Institute (58.7% Non-Hispanic (NH) Whites, 23.8% NH Blacks, 3.4% NH Asian/Pacific Islander, 0.8% NH American Indian/Alaskan Natives, and

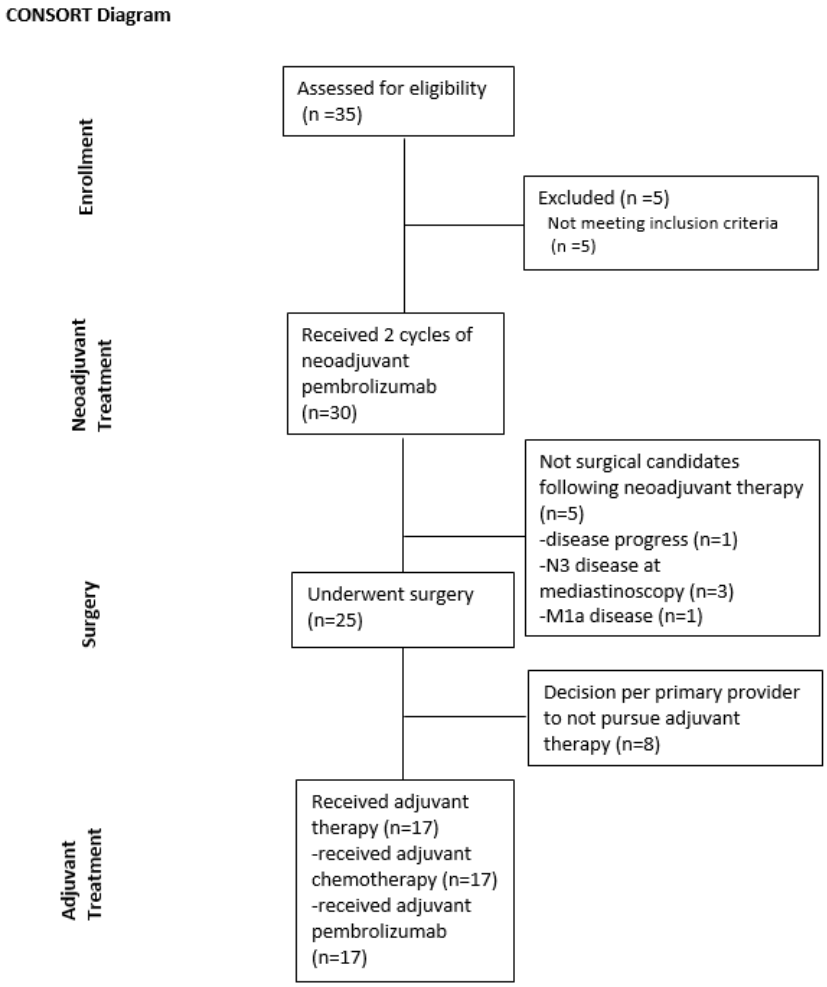
	9.6% Hispanics); Dartmouth Cancer Center (89.3% NH Whites, 1.3% NH Blacks, 2.3% NH Asian/Pacific Islander, 0.1% NH American Indian/Alaskan Native, 3.6% Hispanic); Mayo Clinic Comprehensive Cancer Center (65.7% NH Whites, 7.8% NH Black, 3.7% NH Asian/Pacific Islander, 0.7% NH American Indian/Alaskan Native and 18.3% Hispanics).[3]

[1] Siegel RL, Giaquinto AN, Jemal A. Cancer statistics, 2024 [published correction appears in CA Cancer J Clin. 2024 Mar-Apr;74(2):203. doi: 10.3322/caac.21830]. *CA Cancer J Clin*. 2024;74(1):12-49. doi:10.3322/caac.21820

[2]National Cancer Institute. Surveillance, Epidemiology and End Results Program. Cancer Stat Facts: Lung and Bronchus Cancer. Available at https://seer.cancer.gov/statfacts/html/lungb.html

[3] DelNero PF, Buller ID, Jones RR, Tatalovich Z, Vanderpool RC, Ciolino HP, Croyle RT. A National Map of NCI-Designated Cancer Center Catchment Areas on the 50th Anniversary of the Cancer Centers Program. Cancer Epidemiol Biomarkers Prev. 2022 May 4;31(5):965-71. DOI: 10.1158/1055-9965.EPI-21-1230External Web Site Policy, PMID: 35101903

138 **Supplementary Figure S1.** CONSORT diagram for patient disposition on trial



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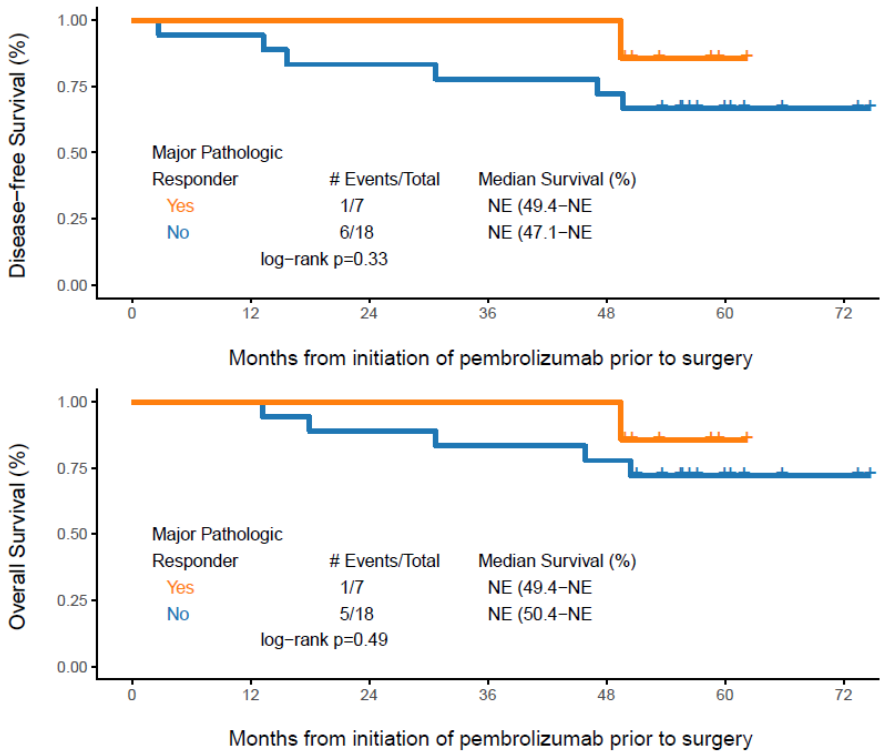
142 **Supplementary Figure S2.** Disease free and overall survival for patients with major pathologic response

143 vs those without major pathologic response noted at time of surgery



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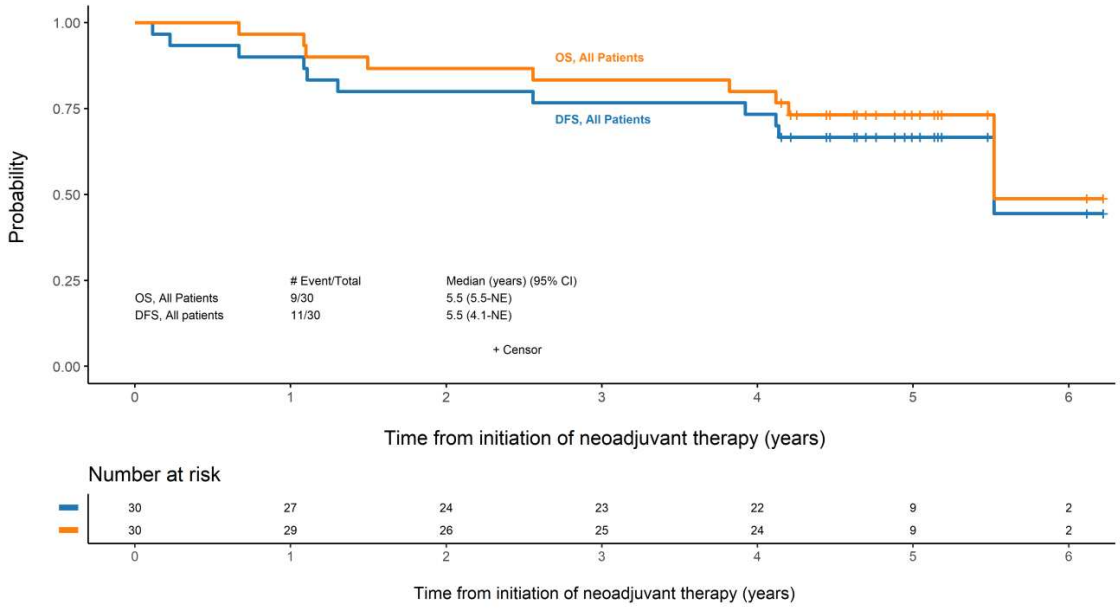
147 **Supplementary Figure S3.** Overall survival and disease-free survival for all evaluable patients on trial



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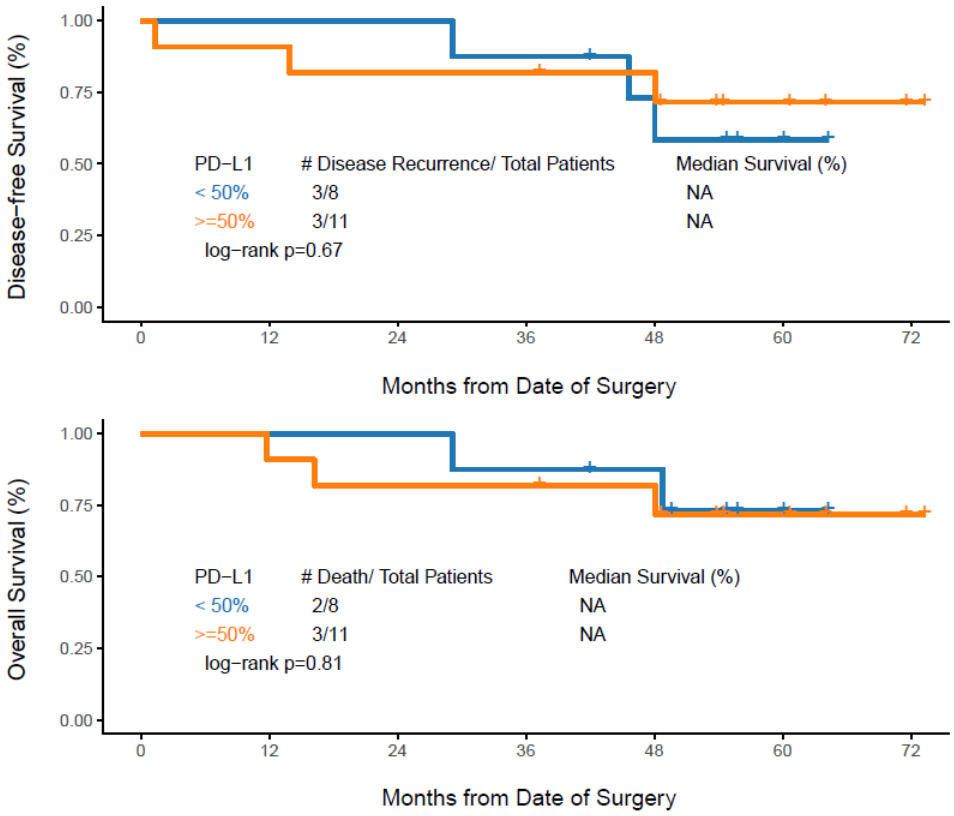
151 **Supplementary Figure S4.** Disease free and overall survival for patients with post-operative PDL1 TPS

152 ≥50% vs <50%.



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156 **Supplementary Table S3.** Whole Exome Sequencing results for patients on study.

Whole exome sequencing findings	N (%)
EGFR mutations	0 (0)
BRAF V600E	0 (0)
METex14 Skipping mutations	0 (0)
ERBB2 mutations	0 (0)
KRAS G12C mutations	2 (7)
STK11 mutations	0 (0)
KEAP1 mutation (V369A VUS)	1 (3)
TP53 mutations Genomic Testing	8 (27)

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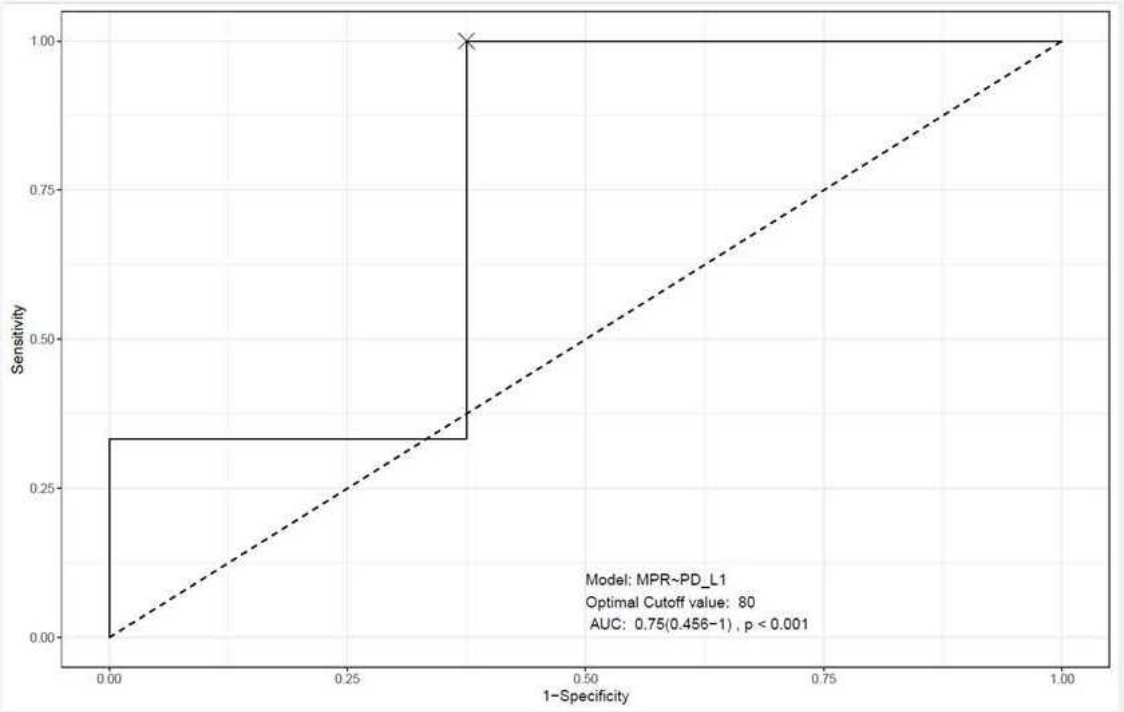
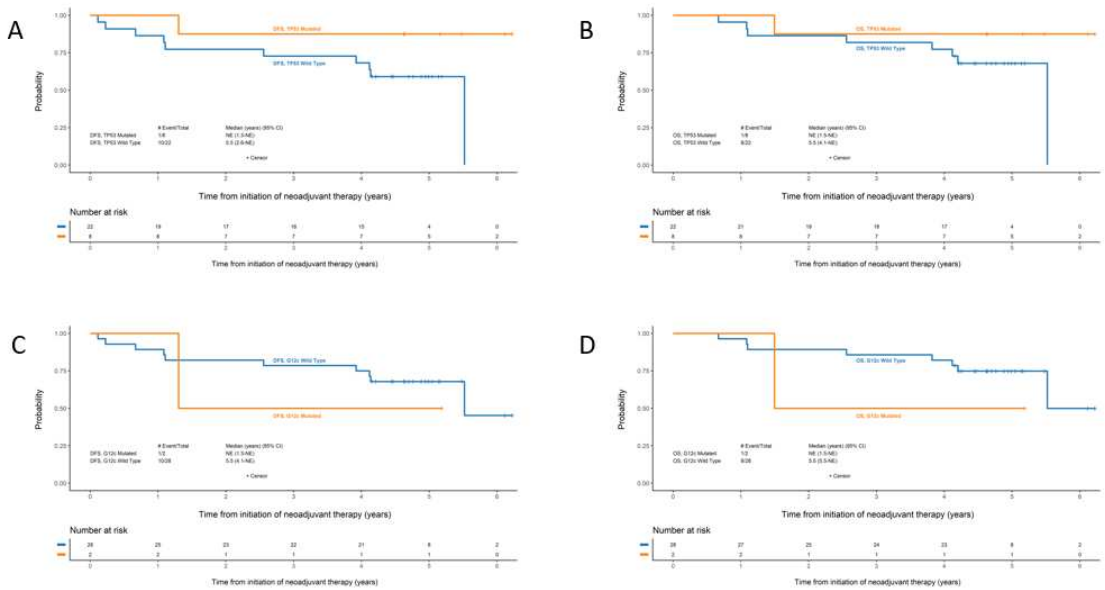
Supplementary Figure S5. ROC Curve for MPR vs Non MPR based on PDL1 Levels



Supplementary Figure S6. Disease free and overall survival for genetic subgroups. A) DFS for patients with *TP53* mutated tumors vs all others. B) OS for patients with *TP53* mutated tumors vs all others. C) DFS for patients with KRASG12C mutated tumors vs all others. D) OS for patients with KRASG12C mutated tumors vs all others.



172 **Supplementary Table S4.** Summary of measures of PCSK9 by pathologic responder

PCSK9 (ng/mL)	MPR (N=7)	Non-MPR (N=21)	Total (N=28)	P-value[1]
Pre-treatment				0.11
N	7	17	24	
Mean (SD)	110.5 (18.5)	127.0 (17.8)	122.2 (19.2)	
Median (IQR)	113.4 (93.9, 127.4)	122.2 (117.5, 137.8)	120.4 (113.3, 132.8)	
Range	88.1, 135.0	97.1, 167.1	88.1, 167.1	
Post-neoadjuvant treatment				0.13
N	7	17	24	
Mean (SD)	135.6 (16.9)	154.8 (28.2)	149.2 (26.6)	
Median (IQR)	139.8 (120.9, 148.4)	157.3 (139.7, 166.9)	146.5 (129.5, 163.8)	
Range	108.0, 154.8	110.6, 209.9	108.0, 209.9	
Post-surgery				0.05
N	6	17	23	
Mean (SD)	165.8 (28.1)	199.8 (30.5)	190.9 (33.0)	
Median (IQR)	169.3 (140.8, 179.9)	197.0 (180.2, 210.2)	192.6 (166.9, 207.1)	
Range	128.5, 207.1	147.3, 255.1	128.5, 255.1	
Post-adjuvant treatment				0.51
N	6	17	23	
Mean (SD)	176.7 (43.9)	196.6 (26.8)	191.4 (32.2)	
Median (IQR)	195.7 (122.4, 212.2)	195.3 (189.5, 209.5)	195.3 (177.9, 212.2)	
Range	120.4, 214.1	130.4, 234.0	120.4, 234.0	

[1]Exact Wilcoxon rank sum p-value.

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175 **Supplementary Table S5.** PDL1 expression for Patients with MPR vs Non-MPR

	Major Pathologic Responder			
	Yes (N=3)	No (N=16)	Total (N=19)	P-value
PDL1 TPS				0.1724[1]
N	3	16	19	
Mean (SD)	86.7 (11.55)	42.4 (40.70)	49.4 (40.86)	
Median	80.0	22.5	60.0	
Range	80, 100	0, 90	0, 100	

[1]Kruskal-Wallis p-value

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192 Supplementary Table S6: Summary of measures of plasma PCSK9 ng/ml cancer progressor versus
193 non-progressor.

PCSK9 (ng/mL)	Progressor (N=11)	Non-Progressor (N=19)	P-value[1]
Pre-treatment			0.95
N	7	17	
Mean (SD)	122.2 (20.7)	122.2 (19.2)	
Median (IQR)	122.2 (108.3, 139.2)	119.3 (114.7, 127.4)	
Range	88.1, 146.6	93.9, 167.1	
Post-neoadjuvant treatment			0.16
N	7	17	
Mean (SD)	163.6 (35.3)	143.3 (20.6)	
Median (IQR)	160.7 (144.1, 200.4)	142.0 (129.4, 157.3)	
Range	108.0, 209.9	110.6, 184.8	
Post-surgery			0.51
N	10	13	
Mean (SD)	193.5 (37.7)	189.0 (30.4)	
Median (IQR)	205.0 (158.2, 210.2)	180.2 (171.6, 195.6)	
Range	128.5, 252.7	140.8, 255.1	
Post-adjuvant treatment			0.88
N	10	13	
Mean (SD)	194.2 (32.6)	189.3 (33.1)	
Median (IQR)	197.4 (189.5, 207.7)	195.3 (177.9, 212.2)	
Range	120.4, 234.0	122.4, 229.7	
Absolute change from pre-treatment to post-neoadjuvant treatment			0.16
N	7	17	
Mean (SD)	41.4 (32.7)	21.1 (28.0)	
Median (IQR)	52.3 (7.8, 54.3)	14.7 (-0.2, 39.8)	
Range	4.8, 96.8	-20.1, 69.8	
Absolute change from pre-treatment to post-surgery			0.64
N	7	12	
Mean (SD)	62.6 (40.7)	66.5 (38.4)	
Median (IQR)	50.4 (40.5, 82.4)	64.2 (44.5, 88.2)	
Range	9.5, 139.6	6.2, 135.8	
Absolute change from pre-treatment to post-adjuvant treatment			0.90
N	7	12	
Mean (SD)	64.4 (34.4)	64.0 (36.6)	
Median (IQR)	61.3 (32.3, 94.3)	68.6 (47.0, 92.1)	
Range	20.0, 118.9	-5.0, 103.6	

Relative change (%) from pre-treatment to post-neoadjuvant treatment			0.24
N	7	17	
Mean (SD)	35.2 (28.4)	20.0 (26.0)	
Median (IQR)	36.7 (5.6, 48.3)	12.8 (-0.1, 33.8)	
Range	3.5, 85.6	-15.4, 71.8	
Relative change (%) from pre-treatment to post-surgery			0.67
N	7	12	
Mean (SD)	53.1 (36.0)	57.6 (34.9)	
Median (IQR)	46.0 (34.4, 67.4)	53.0 (34.2, 85.1)	
Range	6.9, 123.4	4.0, 113.9	
Relative change (%) from pre-treatment to post-adjuvant treatment			0.74
N	7	12	
Mean (SD)	54.7 (31.7)	55.2 (33.9)	
Median (IQR)	44.0 (36.7, 87.0)	61.7 (35.8, 81.4)	
Range	13.6, 105.1	-3.9, 99.0	

[1]Exact Wilcoxon rank sum p-value.