

Meta-Analysis of Neoadjuvant Immunotherapy for Patients with Resectable Non-Small Cell Lung Cancer

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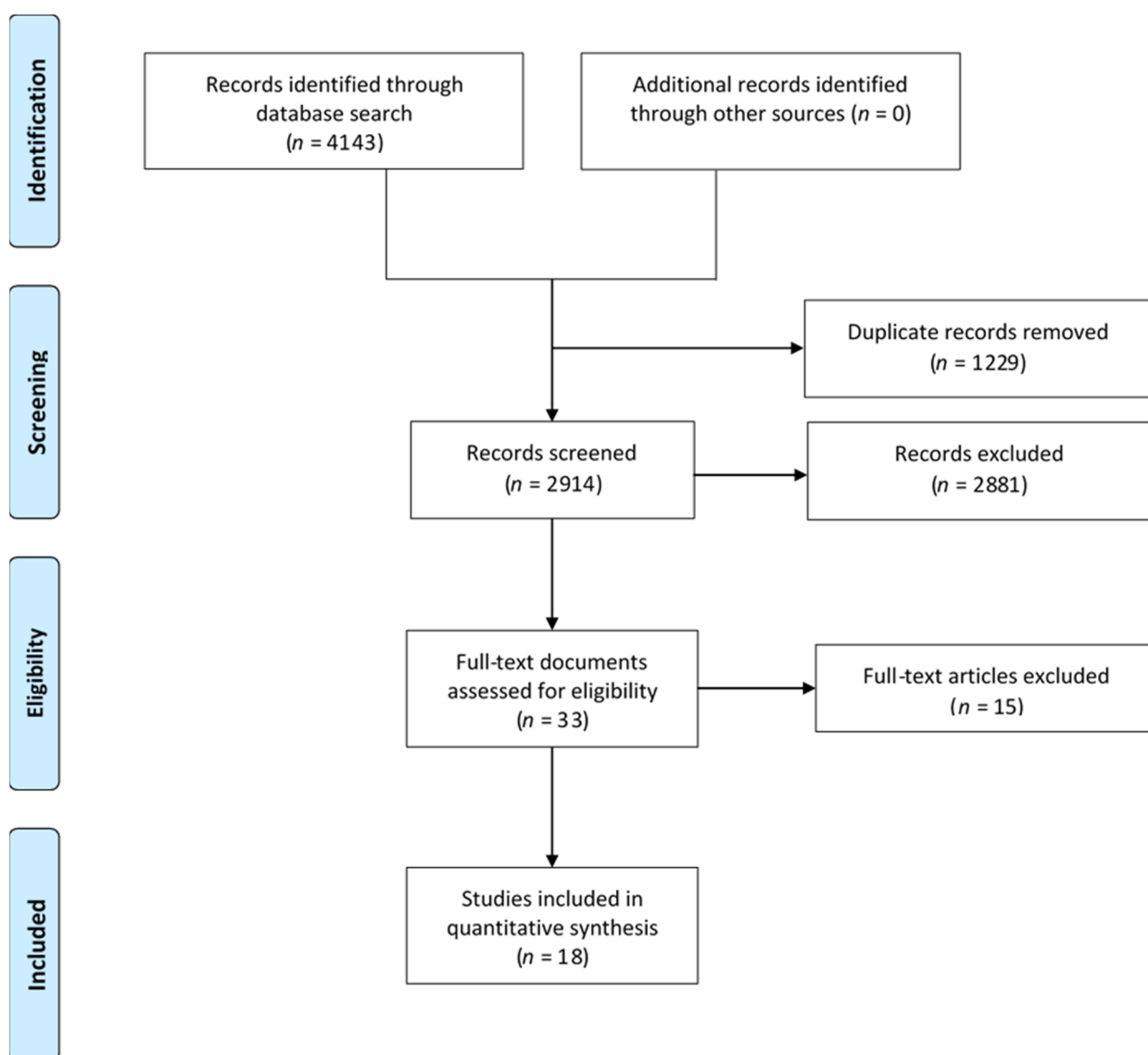


Figure S1. PRISMA flow chart detailing the literature search process for studies on neoadjuvant immunotherapy and surgery for non-small cell lung cancer.

Post-surgical adverse outcomes after neoadjuvant immunotherapy

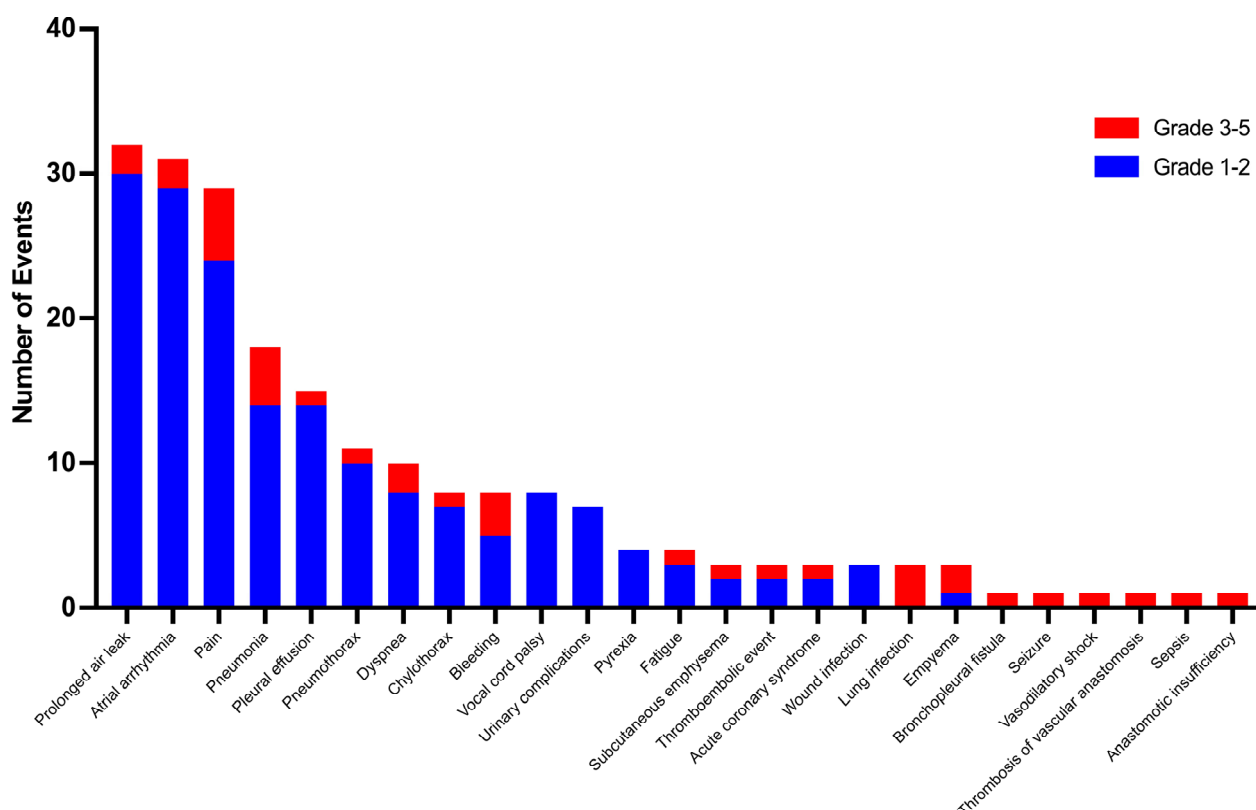


Figure S2. Post-surgical adverse events for patients with resectable non-small cell lung cancer after neoadjuvant immunotherapy.

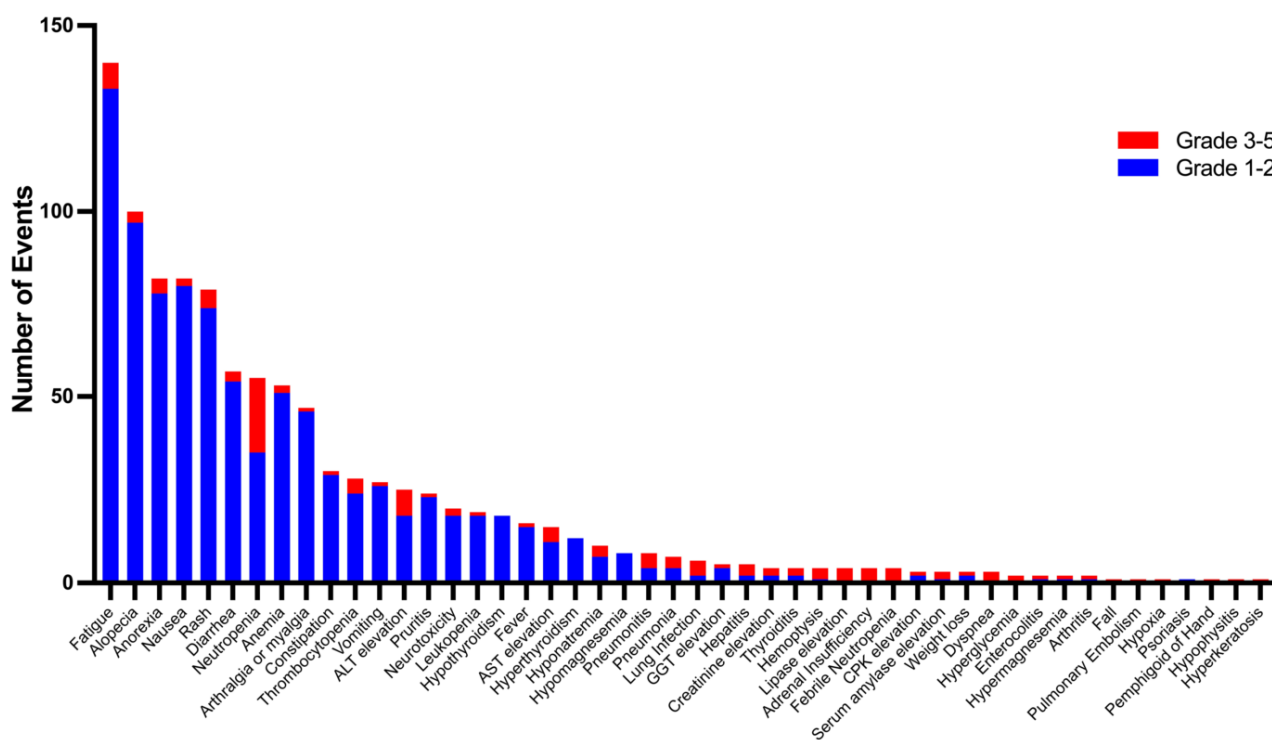


Figure S3. Treatment-related adverse events for patients with resectable non-small cell lung cancer after neoadjuvant systemic therapy.

Table S1. Postoperative surgical adverse events of patients who underwent neoadjuvant immunotherapy and resection for non-small cell lung cancer.

	Proven Rothsch ild ⁵	cio ⁶ Roman ⁷	Casco ne ⁸	Eiccho rn ⁹	Tong ¹⁰	Shu ¹¹	Bott ¹² Forde ¹³	Gao ¹⁴	Yang ¹⁵	Wang ¹⁶	Shen ¹⁷	Jiang ¹⁸	Huan g ¹⁹	Dua n ²⁰	Chen ²¹	Che n ²²
30-day mortality	1	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0
HLOS (days)	-	5	-	-	4	4	4	-	5	-	-	7	5.8	11	-	-
Pneumonia	-	5	1*	1	1	1*	1 [^]	1*	0	4	2	1	-	-	-	-
Prolonged air leak	1 [^]	8	-	-	4	-	1	-	2	-	-	14	1 [^]	-	1	-
Atrial arrhythmia	-	4	-	-	6	3	6	-	1 [^]	5	2	3	1 [^]	0	-	-
Chylothorax	1 [^]	1	-	-	-	-	-	-	-	3	1	1	-	-	1	-
Vocal cord palsy	1	1	-	-	-	-	-	-	1	2	2	-	-	1	-	-
Pain	26 [^]	1	-	-	-	-	-	1	1	-	-	-	-	-	-	-
Bleeding	3 ^{^*}	2	-	-	-	-	-	-	-	-	2	-	-	-	1	-
Urinary complications	-	-	-	-	-	2	1	-	3	-	-	-	-	1	-	-
Pleural effusion	4 [^]	-	-	-	-	-	-	-	-	8	3	-	-	-	-	-
Subcutaneous emphysema	-	1	-	-	1	-	-	-	-	-	-	-	1 [^]	-	-	-
Thromboembolic event	-	-	-	-	1	-	1	-	1 [^]	-	-	-	-	-	-	-
Acute coronary syndrome	1 [^]	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-
Pyrexia	2	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-
Wound infection	-	-	-	-	1	-	-	1	-	-	-	1	-	-	-	-
Pneumothorax	2 [^]	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-
Empyema	1 [^]	-	1*	-	-	-	1	-	-	-	-	-	-	-	-	-
Dyspnea	10 [^]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fatigue	4 [^]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lung infection	3 [^]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bronchopleural fistula	-	-	1*	-	-	-	-	-	-	-	-	-	-	-	-	-
Seizure	-	-	-	-	-	-	-	1*	-	-	-	-	-	-	-	-
Vasodilatory shock	-	-	-	-	-	-	-	-	1 [^]	-	-	-	-	-	-	-
Anastomosis complication	1 [^]	1 [^]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sepsis	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

[^]Grade 3-4 Adverse Event; *Grade 5 Adverse Event; HLOS, Hospital length of stay; Tabulated adverse events were limited to those reported in 3 or more studies, or if the adverse outcome was grade ≥ 3 .

Table S2. A summary of treatment-related adverse events for patients who underwent neoadjuvant immunotherapy for resectable non-small cell lung cancer.

	Rothschil d ⁵	Proveni o ⁶ Roman ⁷	Cascon e ⁸	Eicchor n ⁹	Tong ¹⁰	Shu ¹¹	Bott ¹² Forde ¹³	Gao ¹⁴	Yang ¹⁵	Wang ¹⁶	Shen ¹⁷	Jiang ¹⁸	Huang ¹⁹	Duan ²⁰	Chen ²¹	Che n ²²
Anemia	-	7	5	-	-	21*	-	-	4	9*	4	-	-	3	-	-
ALT elevation	4*	5*	3	-	<10%	6*	1	2	-	-	4*	-	-	-	-	-
AST elevation	3*	-	1	-	<10%	5*	-	2	-	-	4	-	-	-	-	-
GGT elevation	-	-	-	-	-	-	-	5*	-	-	-	-	-	-	-	-
CPK elevation	-	-	-	-	-	-	-	3*	-	-	-	-	-	-	-	-

	Lipase elevation	1*	3*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Neutropenia	-	4*	-	-	-	26*	-	-	-	10*	8*	-	-	7	-	-
	Thrombocytopenia	-	-	-	-	-	19*	-	-	-	6*	3*	-	-	-	-	-
	Leukopenia	-	-	-	-	-	-	-	-	-	12*	-	-	-	7	-	-
	Creatinine elevation	-	3*	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Serum amylase elevation	-	3*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Febrile neutropenia	-	3*	-	-	-	1*	-	-	-	-	-	-	-	-	-	-
Gastrointestinal	Nausea	9*	15	8	-	<10%	13	-	2	1	29*	5	-	-	-	-	-
	Vomiting	-	8	2	-	-	5	2	-	1	-	-	-	-	9*	-	-
	Constipation	-	8	-	-	-	7	-	-	-	9*	5	-	-	1	-	-
	Diarrhea	12*	11	9*	-	7	9*	2	-	-	-	4	-	-	2	1	-
	Enterocolitis	-	-	-	1	-	-	-	-	-	-	-	-	1*	-	-	-
	Hepatitis	1*	-	-	-	-	-	-	-	-	-	-	-	4*	-	-	-
Systemic	Fatigue	24*	24*	15	-	5	17*	-	-	1	39*	5	-	-	10*	-	-
	Weight loss	-	-	-	-	-	2*	-	-	1	-	-	-	-	-	-	-
	Anorexia	-	9*	1	-	<10%	3	3	-	1*	51*	6	-	-	8*	-	-
	Fever	-	-	1	-	-	3	1	6	-	5*	-	-	-	-	-	-
	Arthralgia or myalgia	8	21	2	-	3	5	-	-	-	-	6	-	-	2*	-	-
	Arthritis	2*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fall	-	-	1*	-	-	-	-	-	-	-	-	-	-	-	-	-
Metabolic	Hyperglycemia	-	-	-	-	<10%	1*	-	-	-	-	-	-	-	1*	-	-
	Hypermagnesemia	-	1	1*	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hypomagnesemia	-	-	2	-	-	3	-	-	3	-	-	-	-	-	-	-
	Hyponatremia	-	-	5*	-	-	2*	-	2*	1	-	-	-	-	-	-	-
Endocrine	Adrenal insufficiency	1*	-	-	-	-	-	-	-	3*	-	-	-	-	-	-	-
	Hyperthyroidism	6	-	2	-	<10%	-	-	3	-	-	-	-	-	1	-	-
	Thyroiditis	-	-	-	4*	<10%	-	-	-	-	-	-	-	-	-	-	-
	Hypothyroidism	-	-	2	-	3	3	-	7	-	2	1	-	-	-	-	-
Respiratory	Hemoptysis	-	-	2*	-	-	-	-	2	-	-	-	-	-	-	-	-
	Pneumonitis	2*	-	2*	-	-	-	-	4*	-	-	-	-	-	-	-	-
	Lung infection	4*	-	-	-	-	-	-	2*	-	-	-	-	-	-	-	-
	Pulmonary embolism	-	-	1*	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hypoxia	-	-	1*	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dyspnea	3*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pneumonia	-	-	1*	-	-	-	1*	-	-	4*	-	-	1	-	-	-
Skin	Alopecia	-	17*	-	-	-	14	-	-	-	50*	9	-	-	10*	-	-
	Rash	9	11*	18	1*	4	5	-	2	-	20*	4	-	2	1	1	1*
	Pruritis	10*	7	4	-	3	-	-	-	-	-	-	-	-	-	-	-
	Psoriasis	-	-	1	-	<10%*	-	-	-	-	-	-	-	-	-	-	-
	Hyperkeratosis	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pemphigoid of hand	-	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neurological	Hypophysitis	-	-	-	1*	-	-	-	-	-	-	-	-	-	-	-	-
	Neurotoxicity	-	15*	-	-	-	-	-	-	-	1	4	-	-	-	-	-

*At least 1 or more ≥ Grade 3 treatment related adverse event.