

Ancillary Study Number	Proposer	Title	Start Date	No. of Years
7	F. Kheradmand	Ancillary T cell based studies in SPIROMICS	2/15/2012	4
8	M. Kesimer	Airway mucus/mucin composition, structure and proteome in COPD: A SPIROMICS ancillary study	7/1/2011	4
13	J. Blalock	PGP, A Possible Biomarker for COPD Exacerbations and or Progression	9/12/2012	4
17	S. Christenson	Common genomic mechanisms of disease across asthma and COPD		
19	R. Kaner	Validation study for lung cell gene expression	3/1/2013	4
23	G. Barr	Discovery of Quantitative Emphysema Subtypes on CT Scans	8/1/2014	4
25	M. Han/E. Hoffman	Imaging Predictors of Disease Progression in COPD	4/15/2015	4
26	N. Hansel	SPIROMICS Air Pollution Study	2/24/2014	5
29	M. Han/F. Martinez	Parametric Response Mapping in COPD	5/5/2014	4

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32	S. Christenson	Identifying the Th2 endotype in COPD: clinical and pathologic implications	7/1/2014	4
38	B. Drummond	Cathelicidin: A Vitamin D Intermediary Implicated in Pulmonary Outcomes	4/1/2015	5
39	E. Neptune	Qualitative Mucus Phenotyping in Chronic Bronchitis		
40	M. Armanios/ N.Hansel	Mechanisms of telomere-induced emphysema	7/1/2014	4
43	Choi	Mitophagy and/or necroptosis factors as biomarkers of disease severity and activity in COPD.		
44	Bowler	BAL metabolome library	2/1/2016	1
45	Wells	The Role of PGP in COPD-associated Pulmonary Hypertension (Project Extension of J .Edwin Blalock's SPIROMICS Ancillary Study - 1R01HL114439)	9/1/2014	5
48	Woodruff	Th2-associated blood biomarkers in COPD		
49	Bowler	Sphingolipids biomarkers of COPD progression in healthy smokers	9/30/2015	3

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50	Han	Compartmental Analysis of Metabolite Profiles associated with Disease Phenotypes in Chinese and US Smokers with and without COPD		2
51	Ortega	The Effect of Rare SERPINA1 Variants on α -1AT levels and COPD-related Phenotypes		
52	Kim	Pathologic, Inflammatory, and Genomic Correlates of Chronic Bronchitis	ASAP	0.5
53	Woodruff	Th2-associated blood biomarkers in COPD		
57	Lazarowski	Nucleotides and COPD: ectoenzyme activity regulates ATP levels	9/1/2015	3-6 mos
54	Bhatt	Emphysema and cardiovascular disease: Role of systemic inflammation		
55	Smith	Airway branch patterns and chronic obstructive pulmonary disease		
58	Paine	Predictive value of BAL sRAGE and sICAM-1 in COPD		