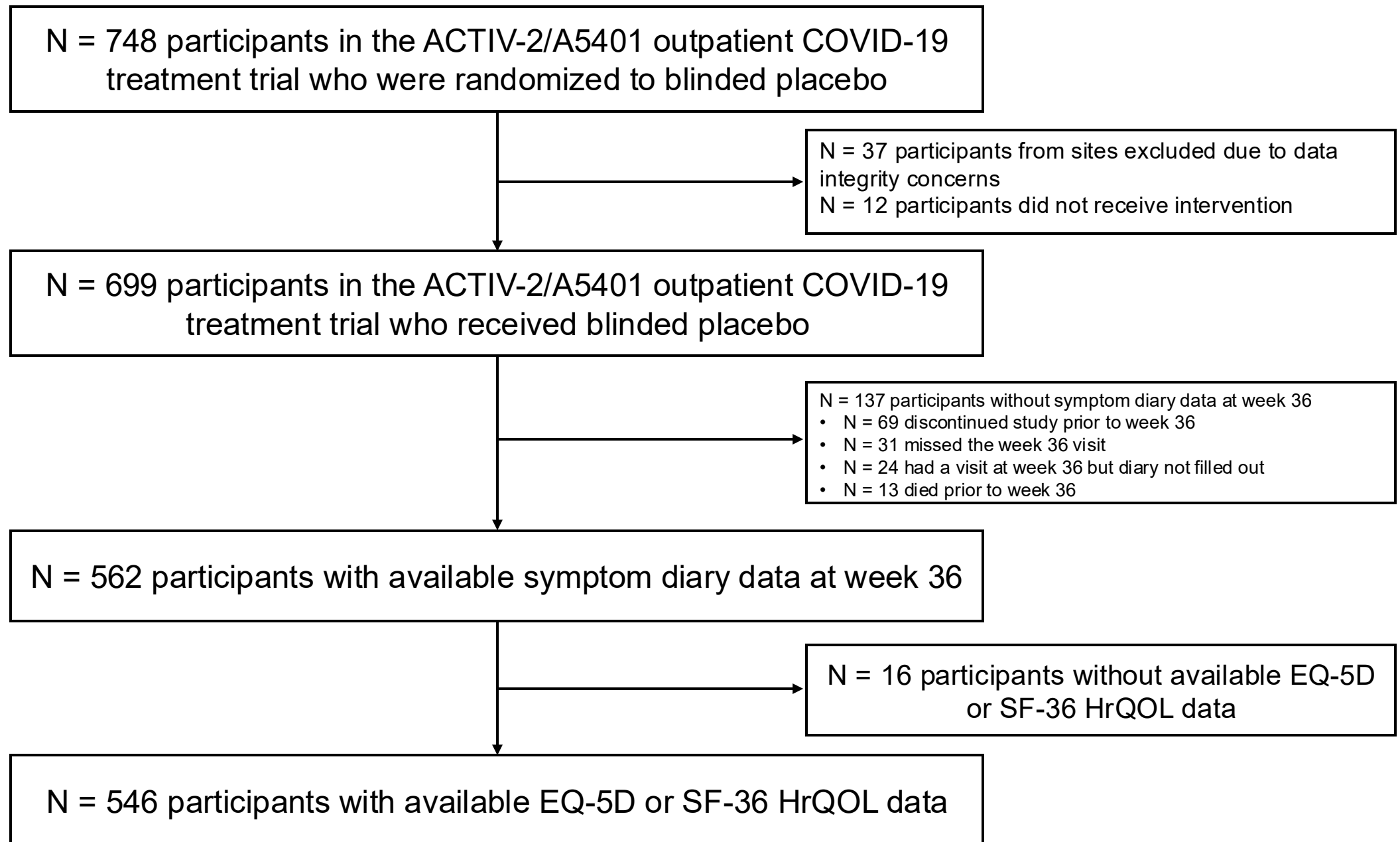
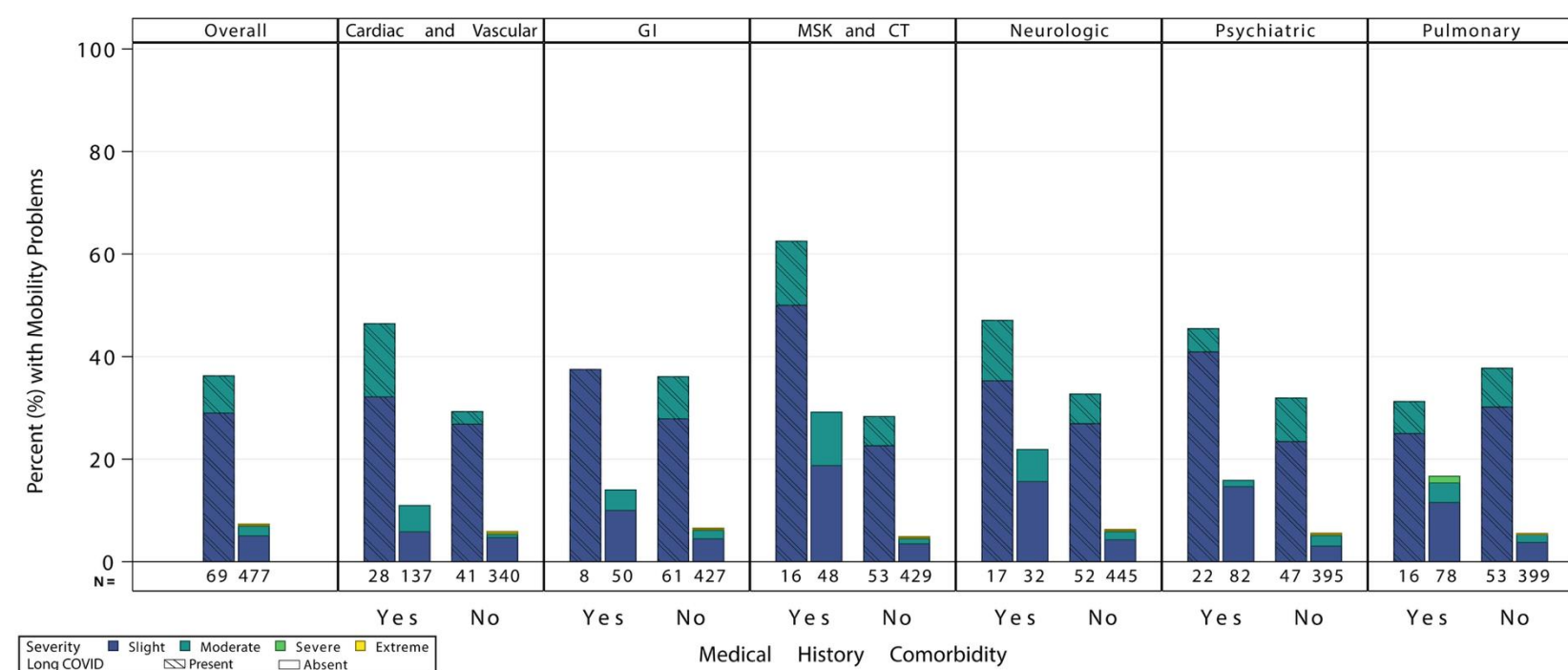


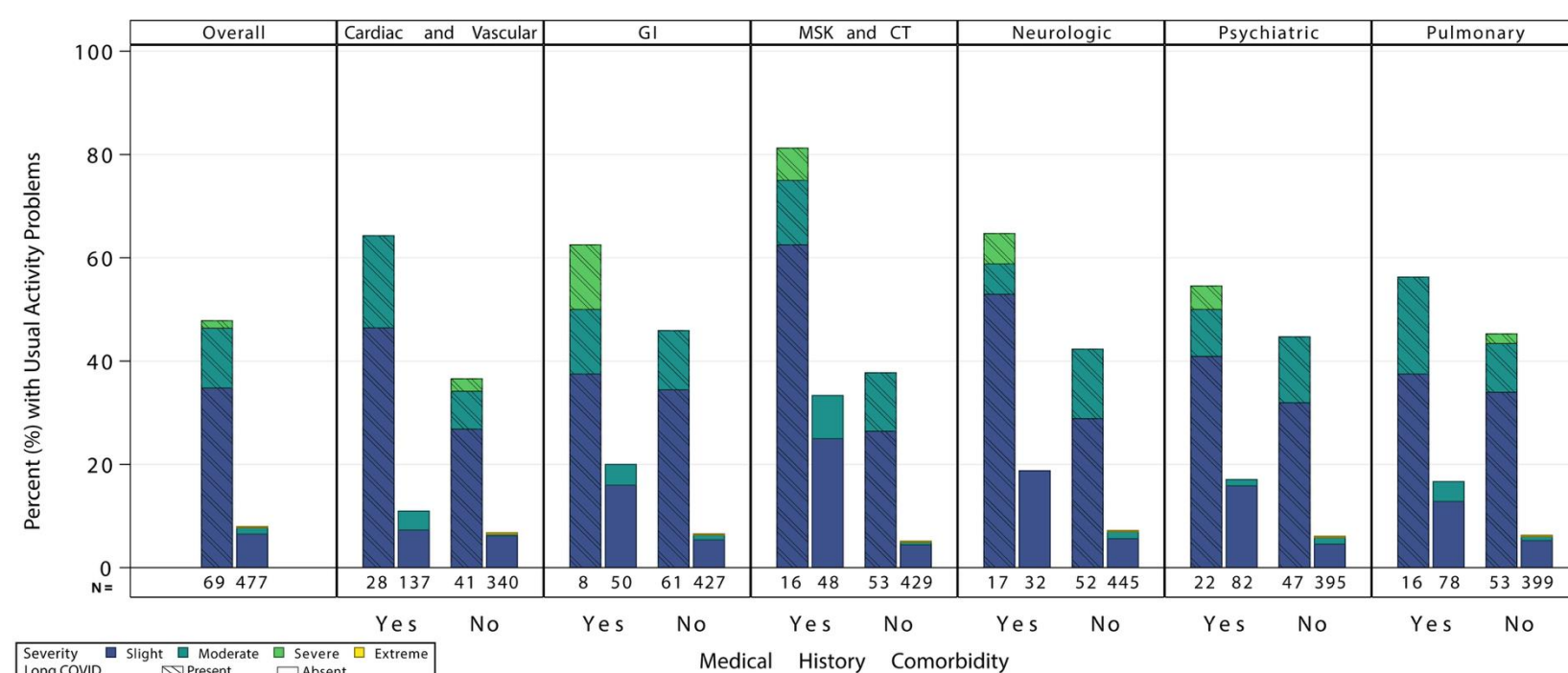


Supplementary Figure 1. Flow diagram depicting the derivation of the study population. Reasons for exclusion are indicated in the boxes adjacent to the horizontal arrows.

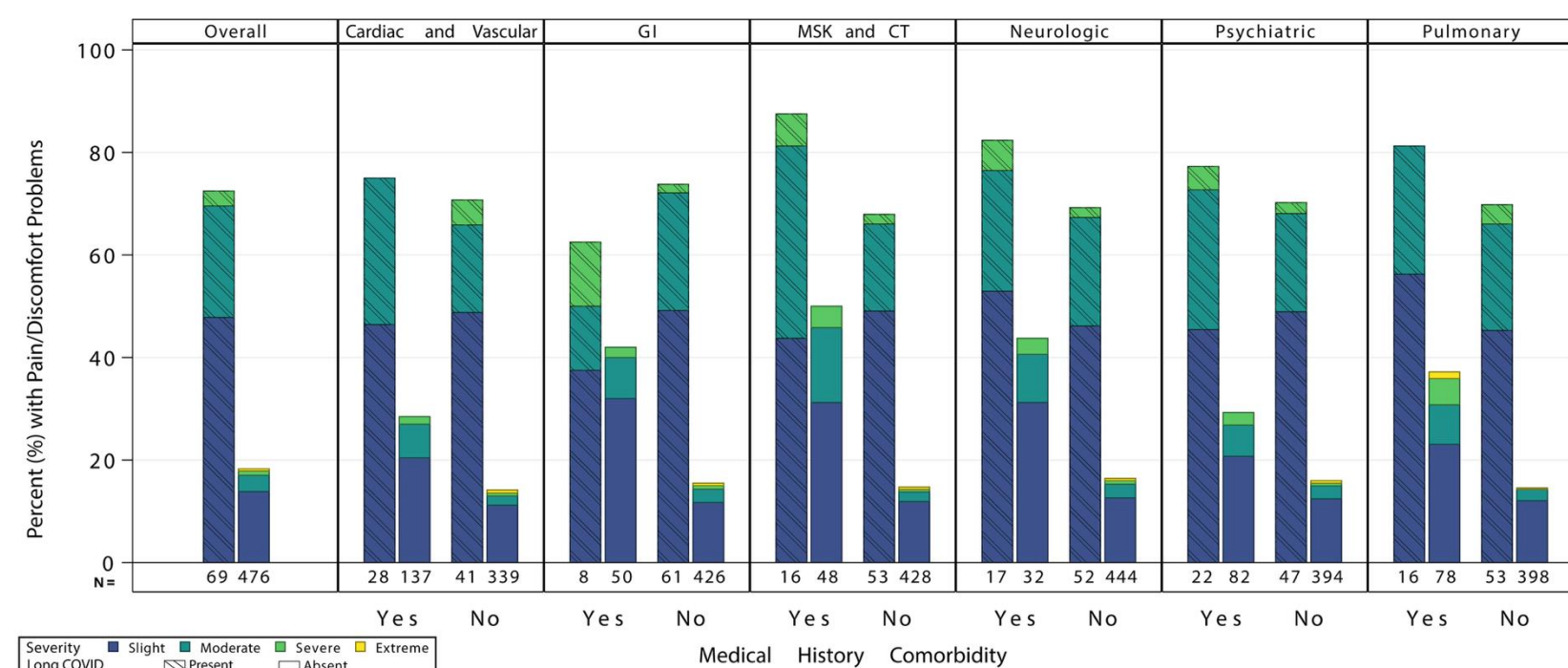
A *Percentage and severity of reported mobility problems between participants with vs. without Long COVID*



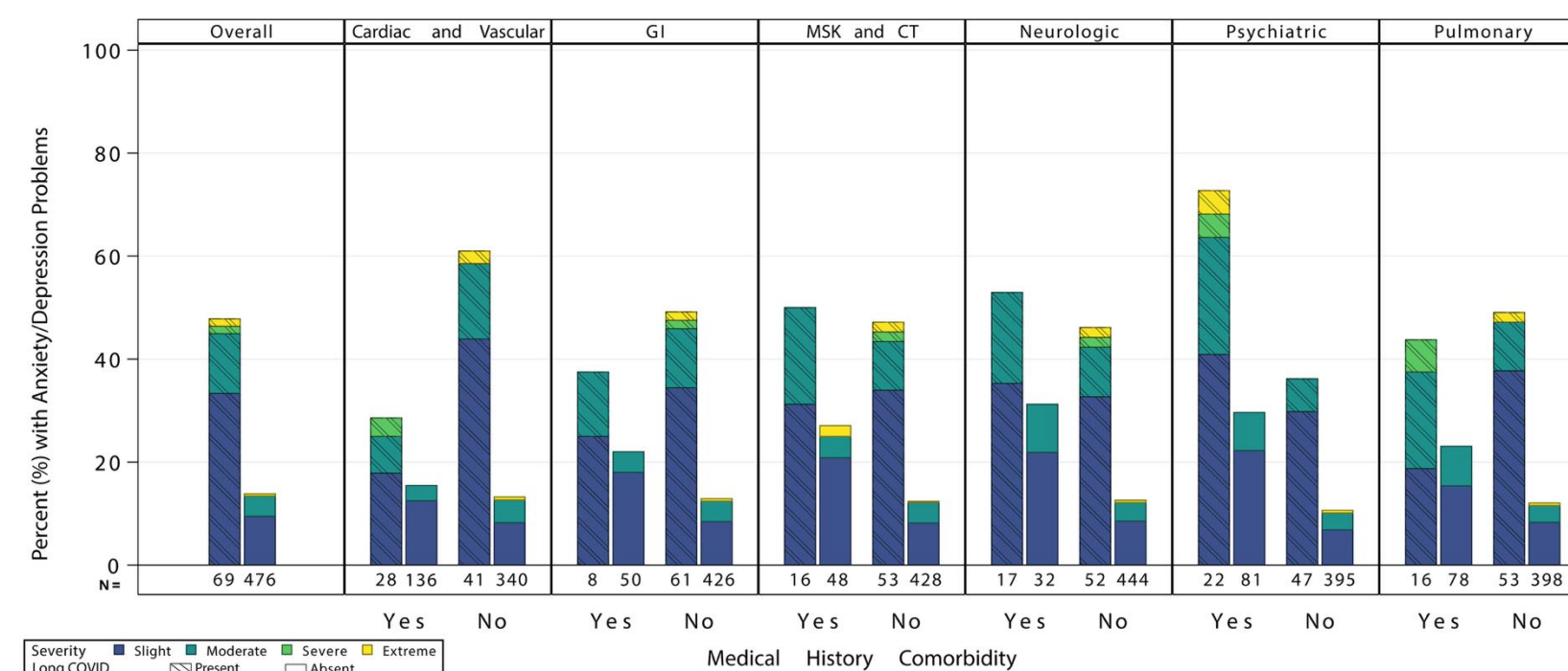
B *Percentage and severity of reported usual activity problems between participants with vs. without Long COVID*



C *Percentage and severity of reported pain/discomfort problems between participants with vs. without Long COVID*



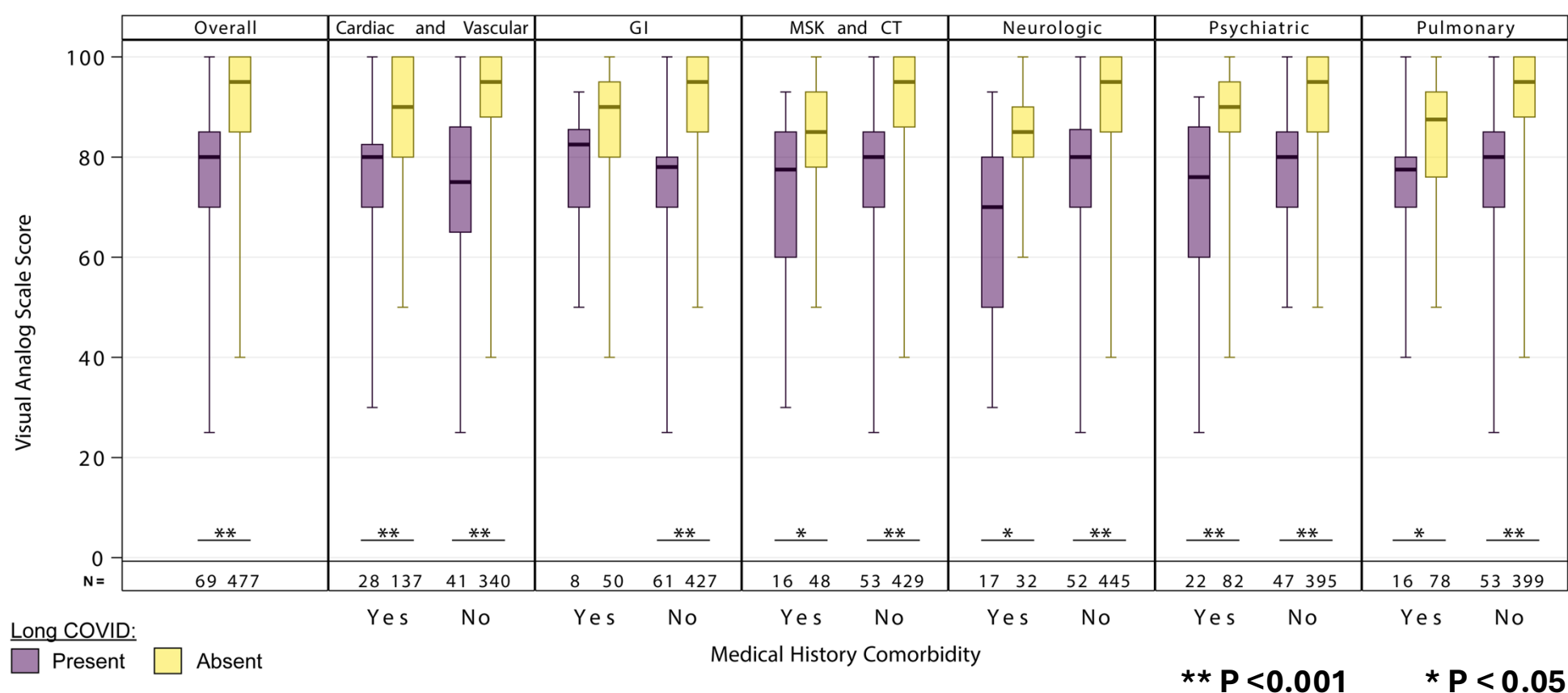
D *Percentage and severity of reported anxiety/depression problems between participants with vs. without Long COVID*



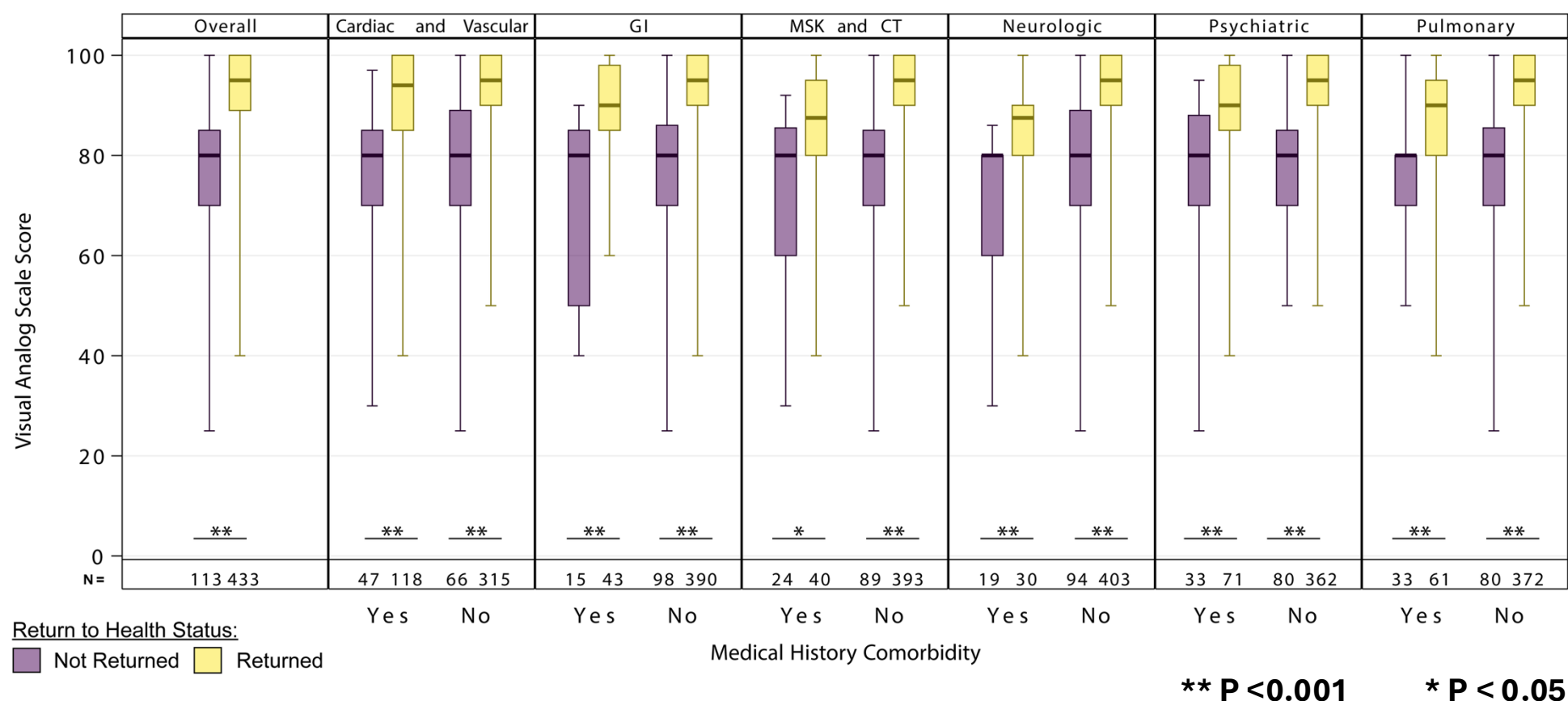
Supplementary Figure 2. Association of long COVID with EQ-5D dimensions, including severity levels for reported problems.

Percentage and severity of reported problems in the EQ-5D dimensions **(A)** mobility, **(B)** usual activity, **(C)** pain / discomfort, and **(E)** anxiety / depression between participants with vs. without long COVID. The distribution of severity levels for reported problems (slight, moderate, severe, and extreme / unable to carry out the dimension) is depicted via color coding. Results are presented in the overall cohort (left-most plot in each panel), as well as in baseline medical history subgroups defined by the presence or absence of selected medical comorbidity categories at baseline (subsequent plots in each panel). Abbreviations: GI: gastrointestinal, CT: connective tissue.

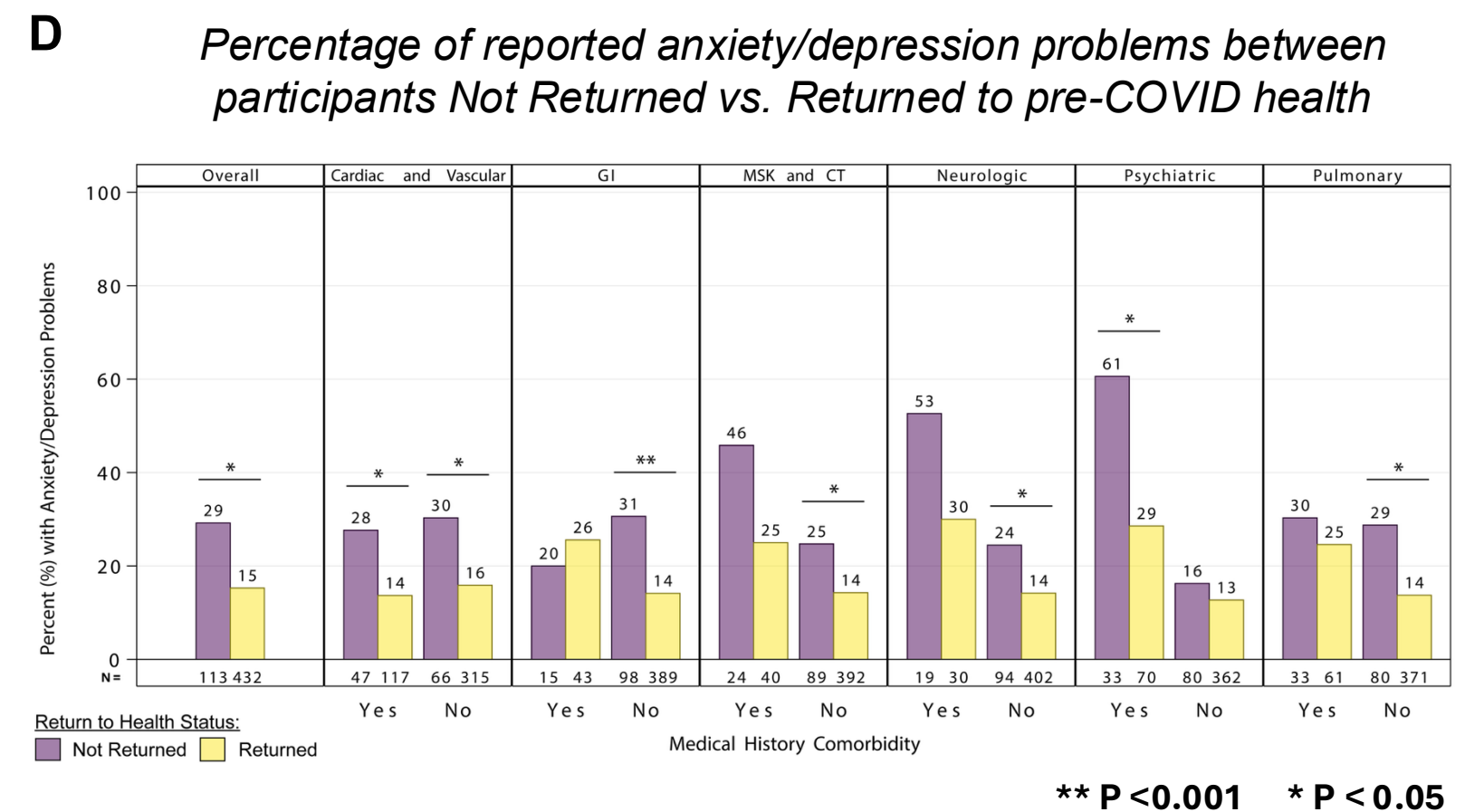
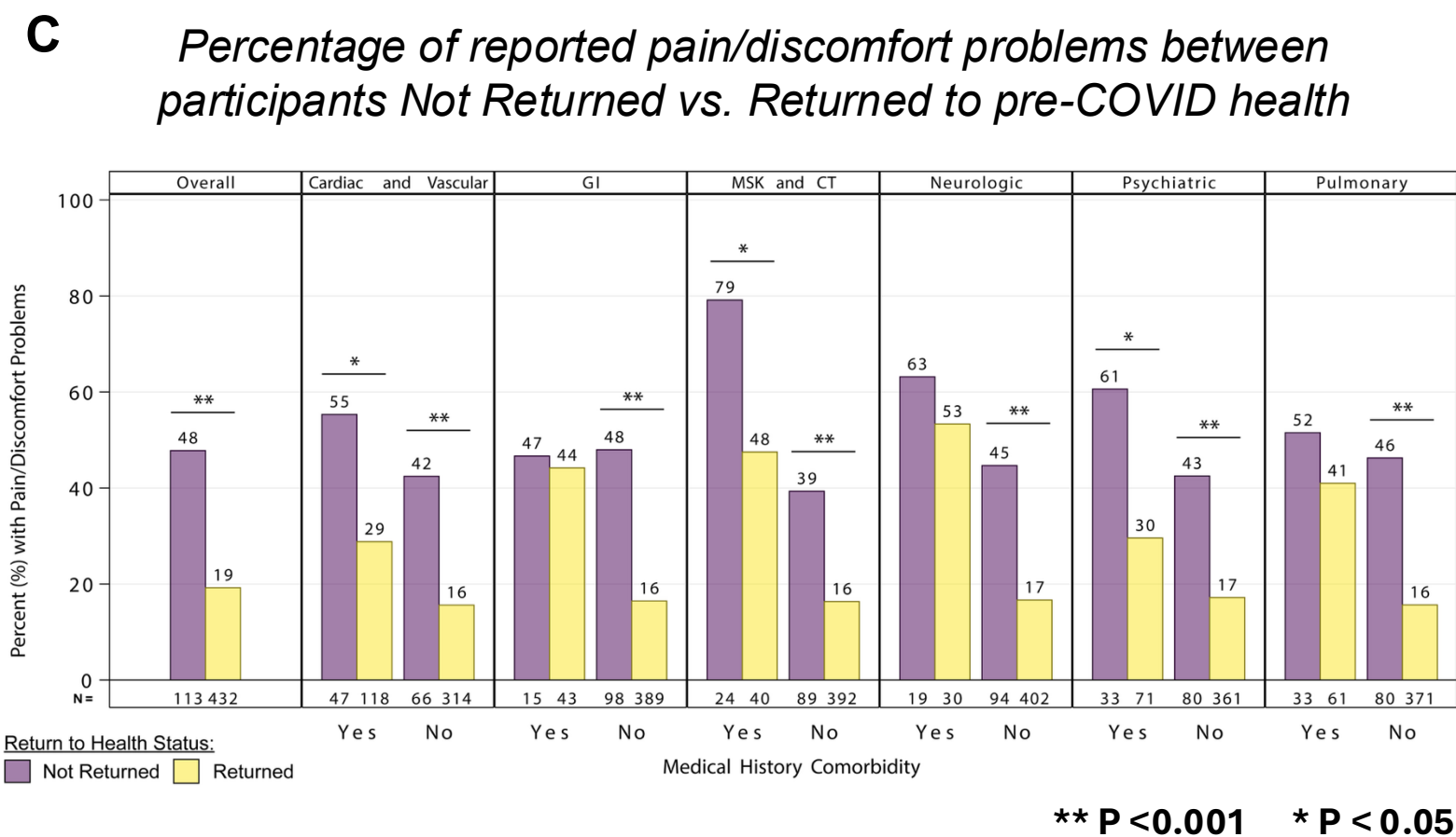
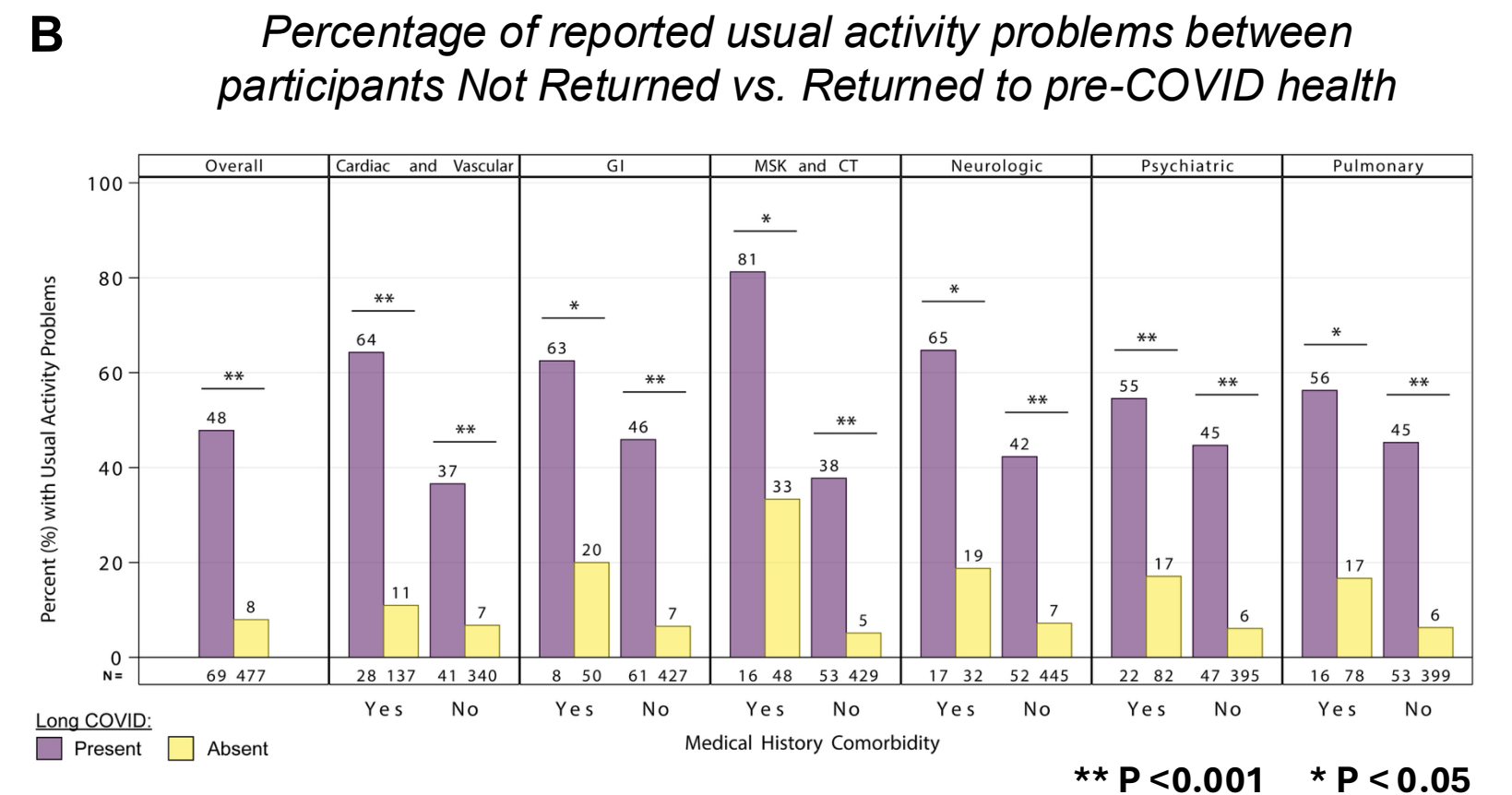
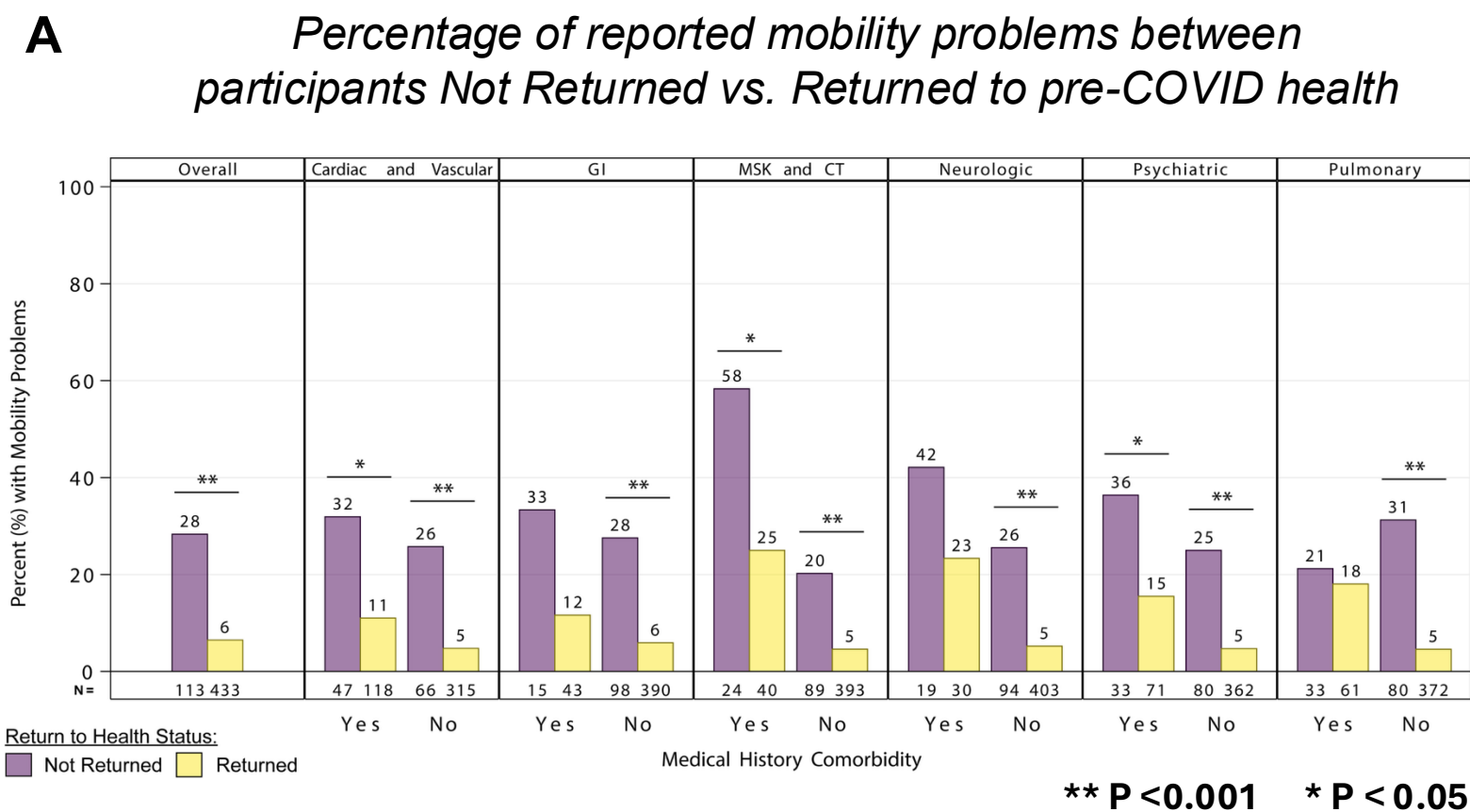
A EQ-5D Visual Analog Scale between patients with vs. without Long COVID



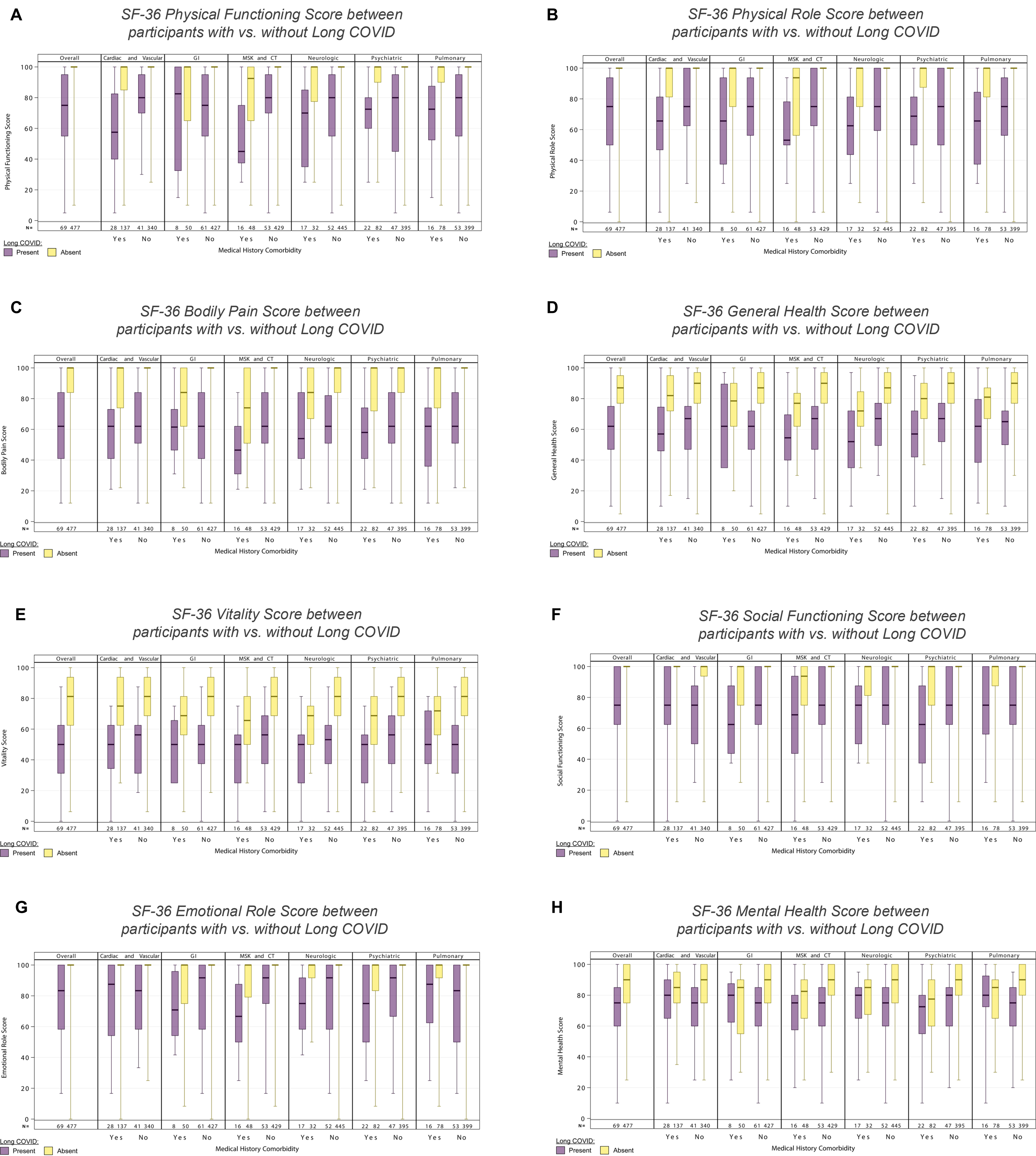
B EQ-5D Visual Analog Scale between those Not Returned vs. Returned to pre-COVID health



Supplementary Figure 3. Association of long COVID and lack of return to pre-COVID health with EQ-5D Visual Analog Scale scores. Comparison of EQ-5D Visual Analog Scale scores between (A) participants with vs. without long COVID and (B) participants who have not vs. have returned to pre-COVID health. Results are presented in the overall cohort (left-most plot in each panel), as well as in baseline medical history subgroups defined by the presence or absence of selected medical comorbidity categories at baseline (subsequent plots in each panel). P-values are based on Wilcoxon rank-sum tests, with ** signifying $P < 0.001$ and * signifying $P < 0.05$. Abbreviations: GI: gastrointestinal, CT: connective tissue.



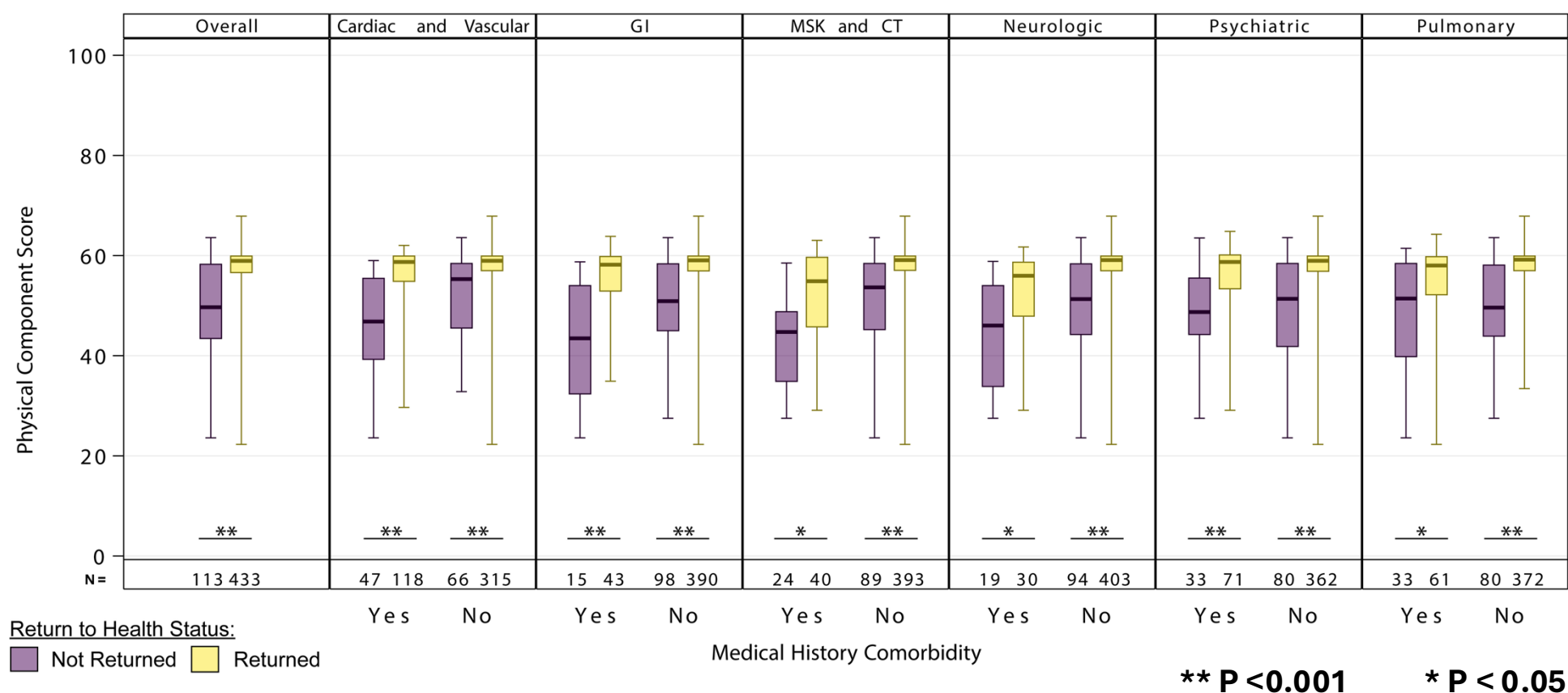
Supplementary Figure 4. Association of lack of return to pre-COVID health with EQ-5D dimensions. Comparison of the percentage of reported problems in the EQ-5D dimensions **(A)** mobility, **(B)** usual activity, **(C)** pain / discomfort, and **(E)** anxiety / depression between participants who have not vs. have returned to pre-COVID health. Results are presented in the overall cohort (left-most plot in each panel), as well as in baseline medical history subgroups defined by the presence or absence of selected medical comorbidity categories at baseline (subsequent plots in each panel). P-values are based on Fisher's exact tests, with ** signifying $P < 0.001$ and * signifying $P < 0.05$. Abbreviations: GI: gastrointestinal, CT: connective tissue.



Supplementary Figure 5. Association of long COVID with individual SF-36 domains. Comparison of scores in each of the individual SF-36 domains between individuals with and without long COVID, including **(A)** physical functioning, **(B)** physical role, **(C)** bodily pain, **(D)** general health, **(E)** vitality, **(F)** social functioning, **(G)** emotional role, and **(H)** mental health. Results are presented in the overall cohort (left-most plot in each panel), as well as in baseline medical history subgroups defined by the presence or absence of selected medical comorbidity categories at baseline (subsequent plots in each panel). Abbreviations: GI: gastrointestinal, CT: connective tissue.

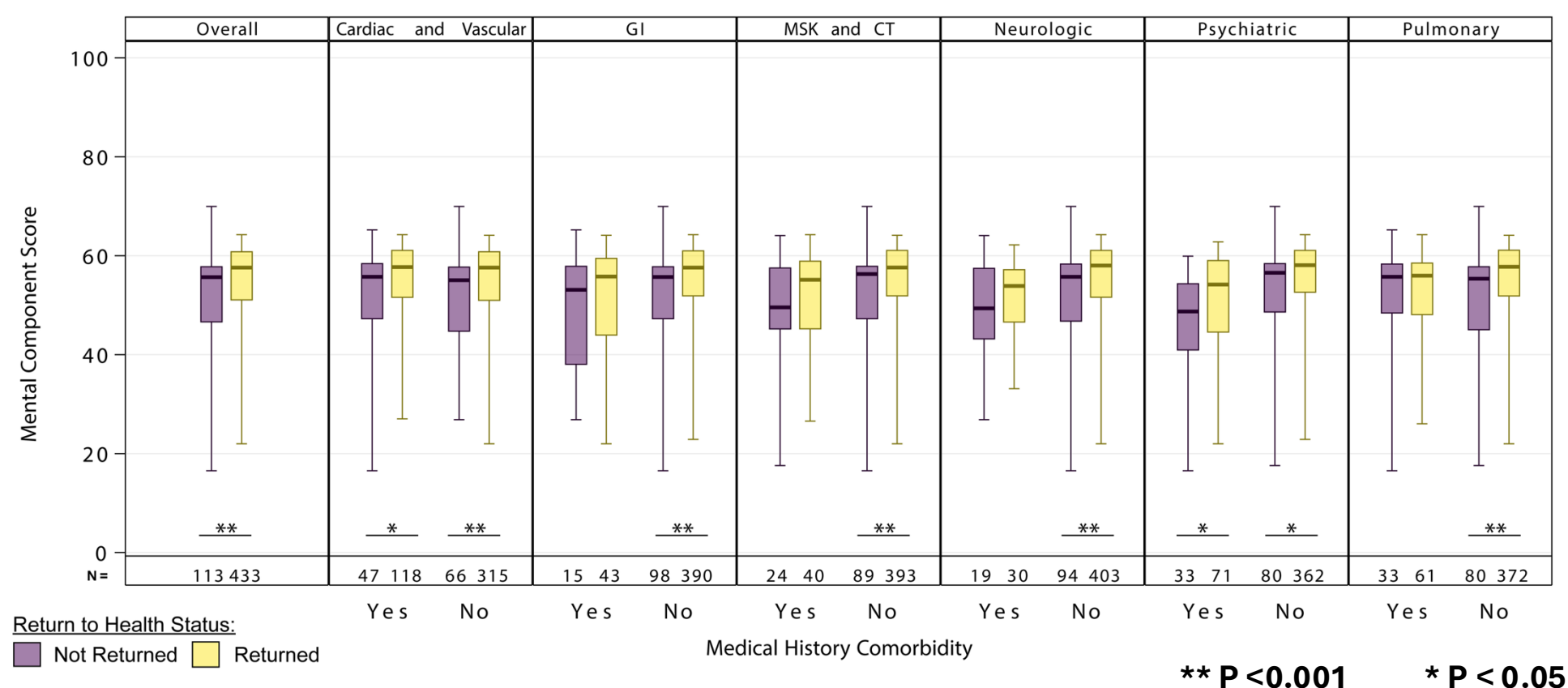
A

*SF-36 Physical Component Score between participants
Not Returned vs. Returned to pre-COVID health*

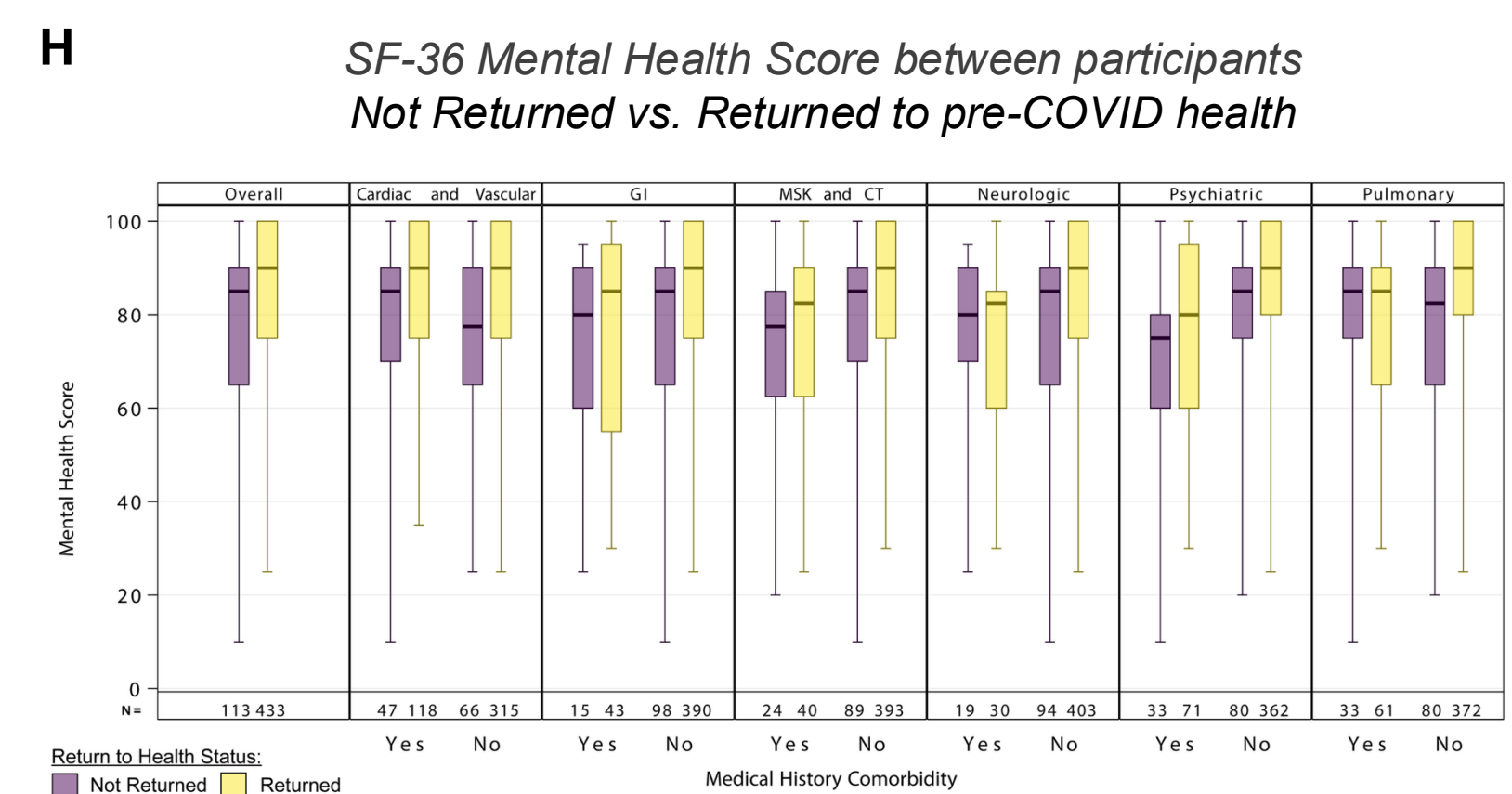
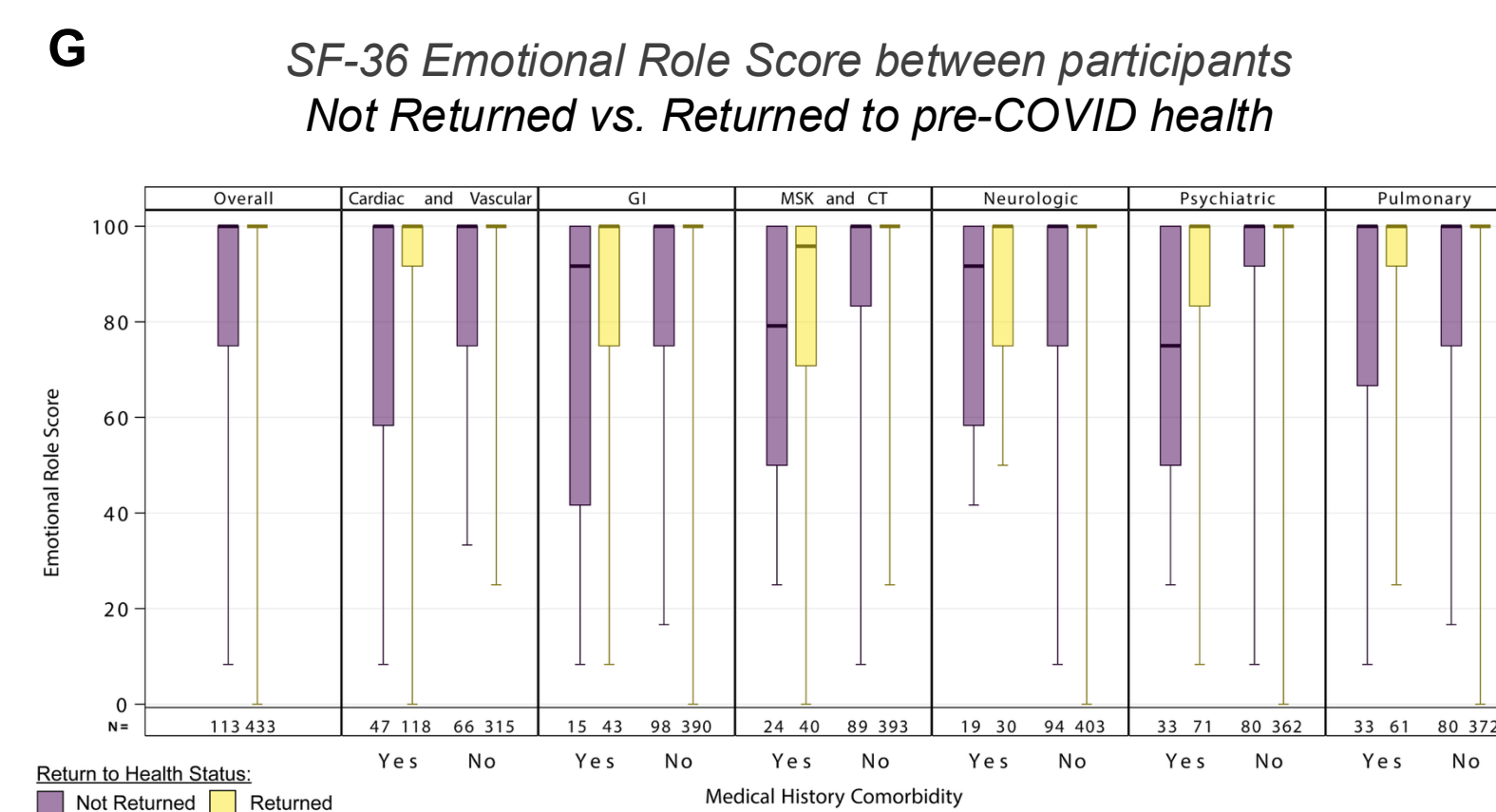
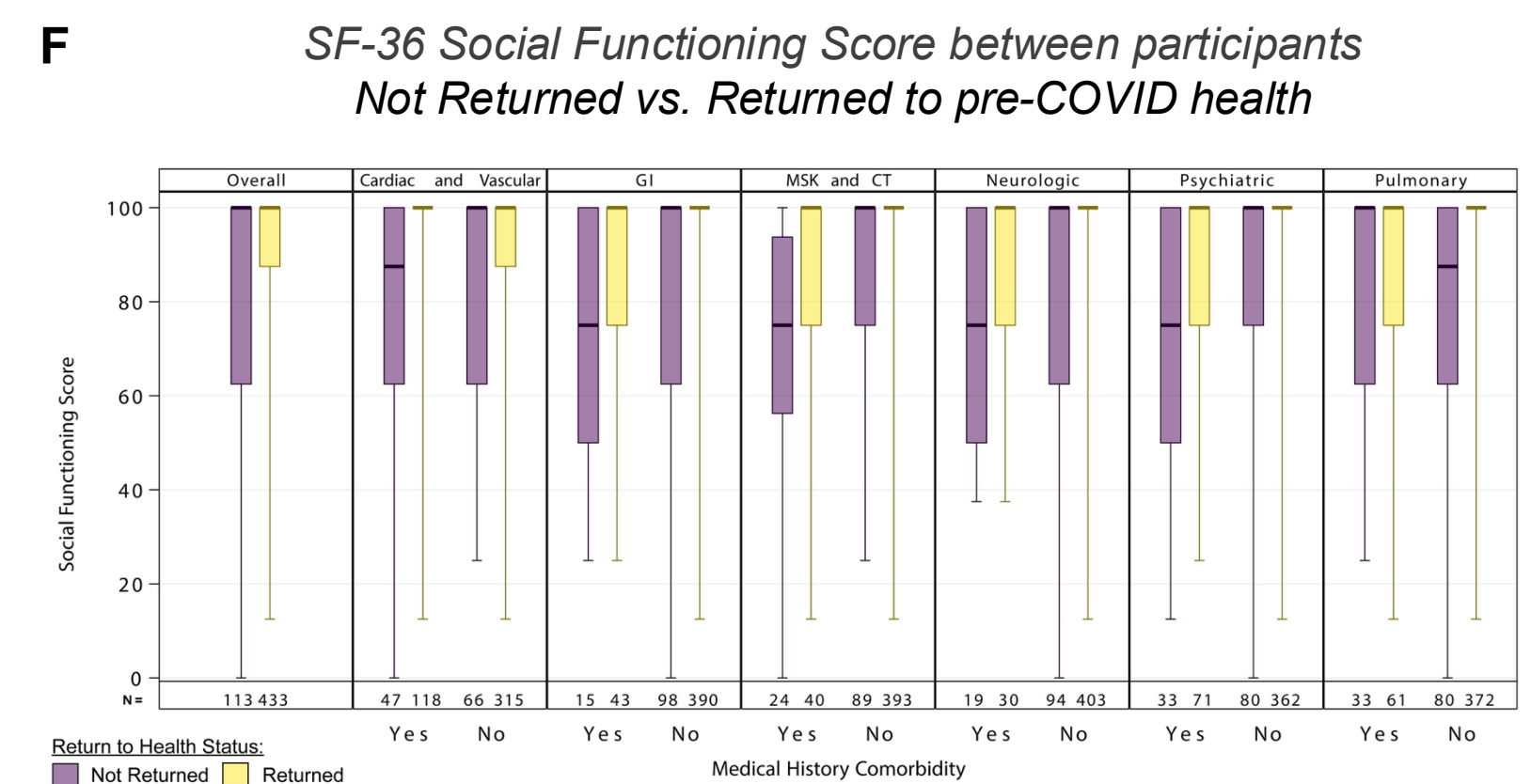
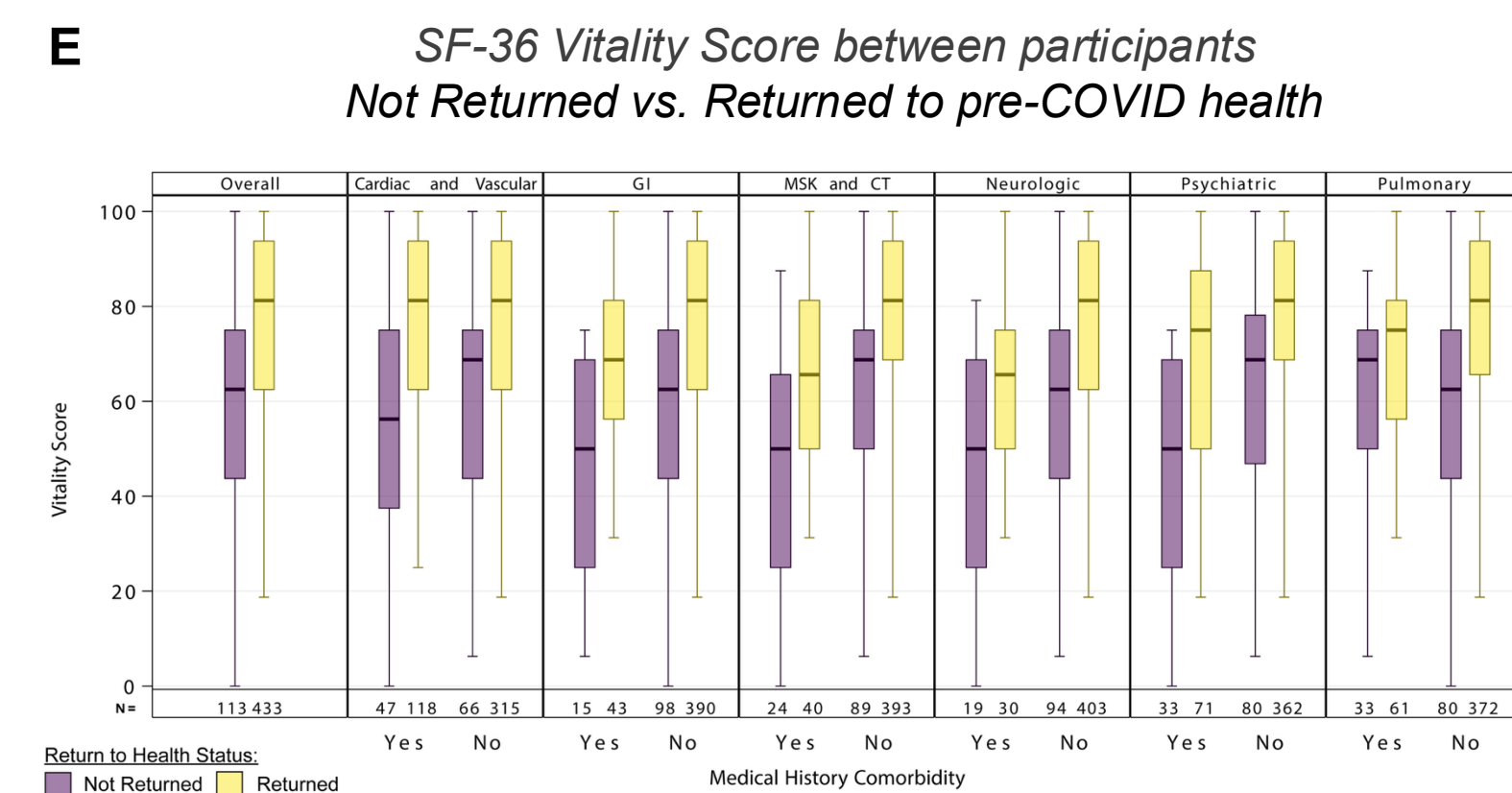
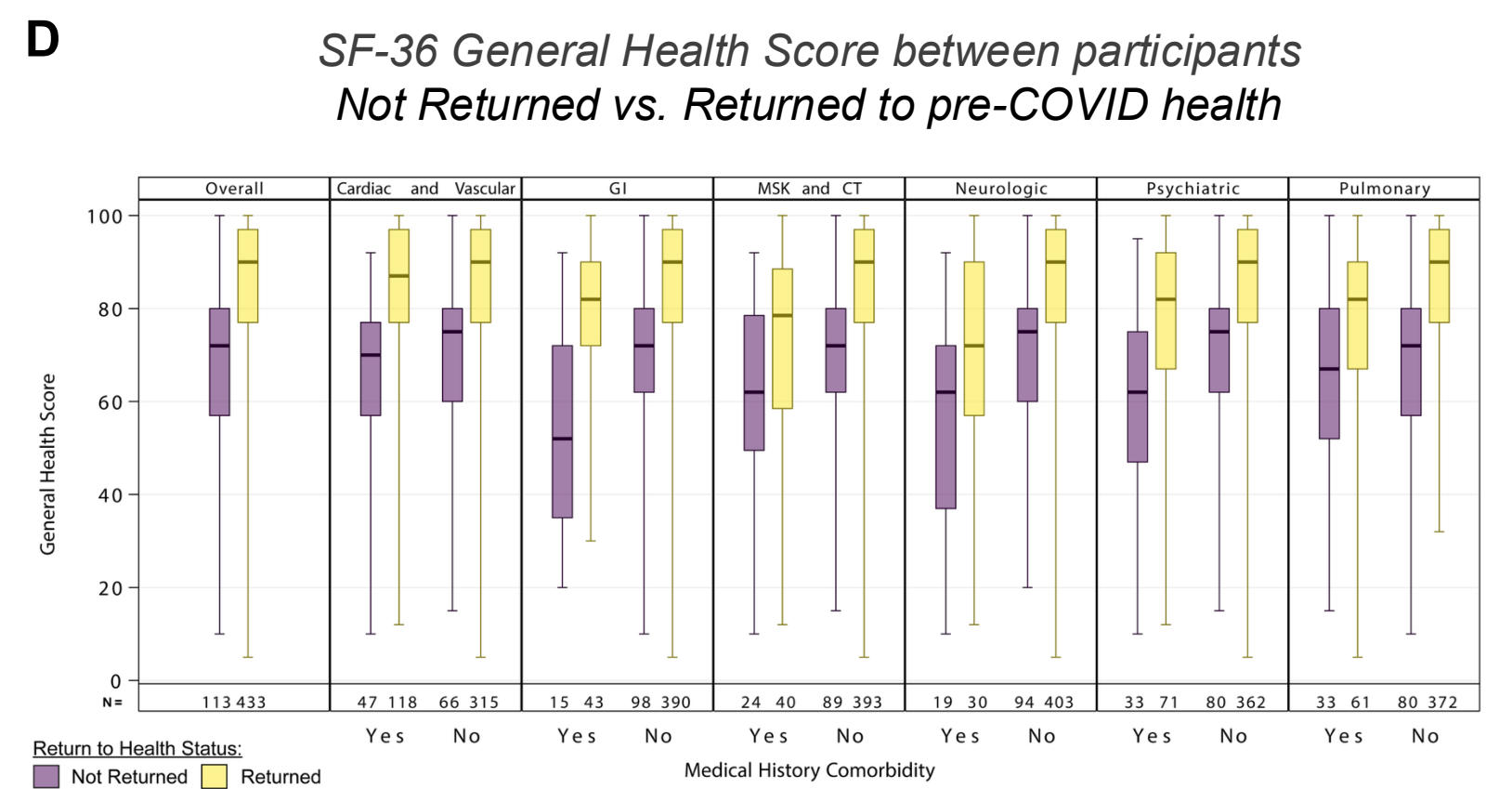
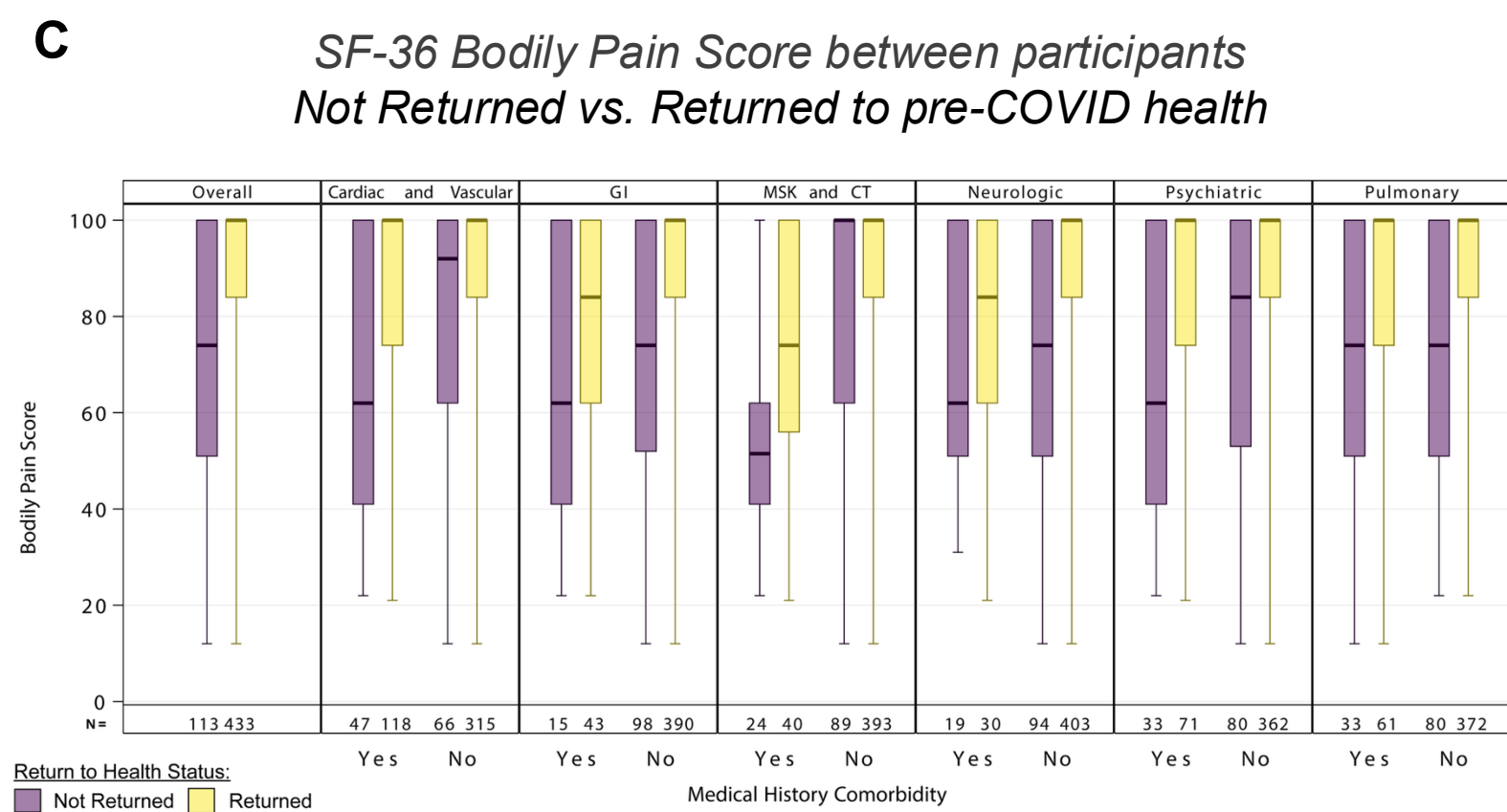
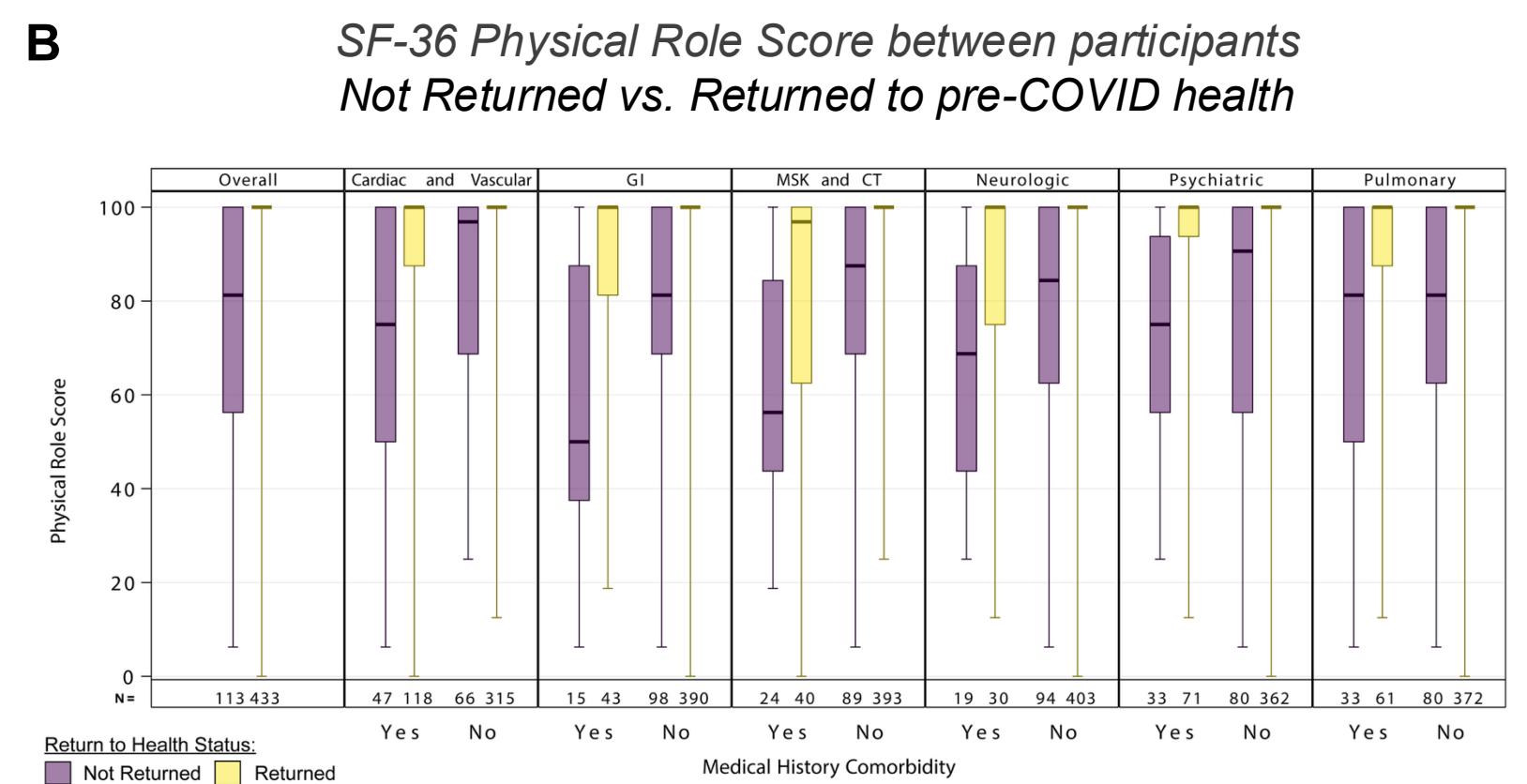
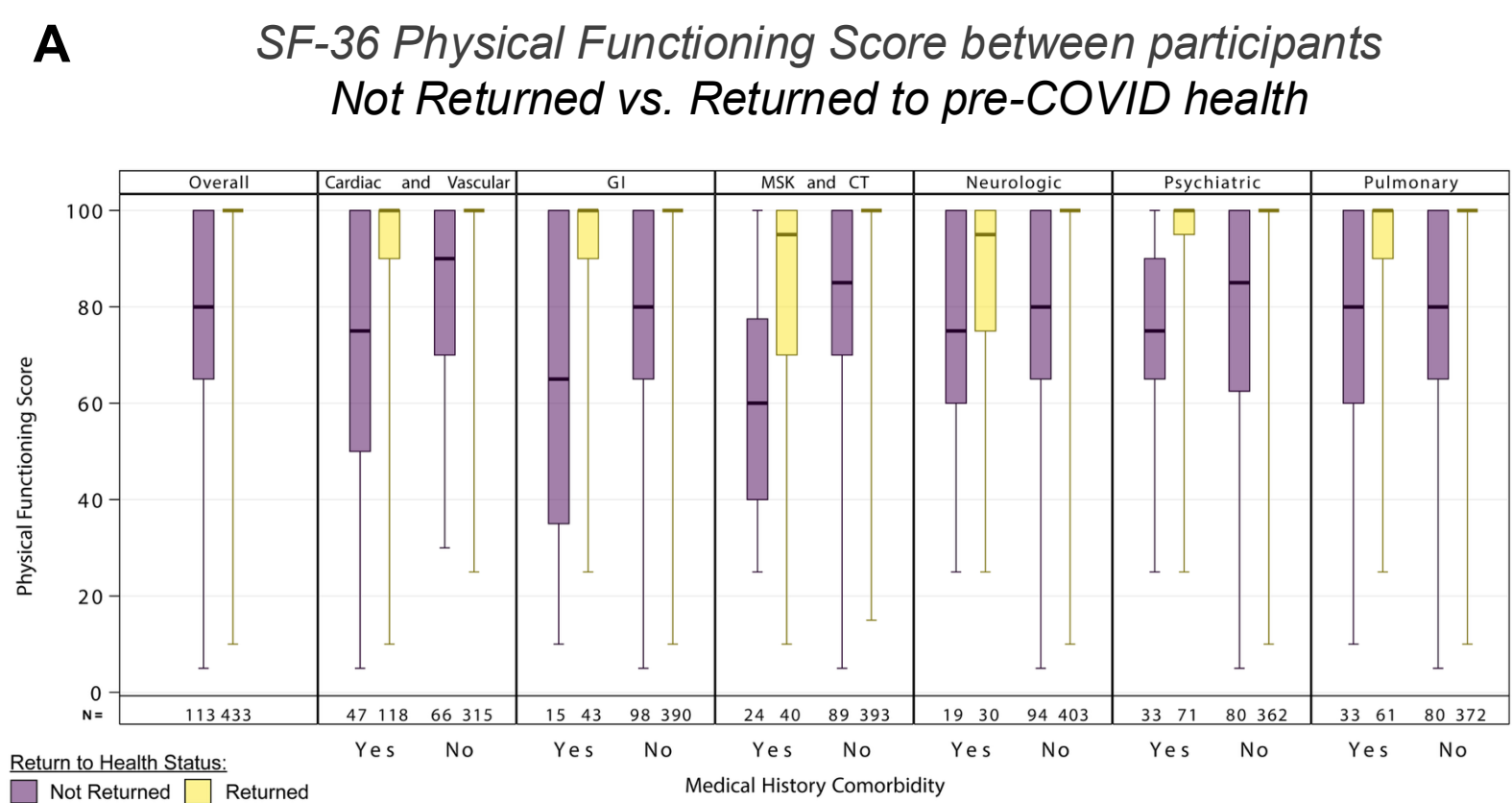


B

*SF-36 Mental Component Score between participants
Not Returned vs. Returned to pre-COVID health*



Supplementary Figure 6. Association of lack of return to pre-COVID health with SF-36 Physical Component Score and Mental Component Score. Comparison of (A) Physical Component Scores and (B) Mental Component Scores between participants who have not vs. have returned to pre-COVID health. Results are presented in the overall cohort (left-most plot in each panel), as well as in baseline medical history subgroups defined by the presence or absence of selected medical comorbidity categories at baseline (subsequent plots in each panel). P-values are based on Wilcoxon rank-sum tests, with ** signifying $P < 0.001$ and * signifying $P < 0.05$. Abbreviations: GI: gastrointestinal, CT: connective tissue.



Supplementary Figure 7. Association of lack of return to pre-COVID health with individual SF-36 domains. Comparison of scores in each of the individual SF-36 domains between individuals who have not vs. have returned to pre-COVID health, including **(A)** physical functioning, **(B)** physical role, **(C)** bodily pain, **(D)** general health, **(E)** vitality, **(F)** social functioning, **(G)** emotional role, and **(H)** mental health. Results are presented in the overall cohort (left-most plot in each panel), as well as in baseline medical history subgroups defined by the presence or absence of selected medical comorbidity categories at baseline (subsequent plots in each panel). Abbreviations: GI: gastrointestinal, CT: connective tissue.

Supplementary Table 1. Summary of the specific medical history events (identified by MedDRA preferred terms) included in each baseline medical comorbidity subgroup.

Baseline Medical Comorbidity Subgroup	Included Medical History Events (identified by MedDRA preferred terms)
Cardiac and Vascular Disorders	• Acute myocardial infarction* • Angina pectoris • Aortic valve disease • Atrial fibrillation* • Bradyarrhythmia • Bradycardia • Cardiac failure • Cardiac failure congestive • Cardiac operation • Cardiomyopathy • Coronary angioplasty* • Coronary arterial stent insertion* • Coronary artery bypass* • Coronary artery disease • Essential hypertension • Hypertension* • Left ventricular dilatation • Mitral valve prolapse • Myocardial bridging • Myocardial infarction* • Myocardial ischaemia • Oedema peripheral • Orthostatic hypotension • Palpitations • Percutaneous coronary intervention* • Peripheral swelling • Peripheral venous disease • Pulmonary valve incompetence • Pulmonary valve stenosis • Raynaud's phenomenon • Right ventricular dilatation • Right ventricular dysfunction • Systolic dysfunction • Tachycardia • Transposition of the great vessels • Varicose vein • Ventricular extrasystoles • Ventricular septal defect
Gastrointestinal Disorders	• Barrett's oesophagus

	• Coeliac disease • Constipation • Crohn's disease • Diverticulum intestinal • Dyspepsia • Eosinophilic oesophagitis • Flatulence • Gastric ulcer • Gastritis • Gastrooesophageal reflux disease • Haemorrhoids • Hiatus hernia • Irritable bowel syndrome • Nausea • Sleeve gastrectomy
Musculoskeletal and Connective Tissue Disorders	• Ankylosing spondylitis • Arthralgia • Arthritis • Back pain • Bone hypertrophy • Bursitis • Enthesopathy • Femoroacetabular impingement • Fibromyalgia • Intervertebral disc degeneration • Intervertebral disc disorder • Intervertebral disc protrusion • Joint dislocation • Joint injury • Muscle spasms • Muscular weakness • Musculoskeletal pain • Myofascial pain syndrome • Neck injury • Neck pain • Osteoarthritis • Osteopenia • Plantar fasciitis • Polyarthritis • Rheumatoid arthritis • Rotator cuff syndrome • Sarcoidosis • Scoliosis • Spinal osteoarthritis

	• Spinal stenosis • Systemic lupus erythematosus • Tendonitis • Tenosynovitis • Tenosynovitis stenosans • Trigger finger
Neurologic Disorders	• Amnesia • Autonomic nervous system imbalance • Cerebrovascular accident* • Cervicogenic headache • Circadian rhythm sleep disorder • Dementia • Diabetic neuropathy • Disturbance in attention • Dizziness • Headache • Hypoaesthesia • Lumbar radiculopathy • Lumbosacral radiculopathy • Migraine* • Narcolepsy • Neuralgia • Ophthalmic migraine • Restless legs syndrome • Sciatica • Seizure • Thoracic outlet syndrome • Transient ischaemic attack* • Tremor • Vocal cord paralysis
Psychiatric Disorders	• Alcohol abuse • Anxiety • Anxiety disorder • Attention deficit hyperactivity disorder • Bipolar II disorder • Bipolar disorder • Borderline personality disorder • Bruxism • Depressed mood • Depression* • Drug dependence* • Generalised anxiety disorder • Insomnia • Major depression

	• Nicotine dependence • Obsessive-compulsive disorder • Post-traumatic stress disorder • Sleep disorder • Suicidal ideation
Pulmonary Disorders	• Acquired diaphragmatic eventration • Asthma* • Asthma exercise induced • Bronchitis chronic • Chronic obstructive pulmonary disease • Congenital pulmonary airway malformation • Cough • Dyspnoea • Emphysema • Epistaxis • Hypoxia • Lung neoplasm malignant • Obstructive sleep apnoea syndrome • Orthopnoea • Pulmonary embolism* • Pulmonary mass • Pulmonary resection* • Rhinitis allergic • Rhonchi • Sinus pain • Sleep apnoea syndrome

**Select clinician-selected historical events with resolution dates prior to study entry that were included as the events were expected to reflect ongoing underlying disease at the time of study entry.*

Supplementary Table 2. Risk Ratios of reported problems in each EQ-5D-5L dimension comparing participants with vs. without long COVID, stratifying by baseline comorbidity. Interaction p-values indicate how the presence / absence of a given baseline comorbidity and of long COVID modify each other's association with problems in EQ-5D-5L domains.

	Mobility Problems		Usual Activity Problems		Pain / Discomfort Problems		Anxiety / Depression Problems	
	RR* (95% CI)	Interaction p-value	RR* (95% CI)	Interaction p-value	RR* (95% CI)	Interaction p-value	RR* (95% CI)	Interaction p-value
Cardiac / Vascular Disorder Yes No	4.2 (2.3, 7.9) 5.0 (2.6, 9.4)	0.73	5.9 (3.4, 10.2) 5.4 (3.1, 9.5)	0.84	2.6 (1.9, 3.7) 5.0 (3.6, 6.9)	0.008	1.9 (0.9, 3.8) 4.6 (3.2, 6.6)	0.02
GI Disorder Yes No	2.7 (0.9, 8.3) 5.5 (3.4, 9.0)	0.25	3.1 (1.4, 6.8) 7.0 (4.5, 11.0)	0.08	1.5 (0.8, 2.8) 4.8 (3.6, 6.2)	<0.001	1.7 (0.6, 4.8) 3.8 (2.7, 5.4)	0.15
MSK / CT Disorder Yes No	2.1 (1.2, 3.8) 5.8 (3.2, 10.5)	0.02	2.4 (1.5, 3.9) 7.4 (4.3, 12.6)	0.002	1.8 (1.3, 2.5) 4.6 (3.4, 6.2)	<0.001	1.9 (0.9, 3.6) 3.8 (2.6, 5.6)	0.07
Neurologic Disorder Yes No	2.2 (0.9, 4.9) 5.2 (3.1, 8.8)	0.08	3.5 (1.6, 7.7) 5.9 (3.7, 9.3)	0.26	1.9 (1.2, 3.0) 4.2 (3.2, 5.6)	0.003	1.7 (0.9, 3.4) 3.7 (2.5, 5.4)	0.05
Psychiatric Disorder Yes No	2.9 (1.5, 5.6) 5.7 (3.2, 10.3)	0.13	3.2 (1.7, 5.9) 7.4 (4.5, 12.1)	0.04	2.6 (1.8, 4.0) 4.4 (3.3, 5.9)	0.046	2.5 (1.6, 3.7) 3.4 (2.1, 5.5)	0.31
Pulmonary Disorder Yes No	1.9 (0.8, 4.5) 6.8 (4.0, 11.7)	0.01	3.4 (1.8, 6.5) 7.2 (4.5, 11.7)	0.07	2.2 (1.5, 3.2) 4.8 (3.6, 6.4)	0.001	1.9 (1.0, 3.8) 4.1 (2.8, 6.0)	0.06

*Risk ratios compare participants with vs. without Long COVID

Abbreviations: RR: risk ratio, GI: gastrointestinal; MSK: musculoskeletal; CT: connective tissue

PARTICIPANT STUDY DIARY – Long Term Follow-up

Protocol Number: **A 5 4 0 1**

Today's Date:

MMM

DD

YYYY

Participant Number:

This Diary will be used during Weeks 12, 24, 36, 48, and 72.

SYMPTOMS

1. Please choose the response below that best describes the overall severity of your COVID-19 symptoms over the past 4 weeks.

☐ No symptoms ☐ Mild ☐ Moderate ☐ Severe

2. Please choose the response below that best describes your general physical health over the past 4 weeks.

☐ Excellent ☐ Very good ☐ Good ☐ Fair ☐ Poor

3. Have you returned to your usual (pre-COVID) health?

☐ Yes ☐ No

4. Indicate the overall severity of your symptoms over the past 4 weeks.

Symptoms	Absent	Mild	Moderate	Severe
Cough				
Shortness of breath or difficulty breathing				
Feeling feverish				
Chills				
Fatigue (low energy)				
Body pain or muscle pain or aches				
Diarrhea				
Nausea				
Vomiting				
Headache				
Sore throat				
Nasal obstruction or congestion (stuffy nose)				
Nasal discharge (runny nose)				
Muscle Weakness				
Insomnia				
Hair loss				
Smell disorder				
Palpitations or fast heart beat				
Joint Pain				
Decreased appetite				
Taste disorder				
Dizziness/balance issues				
Chest pain				
Skin rash				
Difficulty with concentration and thinking				
Difficulty reasoning and solving problems				
Memory loss (short or long term)				

PARTICIPANT STUDY DIARY - Long Term Follow-up

Protocol Number:

A	5	4	0	1
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Participant Number:

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Today's Date:

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MMM

DD

YYYY

MEDICAL CARE

Since your last study visit, have you:

1. Gone to seek medical care at an emergency room or clinic for any of the above symptoms? ☐ Yes ☐ No

2. Been diagnosed by a doctor with any of the following problems?

a. Pulmonary embolism (a blood clot in the lungs)

☐ Yes ☐ No

b. Deep vein thrombosis (a blood clot in the veins)

☐ Yes ☐ No

c. Myocardial infarction (Heart attack)

☐ Yes ☐ No

d. Cerebrovascular accident (Stroke)

☐ Yes ☐ No

3. Been newly prescribed any anticoagulant (blood thinning) medication?

☐ Yes ☐ No

Examples include Heparin (Lovenox), Warfarin (Coumadin), Apixaban (Eliquis), Dabigatran (Pradaxa), Edoxaban (Savaysa) and Rivaroxaban (Xarelto)

4. Been newly prescribed any corticosteroid medication ?

☐ Yes ☐ No

Examples include Cortisone, Dexamethasone (Decadron), Hydrocortisone (Cortef), Methylprednisolone (Medrol), Prednisone (Prednisone Intensol) and Prednisolone (Orapred, Prelone)