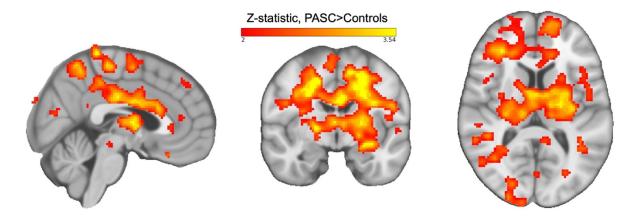
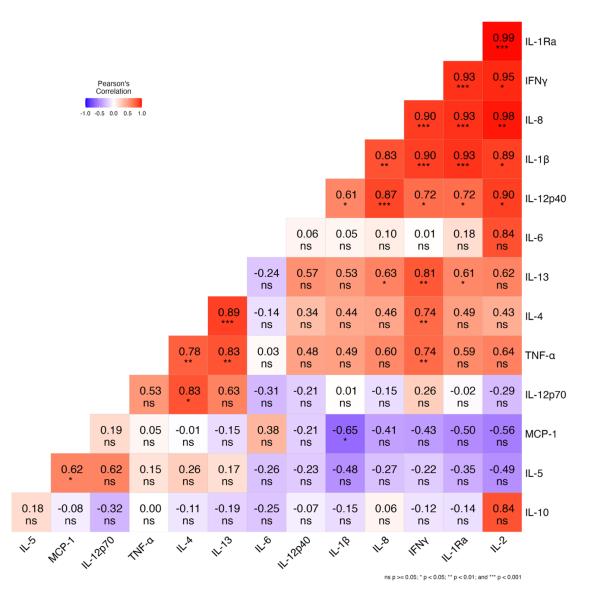
## 991 SUPPLEMENTAL FIGURES

992

- 993 Supplemental Figure 1
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- 998 Supplemental Figure 1 legend:
- 999 To validate our primary results, we performed a second analysis using a paired
- approach in which each PASC participant was matched to a control participant for
- 1001 genotype, sex, and age ±5 years. Because no control participant fit these criteria for one
- 1002 PASC participant, they were left out of the paired validation analysis. Genotype and sex
- 1003 were directly matched; neither age nor cerebellum SUV differed between cases and
- 1004 controls (p>0.05). Example slices through sagittal (x=3), coronal (y=-7), and axial (z=8)
- sections of the 11 PASC > 11 control group-level unpaired validation comparison,
- showing the pattern of increased [<sup>11</sup>C]PBR28 signal. Color bar: threshold min. Z score of
- 1007 2 and max. 3.54. (Figure is shown in neurological convention)
- 1008



1010

1011 Supplemental Figure 2 legend:

1012 Correlation matrix showing relationships among cytokines from a 15 cytokine multiplex

1013 (Millipore HCYTA-60K Luminex magnetic bead panel performed by Eve Technologies,

1014 Calgary Canada), from the 11 PASC participants that provided platelet-poor plasma

1015 samples immediately before PET neuroimaging.

1016 Analytes included: GM-CSF, IFNγ, IL-1β, IL-1RA, IL-2, IL-4, IL-5, IL-6, IL-8, IL-10, IL-

1017 12(p40), IL-12(p70), IL-13, MCP-1, TNFα. \* = p<0.05; \*\* = p<0.01; \*\*\* = p<0.001

## 1019

PASC participant	1	2	3	4	5	6	7	8	9	10	11	12
Headache	9	8	0	2	0	7	10	6	0	9	6	2
Unrested	10	8	4	6	1	0	10	9	7	5	10	7
Muscle Joint } Pain	10	3	0	2	6	6	10	6	5	1	3	2
Short Term Memory	7	6	6	4	4	0	10	0	2	6	2	7
Processing Information	9	6	6	6	4	0	10	3	3	6	3	5

1021

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1022 Supplemental Figure 3 legend:

1023 Each of the 12 PASC participants rated symptoms from the ICC "Neurological

1024 impairments" cluster on a 1-10 severity scale and marked their onset. For Pain, the ICC

1025 asked about "Significant pain" but the history questionnaire distinguished between

## 1026 muscle and joint pain.

- 1027 Light green = Not reported as a problem
- 1028 Orange = "This was a problem for me before COVID"
- 1029 Pink = "This is a problem for me since I had COVID"
- 1030 Red = "This is a serious problem for me since I had COVID"
- 1031
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## 1037 Supplemental Table 1

Affective items	PASC mean (SD)	Control mean (SD)		
Sadness	0.58 (0.67)	0.095 (0.48)		
Pessimism	0.67 (0.49)	0.024 (0.15)		
Sense of failure	0.00 (0.00)	0.024 (0.15)		
Dissatisfaction	0.67 (0.65)	0.095 (0.30)		
Guilt	0.17 (0.39)	0.023 (0.15)		
Feeling of punishment	0.00 (0.00)	0.048 (0.22)		
Disappointment in self	0.17 (0.39)	0.024 (0.16)		
Self-criticism	0.58 (0.51)	0.048 (0.22)		
Suicidal thoughts	0.083 (0.29)	0.00 (0.00)		
Crying episodes	0.42 (0.90)	0.048 (0.22)		
Irritability	0.42 (0.51)	0.24 (0.69)		
Social withdrawal	0.50 (0.52)	0.048 (0.22)		
Indecisiveness	1.00 (0.74)	0.00 (0.00)		
Average affective items	0.40 (0.23)	0.055 (0.10)		
Somatic Items				
Change of body image	0.42 (0.51)	0.024 (0.15)		
Ability to work	1.17 (0.94)	0.073 (0.26)		
Sleep difficulties	0.75 (0.45)	0.17 (0.44)		
Fatigability	1.42 (0.79)	0.073 (0.26)		

Loss of Appetite	0.58 (0.79)	0.024 (0.15)
Weight loss	0.083 (0.29)	0.048 (0.22)
Health anxiety	1.08 (0.67)	0.00 (0.00)
Loss of libido	0.83 (1.03)	0.071 (0.26)
Average somatic items	0.79 (0.39)	0.060 (0.13)
Total score averages	11.58 (1.74)	1.14 (5.58)

1038

1039 Supplemental Table 1 legend:

1040 PASC and Control participant means for BDI items within the affective and somatic

1041 subscales of the BDI. A mixed-model ANOVA revealed a significant interaction driven by

1042 high somatic item means within the PASC group.

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