

Supporting Information for

Evaluation of I-TAC as a potential early plasma marker to differentiate between critical and non-critical COVID-19

Yushan Zhang¹, Chao Xu², Nelson I. Agudelo Higuera³, Resham Bhattacharya^{4,5*}, Jennifer Holter Chakrabarty^{3*}, Priyabrata Mukherjee^{1,5*}

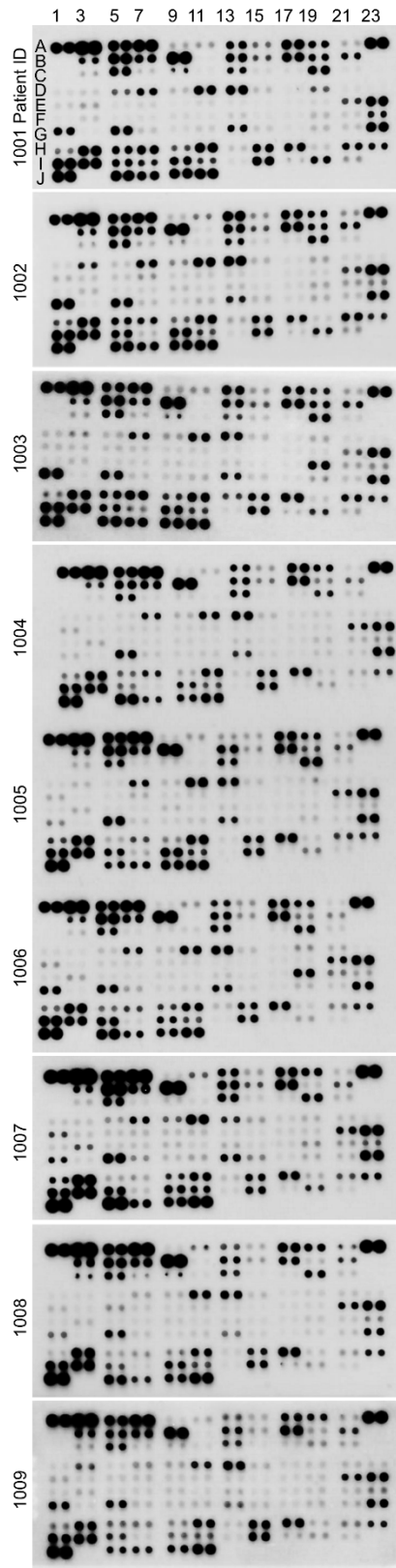
*Corresponding author. Email: Resham-Bhattacharya@ouhsc.edu

Jholter2@ouhsc.edu

Priyabrata-Mukherjee@ouhsc.edu

The supplementary materials include:

Fig. S1



SPOTS

A1 (Reference Spots)	D9 (IFN-gamma)	G10 (MCP-3)
A2 (Reference Spots)	D10 (IFN-gamma)	G11 (M-CSF)
A3 (Adiponectin)	D11 (IGFBP-2)	G12 (M-CSF)
A4 (Adiponectin)	D12 (IGFBP-2)	G13 (MIF)
A5 (Apolipoprotein A-I)	D13 (IGFBP-3)	G14 (MIF)
A6 (Apolipoprotein A-I)	D14 (IGFBP-3)	G15 (MIG)
A7 (Angiogenin)	D15 (IL-1alpha)	G16 (MIG)
A8 (Angiogenin)	D16 (IL-1alpha)	G17 (MIP-1alpha/MIP-1beta)
A9 (Angiopoietin-1)	D17 (IL-1beta)	G18 (MIP-1alpha/MIP-1beta)
A10 (Angiopoietin-1)	D18 (IL-1beta)	G19 (MIP-3alpha)
A11 (Angiopoietin-2)	D19 (IL-1ra)	G20 (MIP-3alpha)
A12 (Angiopoietin-2)	D20 (IL-1ra)	G21 (MIP-3beta)
A13 (BAFF)	D21 (IL-2)	G22 (MIP-3beta)
A14 (BAFF)	D22 (IL-2)	G23 (MMP-9)
A15 (BDNF)	D23 (IL-3)	G24 (MMP-9)
A16 (BDNF)	D24 (IL-3)	H1 (Myeloperoxidase)
A17 (Complement Component C5/C5a)	E1 (IL-4)	H2 (Myeloperoxidase)
A18 (Complement Component C5/C5a)	E2 (IL-4)	H3 (Osteopontin)
A19 (CD14)	E3 (IL-5)	H4 (Osteopontin)
A20 (CD14)	E4 (IL-5)	H5 (PDGF-AA)
A21 (CD30)	E5 (IL-6)	H6 (PDGF-AA)
A22 (CD30)	E6 (IL-6)	H7 (PDGF-AB/BB)
A23 (Reference Spots)	E7 (IL-8)	H8 (PDGF-AB/BB)
A24 (Reference Spots)	E8 (IL-8)	H9 (Pentraxin-3)
B3 (CD40 ligand)	E9 (IL-10)	H10 (Pentraxin-3)
B4 (CD40 ligand)	E10 (IL-10)	H11 (PF4)
B5 (Chitinase 3-like 1)	E11 (IL-11)	H12 (PF4)
B6 (Chitinase 3-like 1)	E12 (IL-11)	H13 (RAGE)
B7 (Complement Factor D)	E13 (IL-12 p70)	H14 (RAGE)
B8 (Complement Factor D)	E14 (IL-12 p70)	H15 (RANTES)
B9 (C-Reactive Protein)	E15 (IL-13)	H16 (RANTES)
B10 (C-Reactive Protein)	E16 (IL-13)	H17 (RBP-4)
B11 (Cripto-1)	E17 (IL-15)	H18 (RBP-4)
B12 (Cripto-1)	E18 (IL-15)	H19 (Relaxin-2)
B13 (Cystatin C)	E19 (IL-16)	H20 (Relaxin-2)
B14 (Cystatin C)	E20 (IL-16)	H21 (Resistin)
B15 (Dkk-1)	E21 (IL-17A)	H22 (Resistin)
B16 (Dkk-1)	E22 (IL-17A)	H23 (SDF-1alpha)
B17 (DPPIV)	E23 (IL-18 BPa)	H24 (SDF-1alpha)
B18 (DPPIV)	E24 (IL-18 BPa)	I1 (Serpin E1)
B19 (EGF)	F1 (IL-19)	I2 (Serpin E1)
B20 (EGF)	F2 (IL-19)	I3 (SHBG)
B21 (EMMPRIN)	F3 (IL-22)	I4 (SHBG)
B22 (EMMPRIN)	F4 (IL-22)	I5 (ST2)
C3 (ENA-78)	F5 (IL-23)	I6 (ST2)
C4 (ENA-78)	F6 (IL-23)	I7 (TARC)
C5 (Endoglin)	F7 (IL-24)	I8 (TARC)
C6 (Endoglin)	F8 (IL-24)	I9 (TFF3)
C7 (Fas Ligand)	F9 (IL-27)	I10 (TFF3)
C8 (Fas Ligand)	F10 (IL-27)	I11 (TfR)
C9 (FGF basic)	F11 (IL-31)	I12 (TfR)
C10 (FGF basic)	F12 (IL-31)	I13 (TGF-alpha)
C11 (FGF-7)	F13 (IL-32)	I14 (TGF-alpha)
C12 (FGF-7)	F14 (IL-32)	I15 (Thrombospondin-1)
C13 (FGF-19)	F15 (IL-33)	I16 (Thrombospondin-1)
C14 (FGF-19)	F16 (IL-33)	I17 (TNF-alpha)
C15 (Flt-3 Ligand)	F17 (IL-34)	I18 (TNF-alpha)
C16 (Flt-3 Ligand)	F18 (IL-34)	I19 (uPAR)
C17 (G-CSF)	F19 (IP-10)	I20 (uPAR)
C18 (G-CSF)	F20 (IP-10)	I21 (VEGF)
C19 (GDF-15)	F21 (I-TAC)	I22 (VEGF)
C20 (GDF-15)	F22 (I-TAC)	J1 (Reference Spots)
C21 (GM-CSF)	F23 (Kallikrein 3)	J2 (Reference Spots)
C22 (GM-CSF)	F24 (Kallikrein 3)	J5 (Vitamin D BP)
D1 (GRO-alpha)	G1 (Leptin)	J6 (Vitamin D BP)
D2 (GRO-alpha)	G2 (Leptin)	J7 (CD31)
D3 (Growth Hormone)	G3 (LIF)	J8 (CD31)
D4 (Growth Hormone)	G4 (LIF)	J9 (TIM-3)
D5 (HGF)	G5 (Lipocalin-2)	J10 (TIM-3)
D6 (HGF)	G6 (Lipocalin-2)	J11 (VCAM-1)
D7 (ICAM-1)	G7 (MCP-1)	J12 (VCAM-1)
D8 (ICAM-1)	G8 (MCP-1)	J23 (NC)
	G9 (MCP-3)	J24 (NC)

Figure S1. Typical images of cytokine array. Plasmas (20 μ l) from each patient or control donor was diluted with 1.5 ml array buffer and applied to one cytokine antibody array membrane. Films were developed for different duration from 3 min to 16 hrs. Patient or donor ID numbers are labeled on the left of each image. Cytokine name and location in the membrane are shown in the right table. (To be continued)

