

## Supplementary Online Content

Tillman H, Johnston SC, Farrant M, et al. Risk for major hemorrhages in patients receiving clopidogrel and aspirin compared with aspirin alone after transient ischemic attack or minor ischemic stroke: a secondary analysis of the POINT randomized clinical trial. *JAMA Neurol*. Published online April 29, 2019. doi:10.1001/jamaneurol.2019.0932

**eTable 1.** POINT, ISTH and PRoFESS Hemorrhage Classifications

**eTable 2.** Baseline Characteristics for ITT Study Population by Major Hemorrhage Status

**eTable 3.** Major and Minor Hemorrhages for ITT Study Population

**eTable 4.** Baseline Characteristics of Patients with Major Hemorrhages in the ITT Study Population by Treatment Group

**eTable 5:** Baseline Characteristics of Patients with Major Hemorrhages in the As-Treated Study Population by Treatment Group

**eTable 6:** Bleeding Details for Minor Hemorrhages for the As-Treated Study Population

**eFigure.** Kaplan Meier Curve of Major and Minor Hemorrhage in the As Treated Study Population

**eAppendix.** POINT Investigators

This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable 1: POINT, ISTH and PRoFESS Hemorrhage Classifications**

POINT	ISTH	PRoFESS
<p><b>Major Hemorrhage</b></p> <p>Hemorrhage that results in non-traumatic, symptomatic intracranial hemorrhage (intracerebral, subdural, subarachnoid, intraventricular, symptomatic hemorrhagic transformation of an ischemic stroke), intraocular bleeding causing loss of vision, need for transfusion of two or more units of red cells or equivalent amount of whole blood, need for hospitalization/prolongation of an existing hospitalization, or death.</p> <p>May include bleeding events related to surgical procedures.</p> <p><b>Minor Hemorrhage</b></p> <p>Hemorrhage that results in interruption or discontinuation of study drug but not classifiable as major hemorrhagic event; may include bleeding events related to surgical procedures but not those related to accidental trauma.</p>	<p><b>Major Bleeding in Non-Surgical Patients</b></p> <p>Fatal bleeding, <i>and/or</i></p> <p>Symptomatic bleeding in a critical area or organ, such as intracranial, intraspinal, intraocular, retroperitoneal, intraarticular or pericardial, or intramuscular with compartment syndrome, <i>and/or</i></p> <p>Bleeding causing a fall in hemoglobin level of 2 g/dL (1.24 mmol/L) or more, or leading to transfusion of two or more units of whole blood or red cells.</p> <p><b>Minor Bleeding</b></p> <p>All non-major bleeds considered minor bleeds; further divided into those that are clinically relevant and those that are not.</p> <p><b>Clinically Relevant Minor Bleed<sup>a</sup></b></p> <p>An acute or subacute clinically overt bleed that does not meet criteria for a major bleed but prompts a clinical response, in that it leads to at least one of the following:</p> <ul style="list-style-type: none"> <li>• hospital admission for bleeding</li> <li>• physician-guided medical or surgical treatment for bleeding</li> <li>• change in antithrombotic therapy (including interruption/discontinuation of study drug)</li> </ul>	<p><b>Major Hemorrhage</b></p> <p>Hemorrhage that results in clinically significant disability, symptomatic intracranial hemorrhage, intraocular bleeding causing loss of vision, need for a transfusion of 2 or more units of red cells or equivalent amount of whole blood, or need for hospitalization.</p> <p><b>Life-threatening Hemorrhage</b></p> <p>Hemorrhage that was fatal or required use of intravenous inotropic medication to maintain blood pressure, surgical intervention, or transfusion of 4 or more units of red cells or equivalent amount of whole blood.</p> <p><b>Non-life-threatening Hemorrhage</b></p> <p>Hemorrhage classified as major hemorrhage but not as life-threatening.</p> <p><b>Minor Hemorrhage</b></p> <p>All non-major hemorrhages leading to interruption of therapy.</p>

Abbreviation: POINT, Platelet-Oriented Inhibition in New TIA and minor ischemic stroke; ISTH, International Society on Thrombosis and Hemostasis; PRoFESS, Prevention Regimen for Effectively Avoiding Second Strokes; g/dL, grams per deciliter; mmol/L, millimoles per liter.

<sup>a</sup> Communication from the Scientific and Standardization Committee (SSC) of the International Society on Thrombosis and Hemostasis (ISTH), November 2015.

---

**eTable 2: Baseline Characteristics for ITT Study Population by Major Hemorrhage Status**

Characteristic	N	Major Hemorrhage (N=33)	N	No Major Hemorrhage (N=4848)	p-value
Age (yr) – median (IQR)	33	74.0 (60.0-84.0)	4848	65.0 (55.0-74.0)	<b>0.0043</b>
Female sex – no. (%)	33	17 (51.5%)	4848	2178 (44.9%)	0.4482
Race – no. (%)	32		4706		0.2533
White		22 (68.8%)		3533 (75.1%)	
Black		7 (21.9%)		959 (20.4%)	
Asian		2 (6.3%)		142 (3.0%)	
Other		1 (3.1%)		72 (1.5%)	
Ethnicity – no. (%)	32		4616		0.4486
Not US Hispanic		29 (90.6%)		4329 (93.8%)	
US Hispanic		3 (9.4%)		287 (6.2%)	
Region – no. (%)	33		4848		1.0
United States		28 (84.9%)		4015 (82.8%)	
Outside United States		5 (15.2%)		833 (17.2%)	
Systolic blood pressure – median (IQR)	33	160.0 (138.0-173.0)	4844	159.0 (143.0-180.0)	0.6884
Diastolic blood pressure – median (IQR)	33	83.0 (70.0-91.0)	4844	87.0 (77.0-98.0)	0.0924
Medical history – no. (%)					
Congestive heart failure	33	0 (0.0%)	4841	126 (2.6%)	1.0
Atrial fibrillation	33	1 (3.0%)	4834	48 (1.0%)	0.2847
Ischemic heart disease	33	4 (12.1%)	4836	493 (10.2%)	0.7698
Hypertension	32	27 (84.4%)	4828	3346 (69.3%)	0.0818
Diabetes mellitus	33	9 (27.3%)	4839	1331 (27.5%)	0.9762
Current tobacco smoker – no. (%)	33	8 (24.2%)	4844	996 (20.6%)	0.6022
Taking aspirin at presentation – no. (%)	33	20 (60.6%)	4848	2794 (57.6%)	0.7304
Taking clopidogrel at presentation – no. (%)	33	1 (3.0%)	4847	89 (1.8%)	0.4601
Time to randomization (h) – mean (SD)	33	7.0 (3.1)	4847	7.3 (2.9)	0.5108
Time to randomization – no. (%)	33		4847		0.8685
< 6h		10 (30.3%)		1534 (31.7%)	
≥ 6h		23 (69.7%)		3313 (68.4%)	
Qualifying event – no. (%)	33		4848		0.3325
TIA		17 (51.5%)		2091 (43.1%)	
Ischemic stroke		16 (48.5%)		2757 (56.9%)	
Qualifying TIA baseline ABCD <sup>2</sup> score – median (IQR)	17	5.0 (4.0-6.0)	2087	5.0(4.0-6.0)	0.6018
Qualifying ischemic stroke baseline NIHSS score – median (IQR)	16	2.0 (1.0-3.0)	2734	2.0 (1.0-2.0)	0.5120

Differences in baseline characteristics between the treatment groups were not significant with the exception of age,  $p=0.0043$ . Race is missing/unknown for  $N=143$ ; ethnicity is missing/unknown for  $N=233$ . ABCD<sup>2</sup> scale score is given only for TIA group ( $N=2108$  with 4 missing) and NIHSS score given only for ischemic stroke group ( $N=2773$  with 23 missing).

Abbreviation: IQR, interquartile range; US, United States; SD, standard deviation; TIA, transient ischemic attack; ABCD<sup>2</sup>, age/blood pressure/clinical features/duration of symptoms/diabetes; NIHSS, National Institutes of Health Stroke Scale.

---

**eTable 3: Major and Minor Hemorrhages for ITT Study Population**

Outcome	Clopidogrel plus aspirin (N=2432)		Aspirin (N=2449)		Hazard Ratio (95% CI)	P Value
	Patients with Event no.	Patients with Event %	Patients with Event no.	Patients with Event %		
<b>Fatal Major Hemorrhage<sup>a</sup></b>	3	0.1	2	0.1		
<b>Major Hemorrhage</b>	23	0.9	10	0.4	2.32 (1.10 – 4.87)	0.02
Intracranial hemorrhage	6	0.2	3	0.1		
Hemorrhagic stroke	5	0.2	3	0.1		
Symptomatic intracerebral hemorrhage	2	0.1	2	0.1		
Symptomatic hemorrhagic transformation of cerebral infarcts	2	0.1	1	0.0		
Other symptomatic intracranial hemorrhage (subarachnoid)	2	0.1	0	0		
Other than intracranial hemorrhage <sup>b</sup>	17	0.7	7	0.3		
Upper GI hemorrhage	4	0.2	4	0.2		
Lower GI hemorrhage	7	0.3	1	0		
Hematuria	1	0.0	1	0.0		
Other <sup>c</sup>	5	0.2	1	0.0		
<b>Minor Hemorrhage</b>	40	1.6	13	0.5	3.12 (1.67 – 5.83)	<0.001

<sup>a</sup>The five fatal major hemorrhages consist of 2 symptomatic intracerebral hemorrhages, 2 symptomatic hemorrhagic transformations, and 1 groin hemorrhage with cardiac arrest.

<sup>b</sup>Three of these patients had 2 hemorrhagic events each.

<sup>c</sup> Other consists of 1 uterine fibroids, 1 vitreous hemorrhage, 1 implantation of a loop recorder, 1 gallbladder hematoma, and 1 groin hemorrhage with cardiac arrest. One patient had a traumatic arm hemorrhage due to a fall adjudicated as a major hemorrhage; according to the protocol, this should not have qualified as a major hemorrhage since it was due to accidental trauma.

Abbreviation: GI, gastrointestinal.

**eTable 4. Baseline Characteristics of Patients with Major Hemorrhages in the ITT Study Population by Treatment Group**

Characteristic	N	Clopidogrel plus Aspirin (N=23)	N	Aspirin (N=10)
Total events		24		12
Events on treatment		22		7
Total patients		23		10
Patients on treatment		21		6
Time to hemorrhage (days) – median (IQR)	23	29.5 (2.6 – 51.8)	10	19.8 (6.5 – 46.8)
Age (yr) – median (IQR)	23	74.0 (63.0-84.0)	10	68.0 (49.0-82.0)
Female sex – no. (%)	23	12 (52.2%)		5 (50.0%)
Race - no. (%)	22		10	
White		17 (77.3%)		5 (50.0%)
Black		4 (18.2%)		3 (30.0%)
Asian		1 (4.6%)		1 (10.0%)
Other		0 (0.0%)		1 (10.0%)
Ethnicity - no. (%)	22		10	
Not US Hispanic		19 (86.4%)		10 (100.0%)
US Hispanic		3 (13.6%)		0 (0.0%)
Region – no. (%)	23		10	
United States		20 (87.0%)		8 (80.0%)
Outside United States		3 (13.0%)		2 (20.0%)
Systolic blood pressure – median (IQR)	23	162.0 (140.0-173.0)	10	154.0 (138.0-181.0)
Diastolic blood pressure – median (IQR)	23	73.0 (68.0-92.0)	10	88.0 (83.0-91.0)
Medical history – no. (%)				
Congestive heart failure	23	0 (0.0%)	10	0 (0.0%)
Atrial fibrillation	23	1 (4.4%)	10	0 (0.0%)
Ischemic heart disease	23	4 (17.4%)	10	0 (0.0%)
Hypertension	22	20 (90.9%)	10	7 (70.0%)
Diabetes mellitus	23	6 (26.1%)	10	3 (30.0%)
Current tobacco smoker – no. (%)	23	5 (21.7%)	10	3 (30.0%)
Taking aspirin at presentation – no. (%)	23	14 (60.9%)	10	6 (60.0%)
Taking clopidogrel at presentation – no. (%)	23	1 (4.4%)	10	0 (0.0%)
Time to randomization (h) – mean (SD)	23	7.5 (3.4)	10	8.1 (2.2)
< 6h		8 (34.8%)		2 (20.0%)
≥ 6h		15 (65.2%)		8 (80.0%)
Qualifying event – no. (%)	23		10	
TIA		12 (52.2%)		5 (50.0%)
Ischemic stroke		11 (47.8%)		5 (50.0%)
Qualifying TIA baseline ABCD <sup>2</sup> score – median (IQR)	12	5.0 (4.5-6.0)	5	5.0 (4.0-5.0)
Qualifying ischemic stroke baseline NIHSS score – median (IQR)	11	2.0 (0.0-3.0)	5	2.0 (2.0-3.0)

Differences in baseline characteristics between treatment groups were not significant: smallest p-value was for diastolic blood pressure with a p-value of 0.1081. Race is missing/unknown for N=1. Ethnicity is missing/unknown for N=1. ABCD<sup>2</sup> scale score is given only for TIA group (N=17) and NIHSS only for ischemic stroke group (N=16).

Abbreviation: IQR, interquartile range; US, United States; SD, standard deviation; TIA, transient ischemic attack; ABCD<sup>2</sup>, age/blood pressure/clinical features/duration of symptoms/diabetes; NIHSS, National Institutes of Health Stroke Scale.

**eTable 5. Baseline Characteristics of Patients with Major Hemorrhages in the As-Treated Study Population by Treatment Group**

Characteristic	N	Clopidogrel plus Aspirin (N=21)	N	Aspirin (N=6)
Total number of events		21		6
Total patients		21		6
Time to hemorrhage (days) – median (IQR)	21	21.2 (2.6 – 51.3)	6	11.5 (6.5 – 23.4)
Age (yr) – median (IQR)	21	74.0 (67.0–84.0)	6	64.5 (46.0–82.0)
Female sex – no. (%)	21	11 (52.4%)	6	4 (66.7%)
Race – no. (%)	20		6	
White		16 (80.0%)		3 (50.0%)
Black		3 (15.0%)		2 (33.3%)
Asian		1 (5.0%)		0 (0.0%)
Other		0 (0.0%)		1 (16.7%)
Ethnicity – no. (%)	20		6	
Not US Hispanic		18 (90.0%)		6 (100.0%)
US Hispanic		2 (10.0%)		0 (0.0%)
Region – no. (%)	21		6	
United States		18 (85.7%)		5 (83.3%)
Outside United States		3 (14.3%)		1 (16.7%)
Systolic blood pressure – median (IQR)	21	162.0 (142.0–173.0)	6	175.0 (160.0–189.0)
Diastolic blood pressure – median (IQR)	21	73.0 (68.0–92.0)	6	90.0 (87.0–104.0)
Medical history – no. (%)				
Congestive heart failure	21	0 (0.0%)	6	0 (0.0%)
Atrial fibrillation	21	1 (4.8%)	6	0 (0.0%)
Ischemic heart disease	21	3 (14.3%)	6	0 (0.0%)
Hypertension	20	18 (90.0%)	6	4 (66.7%)
Diabetes mellitus	21	6 (28.6%)	6	3 (33.3%)
Current tobacco smoker – no. (%)	21	5 (23.8%)	6	1 (16.7%)
Taking aspirin at presentation – no. (%)	21	12 (57.1%)	6	3 (50.0%)
Taking clopidogrel at presentation – no. (%)	21	1 (4.8%)	6	0 (0.0%)
Time to randomization (h) – mean (SD)	21	7.5 (3.6)	6	8.5 (1.4)
Time to randomization – no. (%)	21		6	
< 6h		8 (38.1%)		0 (0.0%)
> 6h		13 (61.9%)		6 (100.0%)
Qualifying event – no. (%)	21		6	
TIA		11 (52.4%)		4 (66.7%)
Ischemic stroke		10 (47.6%)		2 (33.3%)
Qualifying TIA baseline ABCD <sup>2</sup> score – median (IQR)	11	5.0 (5.0–6.0)	4	5.0 (4.5–5.5)
Qualifying ischemic stroke baseline NIHSS score – median (IQR)	10	2.0 (1.0–3.0)	2	1.5 (1.0–2.0)

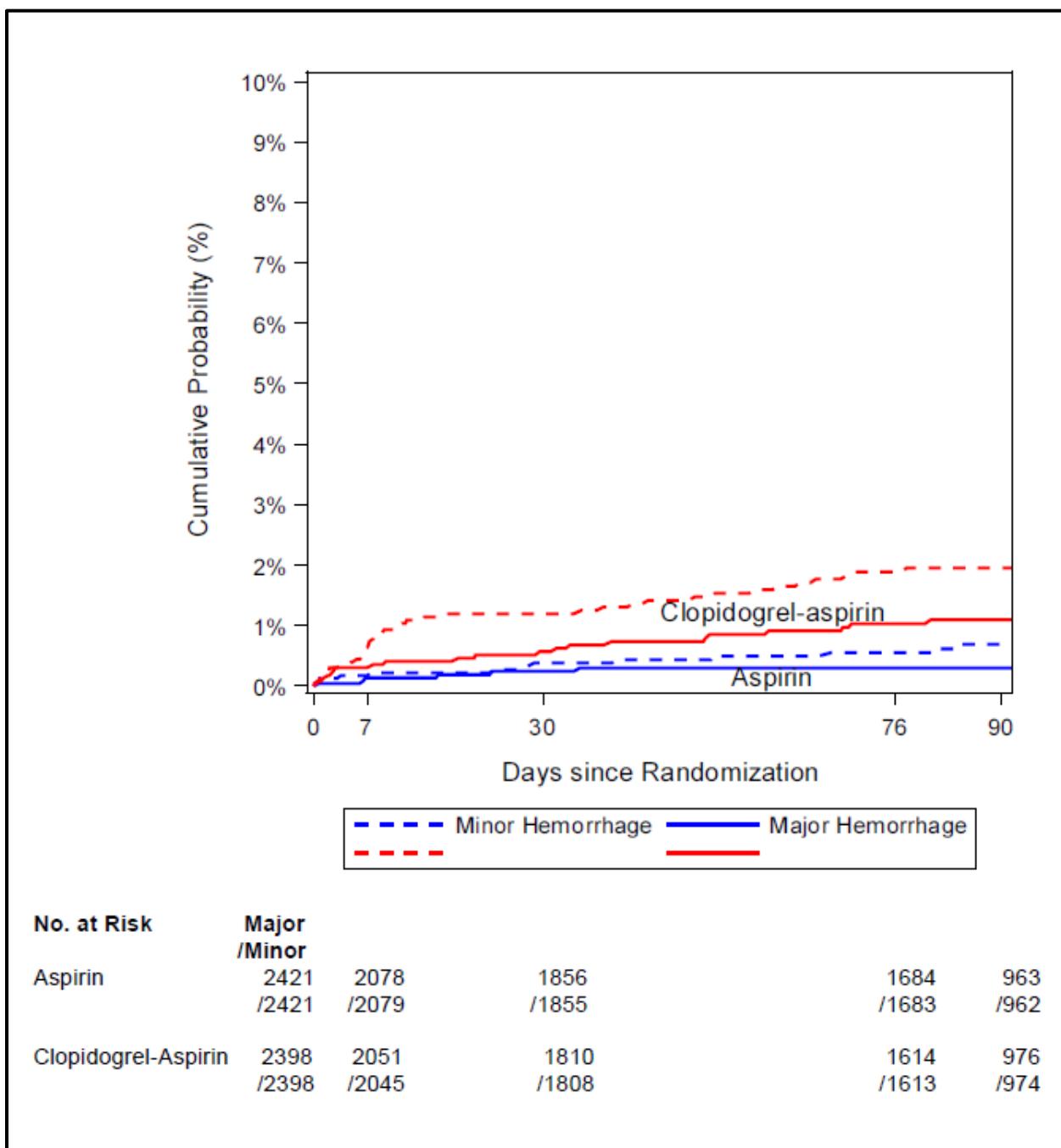
Differences in baseline characteristics between treatment groups were not significant at  $p \leq 0.1$  except for diastolic blood pressure with a p-value of 0.09. Race is missing/unknown for N=1. Ethnicity is missing/unknown for N=1. ABCD<sup>2</sup> scale score given only for TIA group (N=15); NIHSS score given only for ischemic stroke group (N=12).

Abbreviation: IQR, interquartile range; US, United States; SD, standard deviation; TIA, transient ischemic attack; ABCD<sup>2</sup>, age/blood pressure/clinical features/duration of symptoms/diabetes; NIHSS, National Institutes of Health Stroke Scale.

**eTable 6: Bleeding Details for Minor Hemorrhages for the As-Treated Study Population**

	<b>Clopidogrel plus aspirin (N=2398)</b>	<b>Aspirin (N=2421)</b>	<b>Total</b>
Asymptomatic intracerebral hemorrhage	1 (0.04%)	1 (0.04%)	2
Other asymptomatic intracranial hemorrhage	3 (0.12%)	1 (0.04%)	4
Conjunctival hemorrhage	0 (0.00%)	1 (0.04%)	1
Cutaneous	13 (0.54%)	1 (0.04%)	14
Epistaxis	3 (0.12%)	2 (0.08%)	5
Gastrointestinal	12 (0.50%)	4 (0.17%)	16
Genitourinary	3 (0.12%)	3 (0.13%)	6
Gum bleeding	1 (0.04%)	0 (0.00%)	1
Oral	2 (0.08%)	0 (0.00%)	2
<b>Total</b>	<b>38</b>	<b>13</b>	<b>51</b>

eFigure1. Kaplan Meier Curve of Major and Minor Hemorrhage in the As Treated Study Population



## eAppendix. POINT Investigators

### EXECUTIVE COMMITTEE

S. Claiborne Johnston, MD, PhD, J. Donald Easton, MD, Anthony S. Kim, MD, MAS, Mary Farrant, MBA, Yuko Palesch, PhD, Jordan Elm, PhD, William Barsan, MD, Anne Lindblad, PhD, Robin Conwit, MD, Scott Janis, PhD.

### ADVISORY COMMITTEE

S. Claiborne Johnston, MD, PhD, J. Donald Easton, MD, Anthony S. Kim, MD, MAS, Mary Farrant, MBA, Yuko Palesch, PhD, Jordan Elm, PhD, Holly Tillman, MS, Catherine Dillon, MS, William Barsan, MD, Renee Kasperek-Wynn, RN, BSN, Valerie Stevenson, BAS, RRT, CCRP, Lewis Morgenstern, MD, Anne Lindblad, PhD, Carolyn Burke, Lahna Jones, Kimberly Vogan, Robin Conwit, MD, Scott Janis, PhD.

### DATA AND SAFETY MONITORING BOARD

Gregory J. del Zoppo, MD, Robert Cite, MD, Misha Eliasziw, PhD, Pierre Fayad, MD, FAHA, FAAN, Ann M. Lowe, MD, Ileana L. Piña, MD, MPH, Julie A. Swain, MD.

### CLINICAL EVENT ADJUDICATION COMMITTEE

Eric Adelman, MD, Brian Scott, MD, David Bach, MD, Claire S. Duvernoy, MD, Kevin A. Kerber, MD, Deborah A. Levine, MD, MPH, Matthew T. Lorincz, MD, PhD. Darin B. Zahuranec, MD.

### NATIONAL INSTITUTES OF HEALTH

SCOTT JANIS, PhD, ROBIN CONWIT, MD.

### NETT CLINICAL COORDINATING CENTER

William Barsan, MD, Joy Black, BSN, RN, MS, Renee Kasperek-Wynn, RN, BSN, Robert Silbergleit, MD, Mickie Speers, BSN, Valerie Stevenson BAS, RRT, CCRP, Carol Van Huysen, BS, CCRP. Tess Bonham, BS, Andrace DeYampert, MSHS, CCRP, Shirley Frederikson, RN, MS, Samkeliso Mawocha, MS, CCRP, CCRA, Gina Neshewat, MPH, CCRP.

### DATA COORDINATION UNIT/DEPARTMENT OF PUBLIC HEALTH SCIENCES (MUSC)

JORDAN ELM, PhD, CATHERINE R. DILLON, MS, FARIA KHATTAK, MPH, YUKO PALESCH, PhD, KAVITA PATEL, BS, KEITH PAULS, BS, LOGAN SIRLINE, MPH, HOLLY TILLMAN, MS, WENLE ZHAO, PhD. CASSIDY CONNER, MS, ADAM HENRY, MPH, AARON PERLMUTTER, MPH, MSW.

### POINT CLINICAL COORDINATING CENTER (UCSF)

Mary Farrant, BSN, MBA, Karla Zurita, BS, CCRP. Trese Biagini, BA, MA, MSN, ANCC, Marcos T. Contreras, PharmD, Caitlin Glennon, BA.

#### Clinical Research Collaboration (EMMES)

ANNE LINDBLAD, PHD, CAROLYN BURKE, KIMBERLY VOGAN, LAHNA JONES, SYDNEY AVVEDUTI, ELIZABETH HEBERT, CATHRYN LUTHER-LEMMON, REBECCA MORGAN; CAROLYN LUCE, SHARP CLINICAL SERVICES; SHELLEY MCKENNA, CULZEAN CONSULTING; MARIA ELENA LOZANO, SYNTERACT, INC.; SANDRA PETROLO, NEUROSCIENCE TRIALS AUSTRALIA.

#### AUSTRALIA      *Country Lead:* Christopher LEVI

Site	Role	Team Member
Austin Hospital	Principal Investigator	Vincent THIJS
	Co-Investigator(s)	Amy BRODTMANN, Marion SIMPSON
	Study Coordinator(s)	Dennis YOUNG
Box Hill Hospital	Principal Investigator	Chris BLADIN
	Co-Investigator(s)	Jill CAMERON, Philip CHOI, Skye COOTE, Helen DEWEY, Amanda GILLIGAN, Sarah LEE, Claire MULLER, Poh SIEN LOH, Gabrielle TSE, Wenwen ZHANG
	Study Coordinator(s)	Zofia ROSS, Grace THOMAS
Footscray Hospital	Principal Investigator	Tissa WIJERATNE
	Co-Investigator(s)	Jennifer GOFF, Elizabeth MACKEY
	Study Coordinator(s)	Sherisse CELESTINO, Essie LOW
Gosford Hospital	Principal Investigator	Bill O'BRIEN
	Co-Investigator(s)	Patricia CARUANA, Denis CRIMMINS, James W. EVANS, Penelope GORDON, Yun HWANG, Tejas PATEL, Nathan PAVEY, Elizabeth REYNEKE, Alexis SELBY, Jonathan STURM, Scott WHYTE, Stephen WINTERS
	Study Coordinator(s)	Deborah ALCHIN, Susanne RHODES
John Hunter Hospital	Principal Investigators	Chris LEVI, Neil SPRATT
	Co-Investigator(s)	Timothy ANG, Jelle DEMEESTERE, Carlos ESPERON, Venkatesh KRISHNAMURTHY, Chris LEVI, Andre LOISELLE, Fredi MITEFF, Mark PARSONS, Ronak PATEL

	Study Coordinator(s)	Terri HAINES, Erin KERR, Gemma KITSOS
Monash Medical Centre	Principal Investigator	Thanh PHAN
	Co-Investigator(s)	Benjamin CLISSOLD, John LY, Henry MA
	Study Coordinator(s)	Kitty WONG, Dennis YOUNG
Royal Adelaide Hospital	Principal Investigator	Timothy KLEINIG
	Co-Investigator(s)	Edmund CHEONG, Craig KURUNAWAI
	Study Coordinator(s)	Jennifer CRANEFIELD
Royal Melbourne Hospital	Principal Investigator	Stephen DAVIS
	Co-Investigator(s)	Bruce CAMPBELL, Arvind CHANDRATHEVA, Thanuja DHARMADASA, Lauren GILES, Peter HAND, Nevin JOHN, Matthew LEE, Nyan LYNN, Andrew NEAL, Tom OXLEY, Darshan SHAH, Hans Tsuang-Han TU, Vinojini VIVEK, Teddy WU, Bernard YAN, Nawaf YASSI, Henry ZHAO
	Study Coordinator(s)	Amy MCDONALD, Gabriel SILVER

## CANADA

**Country Lead:** Shelagh COUTTS

Site	Role	Team Member
Charles LeMoyne Hospital	Principal Investigator	Jean-Martin BOULANGER
	Co-Investigator(s)	Leo BERGER
	Study Coordinator(s)	Lise BLAIS
Enfant-Jesus Hospital	Principal Investigator	Steve VERREAU
	Co-Investigator(s)	Marie-Christine CAMDEN, Ariane MACKEY
	Study Coordinator(s)	Karine COLLARD, Annette HACHE
Grey Nuns Hospital	Principal Investigators	Brian BUCK, Muzzaffar SIDDIQUI
	Co-Investigator(s)	Rajive JASSAL
	Study Coordinator(s)	Dana BERGQUIST, Lori PIQUETTE
London Health Sciences Center	Principal Investigator	Richard CHAN

	Co-Investigator(s)	Shahram ABOOTALEBI, Rasha ALSUBAIE, Reza AZARPAZHOOH, Ruba BAAMER, Sebastian FRIDMAN, Alexander KHAW, Jennifer MANDZIA, Antonia NUCERA, Iryna PALAMARCHUK, Patricia RICCIO, Luciano SPOSATO
	Study Coordinator(s)	Beth BEAUCHAMP, Susan CRANN
Montreal General Hospital	Principal Investigator	Theodore WEIN
	Co-Investigator(s)	Eric EHRENSPERGER, Lucy VIEIRA
	Study Coordinator(s)	Lisa WADUP
Notre-Dame Hospital	Principal Investigator	Celine ODIER
	Co-Investigator(s)	Nicole DANEAULT, Yan DESCHAINTRE, Andre DUROCHER, Laura GIOIA, Gregory JACQUIN, Sylvain LANTHIER, Alexandre POPPE, Christian STAPF
	Study Coordinator(s)	Marlene LAPIERRE
University of Alberta Hospital	Principal Investigator	Ashfaq SHUAIB
	Co-Investigator(s)	Aftab AHMAD, Ghazala BASIR, Bashir BREBESH, Asif Javed BUTT, Shubhabrata DAS, Atlantic D'SOUZA, Bikram GAJUREL, Esseddeeg GHROODA, Dulara HUSSAIN, Hayrapet KALASHYA, Harsha KAMBLE JAYAPRAKASH, Mahesh KATE, Sahrish Aieshah KAZI, Herbert Alejandro MANOSALVA, Raj PARTHASARATHY, Sibi THIRUNAVUKARASU, Andrew WASSEF
	Study Coordinator(s)	Brenda SCHWINDT
University of Calgary - Foothills Campus	Principal Investigator	Shelagh COUTTS
	Co-Investigator(s)	Abdulaziz AL SULTAN, Amjad ALSERAYA, Sarah BLAYNEY, Debabrata CHAKRABORTY, Shuo CHEN, Philip CHOI, Sadanand DEY, Veronique DUBUC, Prasanna ESWARADASS, James W. EVANS, Thalia FIELD, Brett GRAHAM, Janka HEGEDUS, Michael HILL, Oje IMOUKHUEDE, Evgenia KLOURFELD, Andrew LOCKEY, Aimen MOUSSADDY, Tapuwa MUSUKA, Nancy NEWCOMMON, Davar NIKNESHAN, Ramana REDDY, Dilip SINGH, Ravinder SINGH, Amith

		SITARAM, Ericka TELEG, Carol THAM, Anurag TRIVEDI, Stephen VAN GAAL, Amy YU, Charlotte ZERNA Supriya SAVE
	Study Coordinator(s)	
Vancouver General Hospital	Principal Investigator	Samuel YIP
	Co-Investigator(s)	Negar ASDAGHI, Oscar BENAVENTE, Thalia FIELD, Alejandra GOMEZ GONZALEZ, Asaf HONIG, Sharan MANN, Colleen MURPHY, Phillip TEAL, Stephen VAN GAAL, Laura WILSON Genoveva MACLEAN
	Study Coordinator(s)	

## FINLAND

**Country Lead:** Risto ROINE

Site	Role	Team Member
Helsinki University Central Hospital	Principal Investigator	Turgut TATLISUMAK
	Co-Investigator(s)	Sami CURTZE, Reetta KIVIOJA, Maija KOIVU, Tea LARJO, Ivan MARINKOVIC, Nicolas MARTINEZ-MAJANDER, Emilia OSTERLUND-TAURIALA, Anastasia SHULGA, Gerli SIBOLT, Anna TAPANAINEN, Marjaana TIAINEN, Liisa TOMPOPO, Outi TUMPULA, Sannakaisa VAINIKKA, Kati VALKONEN, Jyri VIRTAN, Emil YLIKALLIO
	Study Coordinator(s)	Saija EIROLA
Turku University Hospital	Principal Investigator	Risto ROINE
	Co-Investigator(s)	Julia AIVO, Anna BRUCK, Lauri HURRI, Manu JOKELA, Jaana KORPELA, Susanna ROINE, Jori RUUSKANEN, Pauli YLIKOTILA
	Study Coordinator(s)	Jaana ERIKSSON

## FRANCE

**Country Lead:** Pierre AMARENCO

Site	Role	Team Member
Adolphe de Rothschild Foundation	Principal Investigator	Michael OBADIA
	Co-Investigator(s)	Mathieu FISSELLIER, Laura GROSLIERE
	Study Coordinator(s)	Soukie JOUAVILLE, Elise PERRIOT, Alessandra PINCINI, Josephine TINE

Bichat-Claude Bernard Hospital	Principal Investigator	Elena MESEGUER
	Co-Investigator(s)	Pierre AMARENCO, Lucie CABREJO, Céline GUIDOUX, Cristina HOBEANU, Philippa LAVALLEE, Anna MARTIN BECHET, Ricardo RIGUAL
	Study Coordinator(s)	Estelle BEGON, Loubna DJEDIDI
Fleyriat Hospital	Principal Investigator	Frederic PHILIPPEAU
	Co-Investigator(s)	Angel-Christian OLARU, Taras SOSYAK
Foch Hospital	Principal Investigator	Bertrand LAPERGUE
	Co-Investigator(s)	Adrien WANG
	Study Coordinator(s)	Delphine LOPEZ
Pierre Wertheimer Hospital	Principal Investigator	Norbert NIGHOGHOSSIAN
	Co-Investigator(s)	Amandine BENOIT, Tae-Hee CHO, Laurent DEREX, Laura MECHTOUFF, Elodie ONG
	Study Coordinator(s)	Marielle BUISSON
Pitie-Salpetriere Hospital	Principal Investigator	Yves SAMSON
	Co-Investigator(s)	Flore BARONNET, Sophie CROZIER, Sandrine DELTOUR, Belen DIAZ FERNANDEZ, Raphael LE BOUC, Anne LEGER, Charlotte ROSSO, Marion YGER
	Study Coordinator(s)	Bachir AIDAOUI, Christine PIRES

## GERMANY

**Country Lead:** Hans-Christoph DIENER

Site	Role	Team Member
Central Bremen Hospital	Principal Investigator	Andreas KASTRUP
	Co-Investigator(s)	Uwe BECKER, Freimuth BRUNNER, Janina GUENTNER, Andreas SCHROTER
	Study Coordinator(s)	Halil MERDIVAN
Hannover Medical School	Principal Investigator	Karin WEISSENBORN

	Co-Investigator(s)	Maria GABRIEL, Gerrit GROSSE, Ramona SCHUPPNER, Hans WORTHMANN
	Study Coordinator(s)	Femke PLÜSCHKE, Karen SCHAEFFER, Frederike VON DER HAAR
University Hospital Essen	Principal Investigators	Hans-Christoph DIENER, Martin KOEHRMANN, Christian WEIMAR
	Co-Investigator(s)	Hsin-Chieh CHEN, Benedikt FRANK, Karim HAJJAR
	Study Coordinator(s)	Melanie DIETZOLD
University Hospital Frankfurt	Principal Investigator	Waltraud PFEILSCHIFTER
	Co-Investigator(s)	Ferdinand BOHMANN, Iris DIVE, Katharina FILIPSKI, Christian FOERCH, Roxane-Isabelle KESTNER, Matthias LORENZ, Jan Hendrik SCHAEFER, Alexander SEILER, Damla TAHTALI
	Study Coordinator(s)	Heike RAI (BRAUN)
University Hospital of Ulm	Principal Investigator	Katharina ALTHAUS
	Co-Investigator(s)	Susanne MUELLER, Hermann NEUGEBAUER, Sebastian STOESSER, Sebastien STROH
	Study Coordinator(s)	Sabine RAUBOLD
University Medical Center Hamburg	Principal Investigator	Gotz THOMALLA
	Co-Investigator(s)	Christoph BECK, Bastian CHENG, Amir GOLSARI, Julia HOPPE, Anna C KRUTZELMANN, Julian SCHROEDER, Dieke VOGET
	Study Coordinator(s)	Dagmar OTTO

## MEXICO

**Country Lead:** Jorge VILLARREAL-CAREAGA

Site	Role	Team Member
Neurosciences Clinical Trials S.C.	Principal Investigator	Elmer Guillermo LOPEZ MEZA
	Co-Investigator(s)	Karla Gabriela ALTAMIRANO BELTRAN, Claudia PEREZ CORONEL
	Study Coordinator(s)	Wendy LOPEZ MEZA
NEW ZEALAND	<b>Country Lead:</b>	Alan BARBER

<b>Site</b>	<b>Role</b>	<b>Team Member</b>
Auckland City Hospital  <b>SPAIN</b>	Principal Investigator	Alan BARBER
	Co-Investigator(s)	Neil ANDERSON, Mary BRENNAN, Nicole JENKINS, Justin KAO, Dominic TSE, Teddy WU
	Study Coordinator(s)	Lily ZHAO
	<b>Country Lead:</b>	Carlos MOLINA
<b>Site</b>	<b>Role</b>	<b>Team Member</b>
Santa Creu and Sant Pau Hospital	Principal Investigator	Joan MARTI FABREGAS
	Co-Investigator(s)	Aida ALEJALDRE, Miriam ALMENDROTE MUÑOZ, Ignacio ARACIL, Pol CAMPS RENOM, Raquel DELGADO-MEDEROS, Lavinia DINIA, Sebastian FIGUEROA, Daniel GUISADO, Alejandro MARTINEZ DOMENO, Estrella MORENAS, Luis PRATS SANCHEZ, Manuel SIMON, Javier SOTOCÀ Rebeca MARIN BUENO
	Study Coordinator(s)	
Basurto Hospital	Principal Investigator	Maria del Mar FREIJO GUERRERO
	Co-Investigator(s)	Borja AGUILERA, Laura AUZMENDI, Jose Maria FERNANDEZ, Maria del Carmen GIL ALZUETA, Sonia GONZALEZ, Juan Luis IDRO, Ana IKERNE, Ana Maria LORENZO GARCIA, Arancha SAINZ, Saul SILVARREY RODRIGUEZ
	Study Coordinator(s)	Juan Manuel GARCIA SANCHEZ
Burgos University Hospital	Principal Investigator	Yolanda BRAVO ANGUIANO
	Co-Investigator(s)	Monica BARTULOS IGLESIAS, Daniel PASCUAL CARRASCAL, Francisco Javier RODRIGUES PEGUERO, Jose Maria TREJO GABRIEL Y GALAN
Girona University Hospital	Principal Investigators	Maria del Mar CASTELLANOS RODRIGO, Joaquin SERENA
	Co-Investigator(s)	Berta ALEMANY PERRA, Saima BASHIR, Irene BRAGADO, Cristina COLL, Ana COTS, Mar IRIDA LLORET VILLAS, Fabian MARQUEZ, Yolanda SILVA, Mikel TERCENO, Karol Enrique USCAMAITA, Cecile VAN EENDENBURG

	Study Coordinator(s)	Berta JORDAN, Martha KAZIMIERCZAK, Laura PARDO
Hospital del Mar	Principal Investigator	Jaume ROQUER
	Co-Investigator(s)	Elisa CUADRADO, Eva GIRALT, Jordi JIMENEZ CONDE, Angel OIS, Ana RODRIGUEZ, Rosa VIVANCO
	Study Coordinator(s)	Gemma ROMERAL
Hospital Donostia	Principal Investigator	Ana Maria DE ARCE BORDA
	Co-Investigator(s)	Noemi DIEZ GONZALEZ, Felix GONZALEZ LOPEZ, Maria Begona MARTINEZ PINEIRO, Maria Teresa MARTINEZ ZABAleta, Mikel TAINTA CUEZVA, Miren ZULAICA IJURCO
La Fe University Hospital	Principal Investigator	Aida LAGO
	Co-Investigator(s)	Gerardo FORTEA, Rogelio LOPEZ, Lluis MORALES-CABA, Jose Ignacio TEMBL
	Study Coordinator(s)	Patricia SAHUQUILLO
Miguel Servet Hospital	Principal Investigator	Javier MARTA-MORENO
	Co-Investigator(s)	Jorge ARTAL, Rocio CALDU, Ariadna FERNÁNDEZ, Marta SERRANO, Herbert TEJADA MEZA
	Study Coordinator(s)	Maria SERAL-MORAL
Vall d'Hebron Hospital	Principal Investigator	Carlos MOLINA
	Co-Investigator(s)	Sandra BONED, Jesus JUEGA, Marian MUCHADA, Noelia RODRIGUEZ
	Study Coordinator(s)	Estela SANJUAN
<b>UNITED KINGDOM</b>	<b>Country Lead:</b> James KENNEDY	

Site	Role	Team Member
Addenbrooke's Hospital	Principal Investigator	Kayvan KHADJOOI
	Co-Investigator(s)	Denish CHANDRASENA Sarah CRISP, Nick EVANS, Barnaby FIDDES, Niamh HANNON, Derek HAYDEN, Helen HAYHOE, Siobhan

	Study Coordinator(s)	KELLY, Eoin O'BRIEN, Elizabeth WARBURTON Elaine AMIS, Charlotte FARRON, Jennifer MITCHELL
John Radcliffe Hospital	Principal Investigator Co-Investigator(s)	James KENNEDY Gary FORD, Philip MATHIESON, Sara MAZZUCCO, George POPE, Ian RECKLESS, Ursula SCHULZ, Ku SHAH
	Study Coordinator(s)	Rachel TEAL
Luton & Dunstable University Hospital	Principal Investigator Co-Investigator(s)	Lakshmanan SEKARAN Lankanatha ALWIS, Niaz MOHAMMAD, Johnson PHILIPPANATHAN, Duke PHIRI, Sakthivel SETHURAMAN
	Study Coordinator(s)	Margaret TATE
Northwick Park Hospital	Principal Investigator Co-Investigator(s)	David COHEN Mudhar ABDUL-SAHEB, Lankanatha ALWIS, Raj BATHULA, Joe DEVINE, Silvie DOUBRAVSKA, Radim LICENIK, Mmua NGWAKO, Nabeela NISAR, Aravindh SIVAGNANARATNAM Mushiya MPELEMBUE
Queen Elizabeth University Hospital	Principal Investigator Co-Investigator(s)	Keith MUIR Barath CERIPELLI, Jennifer ELLIOT, Xuya HUANG, Dheeraj KALLADKA, Fiona MORETON, Sankaranarayanan RAMACHANDRAN, Salwa EL TAWIL
	Study Coordinator(s)	Wilma SMITH
Royal Stoke University Hospital	Principal Investigator Co-Investigator(s)	Indira NATARAJAN Jayan CHEMBALA, Christine ROFFE, Ranjan SANYAL, Anushka WARUSEVITANE, Janaka WEERATHUNGA
	Study Coordinator(s)	Racquel CARPIO
Royal United Hospital	Principal Investigator	Lukuman GBADAMOSHI

	Co-Investigator(s)	James CHOULERTON, Lindsey DOW, Helen NEWTON, Kate PEACOCK, Louise SHAW, Andrew STONE
	Study Coordinator(s)	Joanne AVIS, Suzanne LUCAS, Barbara MADIGAN
Southampton General Hospital	Principal Investigator	Nic WEIR
	Co-Investigator(s)	Pam CRAWFORD, Sue EVANS, James MARIGOLD, Emma WOOD
	Study Coordinator(s)	Imogen GARTRELL, Simon SMITH
University College Hospital	Principal Investigator	Richard PERRY
	Co-Investigator(s)	Gargi BANGEREE, Duncan WILSON
	Study Coordinator(s)	Azra BANARAS, Caroline WATCHURST

**UNITED STATES** *NETT Hub Principal Investigators:* Opeolu ADEOYE, Tom AUFDERHEIDE, Jill BAREN, Michelle BIROS, Cliff CALLAWAY, Jan CLAASSEN, Kurt DENNINGHOFF, Nina GENTILE, Joshua GOLDSTEIN, Claude HEMPHILL, Roger HUMPHRIES, Elizabeth JONES, Steven LEVINE, Christopher LEWANDOWSKI, Joseph ORNATO, James QUINN, Sidney STARKMAN, Barney STERN, Michel TORBEY, Craig WARDEN, Robert WELCH, David WRIGHT

Site	Role	Team Member
Abbott Northwestern Hospital	Principal Investigator	Mark YOUNG
	Co-Investigator(s)	Michelle BIROS, Mustapha EZZEDDINE, Pezhman ROOHANI, Holly SWANSON-CARROLL, Ronald TARREL
	Study Coordinator(s)	Jennifer FEASE, Sarah HOCHSPRUNG
Abington Memorial Hospital	Principal Investigator	Dan GZESH
	Co-Investigator(s)	Jill BAREN, James COOK, Brett CUCCHIARA, Franklin DIAMOND, Lee HARRIS, Karin KELLERMAN, John KHOURY, Brad KLEIN, Laurie KNEPPER, Osman KOZAK, Kandan KULANDAIVEL, Larami MACKENZIE, Jennifer MCGOWAN TRAINER, Qaisar SHAH, David WEISMAN
	Principal Investigator	Franklin MARDEN

Alexian Brothers Medical Center	Co-Investigator(s)	Michele BEY, Phil GORELICK, Colleen HARRISON, Alkesh PATEL, Anna RAIMONDI, Ginger REILLY, Merrel REISS, Sanford SHERMAN, Theresa TERNA
	Study Coordinator(s)	Michele BEY, Elizabeth FOX (KIM)
Allegheny General Hospital	Principal Investigators	Hebah HEFZY, Ashis TAYAL
	Co-Investigator(s)	Beth BREMNER, Edward GETTINGS, Omar HAMMAD, Judy JAROUSE, Michael MARYNOWSKI, John O'NEILL, Ramnath RAMANATHAN, Laxmi SHAH, Arvind VENKAT, Crystal WONG, David WRIGHT
	Study Coordinator(s)	Vibha CHAUHAN, Gail LOVE, Melissa TIAN
Aria Health Frankford Campus	Principal Investigators	Nina GENTILE, Joshua SIMON, Gerald WYDRO
	Co-Investigator(s)	Pamela GOLDMAN, Mercedes JACOBSON
	Study Coordinator(s)	Hannah REIMER
Augusta Health	Principal Investigator	Robert MCMAHON
	Co-Investigator(s)	Roger GILDERSLEEVE
	Study Coordinator(s)	Rebecca CUTLIP
Augusta University Medical Center	Principal Investigator	Jeffrey SWITZER
	Co-Investigator(s)	Feroze AFZAL, Tia ARYAL, Viken BABIKIAN, Askiel BRUNO, Hartmut GROSS, David HESS, Julie JORDAN, Candelario LASERNA, Fenwick NICHOLS, Brenda ROSSON, Mihaela SALER, Shannon STEWART
	Study Coordinator(s)	Natalie BISHOP, Erin CHRISTENSEN, Brian CLOSE, Kori WILLIAMS
Aurora St. Luke's Medical Center	Principal Investigators	Arvind AHUJA, Khaled ASI, Elizabeth MARRIOTT, Rehan SAJJAD
	Co-Investigator(s)	Tom AUFDERHEIDE, Akram SHHADEH
	Study Coordinator(s)	Carol HALLIDAY, Marilyn MILLER, Lynda YANNY
Baltimore Washington Medical Center	Principal Investigator	Sangjin OH
	Co-Investigator(s)	Carolyn CRONIN, Barney STERN
	Study Coordinator(s)	Virginia GANLEY, Jill HECKENDORF
	Principal Investigator	Jeremy PAYNE

Banner Good Samaritan Medical Center	Co-Investigator(s) Study Coordinator(s)	Douglas FRANZ, Paola LINYARD, Emily RAY, Aleksander TKACH Tony DENISON
Banner University Medical Center - South Campus	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Kendra DRAKE Katherine BONSELL, Kurt DENNINGHOFF, Chelsea KIDWELL, David NGUYEN, Jennifer TAY Isabelle CHEA, Kathryn SCHIERLING
Banner University Medical Center - Tucson Campus	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Kendra DRAKE, Farshad SHIRAZI Katherine BONSELL, Kurt DENNINGHOFF, Chelsea KIDWELL David NGUYEN, Jennifer TAY Bruce BARNHART, Isabelle CHEA, Karen LUTRICK, Kathryn SCHIERLING
Barnes Jewish Hospital	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Laura HEITSCH, Pete PANAGOS Opeolu ADEOYE, Alla AL-HABIB, Hesham ALLAM, Vamshi BALASSETTI, Christian BURRELL, David CARPENTER, David CURFMAN, Christopher DELINE, Colin DERDEYN, Javon EDGECOMBE, Andria FORD, Derek HOLDER, Naim KHOURY, Tobias KULIK, Gyan KUMAR, Jin-Moo LEE, Christopher LEON-GUERRERO, Art PANCIOLI Jill NEWGENT
Ben Taub General Hospital	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Dick KUO, Paulina SERGOT Haitham HUSSEIN, Elizabeth JONES, Joseph KASS Kelly KEENE
Benefis Hospitals Inc	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Dennis DIETRICH William HENNING Laura ARMSTRONG, MegAnne CASEY, Veronica SCHAEFER
Beth Israel Deaconess Medical Center	Principal Investigator Co-Investigator(s)	Nathan SHAPIRO Leslie BILELLO, Jeremy CAREY, Jonathan EDLOW, Lester LEUNG, Vasileios-Arsenios LIOUTAS, Mark MCALLISTER, Magdy SELIM, Edward ULLMAN

	Study Coordinator(s)	Sharon HAYES, James WAREING
Bethesda North Hospital	Principal Investigators Co-Investigator(s)	Rahul KARAMCHANDANI, Kyle WALSH  Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Rhonda CADENA, Elisheva COLEMAN, Felipe DE LOS RIOS LA ROSA, Stacie DEMEL, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Rachel GARVIN, Anna GENSIC, Sabreena GILLOW, Aaron GROSSMAN, Jonah GROSSMAN, Laura HEITSCH, Adam JASNE, Daniel KANTER, Brian KATZ, Pooja KHATRI, Brett KISSELA, Dawn KLEINDORFER, William KNIGHT, Natalie KREITZER, Julian MACEDO, Jason MACKEY, Sharyl MARTINI, Erin McDONOUGH, Eva MISTRY, Meena MUNSHI, Brian OLOIZIA, Art PANCIOLI, Katrina PEARISO, Jonathan RATCLIFF, Sameer SHARMA, Blake SMITH, Michael STAR, Brian STETTLER, Daniel WOO, Muhammad ZAGHLOULEH  Shannon DEEDS, Sara KEEGAN
Bon Secours St. Francis Medical Center	Study Coordinator(s)	Chi-Kin NG, Amandeep SANGHA  Daniel ANGELI, Mudassar ASGHAR, Stacey EPPS, Patricia LANE  April CAMPBELL, Lavon HARRIS
Bon Secours St. Mary's Hospital	Principal Investigators Co-Investigator(s)	Chi-Kin NG, Amandeep SANGHA, Alan SCHULMAN  Matthew BOYCE, Robert COHEN, Rachel DONALDSON, Supakunya EDMONSON, Stacey EPPS, Daniel HARDY, Kim HARRIS, Francis MCGEE, John O'BANNON, Mary RANSOM, Noma REHMAN, Thomas SMITH, Brian STUCKI, Robert WHITE, John WITTMAN  April CAMPBELL, Ileana KINNIE, Tamika WALTHOUR
Boston Medical Center	Principal Investigators	Carlos KASE, Jose Rafael ROMERO

	Co-Investigator(s)	Syed ABBAS, Hugo APARICIO, Viken BABIKIAN, Erica CAMARGO, Anna CERVANTES, David GREER, Julie GRIMES, Feliks KOYFMAN, Hesham MASOUD, Sumeet MULTANI, Varun NARAGUM, Thanh NGUYEN, Aleksandra PIKULA, Rony SALEM, Courtney SCOTT, Malveeka SHARMA, Ashkan SHOAMANESH, Nicholas TARLOV
	Study Coordinator(s)	Christopher CARR, Danielle DOUSA, Helena LAU, Matthew OGRODNIK, Tudor STURZOIU
Brigham and Women's Hospital	Principal Investigator Co-Investigator(s)	Daniel PALLIN  Imoigele AISIKU, Edilberto AMORIM, Philip ANDERSON, Khamid BAKHADIROV, Matthew BEVERS, Calvin BROWN, Xuemei CAI, David CHUNG, Ming-Cheih DING, Brian EDLOW, Guido FALCONE, Sarah FRASURE, Scott GOLDBERG, Eric GORALNICK, Peter HOU, Saef IZZY, Guruprasad JAMBAULIKAR, Ruchira JHA, Minjee KIM, Joshua KOSOWSKY, Ariane LEWIS, Sanjay MENON, Sarah NELSON, Ziad OBERMEYER, Kelli O'LAUGHLIN, Casey OLM-SHIPMAN, Kei OUCHI, Siddharth PARMAR, Nils PETERSEN, Chia-Ling PHUAH, Charles POZNER, Ali RAZMARA, Jeremiah SCHUUR, Raghu SEETHALA, Shreyansh SHAH, Sarah WAHLSTER, Scott WEINER, Sahar ZAFAR, Eli ZIMMERMAN  Rachel CATLIN, Rebecca GISH, Emily JAMIESON, Conor NAROVEC
Buffalo General Medical Center	Principal Investigator Co-Investigator(s)	Marilou CHING  Luis ARANGUA, Christopher DELINE, Amit KANDEL, Rakesh MAGUN, Bijal MEHTA, Maxim MOKIN, Ashkan MOWLA, Robert SAWYER, Peyman SHIRANI  Trevor CHICHELLI, Anne Marie CRUMLISH, Kathy PARKES
California Pacific Medical Center Davies Campus	Principal Investigator Co-Investigator(s)	Nobl BARAZANGI  Ermias AYTENFISU, Ann BEDENK, Charlene CHEN, Shirley CHEN, Billy GAO, Victor JARAMILLO, Elena PODOLSKAYA, Jessica REDFORD, Jack ROSE, Oana SPATARU, David TONG, Christine WONG

	Study Coordinator(s)	Katie PONTING
California Pacific Medical Center	Principal Investigator Co-Investigator(s)	Nobl BARAZANGI Ermias AYTENFISU, Ann BEDENK, Charlene CHEN, Shirley CHEN, Billy GAO, Victor JARAMILLO, Elena PODOLSKAYA, Jessica REDFORD, Jack ROSE, Oana SPATARU, David TONG, Christine WONG
	Study Coordinator(s)	Katie PONTING
Carolinas Medical Center	Principal Investigators Co-Investigator(s)	Phaniraj IYENGAR, Sanjay IYER Andrew ASIMOS, Aristides CHACONAS, Joseph GIORDANO, Anita HOYT, Swatiben PATEL, Darla STEVENS, Mary TRAYNOR
	Study Coordinator(s)	Nicol BRANDON, Anja DAILEY, Megan KRAMER, Marlow PRICE, Blondene ROBINSON
Cedars-Sinai Medical Center	Principal Investigator Co-Investigator(s)	Shlee SONG Oana DUMITRASCU, Duy LE, Patrick LYDEN, Fernando MAYORBASTO, Mani NEZHAD, Konrad SCHLICK, Mohammad SHAFIE, Yilin SHEK
	Study Coordinator(s)	Peter Chang KIM
Chandler Regional Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Brian TIFFANY Hemant PANDEY, Euly SMITH Annette RUIZ TAYLOR
Christ Hospital	Principal Investigators Co-Investigator(s)	Rahul KARAMCHANDANI, Kyle WALSH Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Elisheva COLEMAN, Felipe DE LOS RIOS LA ROSA, Stacie DEMEL, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Rachel GARVIN, Anna GENSIC, Sabreena GILLOW, Aaron GROSSMAN, Jonah GROSSMAN, Adam JASNE, Daniel KANTER, Brian KATZ, Pooja KHATRI, Brett KISSELA, Dawn KLEINDORFER, William KNIGHT, Natalie KREITZER, Julian MACEDO, Sharyl MARTINI, Erin MCDONOUGH, Meena MUNSHI, Brian OLOIZIA, Art PANCIOLI, Katrina PEARISO, Jonathan RATCLIFF, Sameer SHARMA, Blake SMITH, Michael STAR, Brian STETTLER, Daniel WOO, Muhammad ZAGHLOULEH
	Study Coordinator(s)	Shannon DEEDS, Sara KEEGAN

Christiana Hospital	Principal Investigator Co-Investigator(s)	Jason NOMURA  Barbara-Jean ALBANI, Jill BAREN, Richard BOUNDS, Michael BREYER, Brian BURGESS, Richard CHOI, Mary CIECHANOWSKI, Christian COLETTI, David COOK, Valerie DECHANT, Colleen ELLIS, Eileen EVANGELISTA, Heather FARLEY, Jenna FREDETTE, Kimberly GANNON, Leila GETTO, Ben GOODGAME, Angelo GRILLO, Anilkumar JASANI, John JESUS, David KAHN, Brian LEVINE, Patrick MATTHEWS, Jonathan MCGHEE, Jennifer MINK, Anthony MUNSON, Jason NACE, John POWELL, Jonathan RASER-SCHRAMM, Charles REESE, Sudhakar SATTI, Timothy SHIUH, Paul SIERZENSKI, Justin STOWENS, Waimee Amy TAI, Emilio VOLZ, Eli ZESERSON, George ZLUPKO  Study Coordinator(s) Amy CHERICO, Cynthia HOON
Cleveland Clinic	Principal Investigator Co-Investigator(s)	Irene KATZAN  Mahmoud AL-MASRY, Andrew BULETKO, Luzma CARDONA, Russell CEREJO, Esteban CHENG-CHING, Abeer FARRAG, Pravin GEORGE, Shazam HUSSAIN, Ahmed ITRAT, Seby JOHN, Zeshaun KHAWAJA, Mei LU, ShuMei MAN, Jason MATHEW, Johanna MORTON, Naresh MULLAGURI, Andrew RUSSMAN, Lakshmi SHANKAR, Lila SHEIKHI, Ather TAQUI, Tapan THACKER, Gabor TOTH, Ken UCHINO, Paul WASIELEWSKI, Dolora WISCO  Study Coordinator(s) Vikram PUVENNA, Amy RICHMOND, Nancie TIGHE
Cleveland Regional	Principal Investigator Study Coordinator(s)	Gaurang PALIKH  Rayna EDWARDS, Amelia REYNOLDS
Columbia St. Mary's Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Tom AUFDERHEIDE  Michael CONNOR, Marc LAZZARO, John LYNCH Amanda EMMRICH, Melissa MENA
	Principal Investigator	Thomas MIRSEN

Cooper University Hospital	Co-Investigator(s)	Jill BAREN, Brigitte BAUMANN, Ankur BHARGAVA, Jia Zhen CHENG, Brett CUCCHIARA, Michael GALLAGHER, Xuan-Lan GRIFFITH, Christopher JONES, Bhavika KAKADIA, Tapan KAVI, Vladimir KLINOV, Mia KO, Dena LITTLE, Neil MASANGKAY, Eric NAGELE, Rajiv NARULA, James NOTO, Alok PATEL, Ruchir SHAH, Umang SHAH, George SHOKRI, Randip TANEJA, Ephrem TEKLEMARIAM, Ryna THEN, Michael WESTON, Furkan YILMAZ
	Study Coordinator(s)	Christine BESWICK, Lisa CAPANO-WEHRLE, Cory HACKMYER, Tamara LEE, Andrew MARCH, Patricia NIBLACK
Dartmouth-Hitchcock Medical Center	Principal Investigator Co-Investigator(s)	Timothy LUKOVITS Robin CLARK-ARBOGAST, Richard GODDEAU, Jason JOHNS, Vijay RENGA, Diana ROJAS-SOTO Charlotte JEFFREYS, Margaret NOTESTINE
Dell Seton Medical Center at UT	Principal Investigator Co-Investigator(s)	TJ MILLING Atheer AHMED BALDAWI, John BEDOLLA, John BERTELSON, Ray BOGITCH, Pat CROCKER, Lisa DAVIS, Ming DING, Kent ELLINGTON, Jessica ERFAN, Clifford Jack FRAIM, Jeffrey HENDERSON, Eric HIGGINBOTHAM, Tameem HUSAIN, Elizabeth JONES, Jefferson MILEY, Johanna MORTON, Todd NASH, Sarah OLSTYN, Sohan PAREKH, Osvaldo PERURENA, Brian PRICE, Sheldon ROCKWOOD, Sara SCOTT, Jason SHEN, Kristen SMOLIK, Christopher TOPEL, Steven WARACH, Walter WERCHAN, Robert WESTON, Ira WOOD, Chris ZIEBELL
	Study Coordinator(s)	Sheree ADAMS, Kristen KIMMERLE, Laura LACHANCE
Desert Regional Medical Center	Principal Investigators Co-Investigator(s)	Luis ARANGUA, Ajeet SODHI, M. Asif TAQI Robert CLAYCOMB, Glenn Mark FISCHBERG, XIAO-TANG KONG, Andrew NIK, Tami SALAHUDDIN, Nicholas TARLOV
	Study Coordinator(s)	Yasir KHAN
	Principal Investigators	Anthony LAGINA, Claire PEARSON

Detroit Receiving Hospital	Co-Investigator(s)	Benjamin ATKINSON, Pratik BHATTACHARYA, Seeman CHATURVEDI, William COPLIN, Angela GROVES, Amit KANSARA, Phillip LEVY, Ramesh MADHAVAN, Aniel MAJJHOO, Wazim MOHAMED, Meenakshi MUNSHI, Greg NORRIS, Brian O'NEIL, Kumar RAJAMANI, Sunitha ANTHAKUMAR, Robert SHERWIN, Kushak SUCHDEV, Ambooj TIWARI, Preet VARADE, Robert WELCH
	Study Coordinator(s)	Farhan AYAZ, Saikat BHUIYAN, Valerie MIKA
Eisenhower Medical Center	Principal Investigator	Bishoy LABIB
	Co-Investigator(s)	NAMIN-REZA SALARI
	Study Coordinator(s)	Moheib FAHEIM, Kamel KAMEL, Dianna LABIB
El Camino Hospital	Principal Investigator	Peter FUNG
	Study Coordinator(s)	Inderjit DHOKAL, Rebecca DUNN, Christine KELLER, Ryan SMITH
Ellis Hospital	Principal Investigator	Kejian TANG
	Co-Investigator(s)	Abdelhakim DINAR, Francisco GOMEZ
	Study Coordinator(s)	Margie PANETTA
Emory University Hospital	Principal Investigator	Michael ROSS
	Co-Investigator(s)	Aaron ANDERSON, Anika BACKSTER, Samir BELAGAJE, Elizabeth CARROLL, Robin DHARIA, Adam EDWARDS, Tamara ESPINOZA, Michael FRANKEL, Minas GEBRU, Rishi GUPTA, Vijayakumar JAVALKAR, Omar KASS-HOUT, Tareq KASS-HOUT, Carlene KINGSTON, Andrey LIMA, Lisa MERCK, Fadi NAHAB, Raul NOGUEIRA, Mahmoud OBIDEEN, Anwar OSBORNE, Kumiko OWADA, Shelly OZARK, Vishal PATEL, Harrison PEARL, Haseeb RAHMAN, Jonathan RATCLIFF, Ali SAAD, Yasir SALEEM, Aaron STAYMAN, Melanie WINNINGHAM, David WRIGHT
	Study Coordinator(s)	Alex HALL, Nick STANLEY
Emory University	Principal Investigator	Michael ROSS

Hospital Midtown	Co-Investigator(s)	Aaron ANDERSON, Anika BACKSTER, Samir BELAGAJE, Robin DHARIA, Adam EDWARDS, Tamara ESPINOZA, Michael FRANKEL, Minas GEBRU, Rishi GUPTA, Vijayakumar JAVALKAR, Omar KASS-HOUT, Tareq KASS-HOUT, Andrey LIMA, Fadi NAHAB, Raul NOGUEIRA, Mahmoud OBIDEEN, Anwar OSBORNE, Kumiko OWADA, Vishal PATEL, Jonathan RATCLIFF, Ali SAAD, Aaron STAYMAN, Melanie WINNINGHAM, David WRIGHT
	Study Coordinator(s)	Alex HALL, Nick STANLEY
Essentia Health St. Mary's Medical Center	Principal Investigator Co-Investigator(s)	Dimitrios GIANNAKIDIS
	Study Coordinator(s)	Linda ANDERSON, Nick ITZIN, Diane ROACH, Ruth THOMSON, Gail WALLACE
		Erica CHOPSKIE, Karen HARMON, Robert SHULTZ
Essentia Health-Fargo	Principal Investigator Co-Investigator(s) Study Coordinator(s)	M. Ziad DARKHABANI Michelle BIROS, Jessica SIMS Mandy BARTLETT, Marlee HURTT
Evanston Hospital	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Rima DAFER, Archie ONG Fulvio GIL, Deb LYNCH, Steven MEYERS, Richard MUNSON Julie ANDERSON, Sherri LOEB, Mary-Lou MAHER, Stasia Diana ROUSE
Fairview Southdale Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Mustapha EZZEDDINE Michelle BIROS, David GRESBACK, Alexander ZUBKOV Audrey HENDRICKSON, Kathleen MILLER, Mindy RUMBOLZ, Julie SCHERBER, Abbey STAUGAITIS
Fletcher Allen Hospital of Vermont	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Mark GORMAN Christopher COMMICHAU Cathy GREGORY, Sharon KENNEY
Forsyth Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Chere CHASE Benjamin ANYANWU, Tamas BATHORY, Paul BURKE, Ashley CAMPBELL, Brittney CAMPBELL, Tarek DAKAKNI, Veronica HEATH, Howard KRAFT, Eric MELVIN, Olukayode ONASANYA, Charles STEWART Debra NORWOOD

Frederick Memorial Hospital	Principal Investigator Study Coordinator(s)	Shahid RAFIQ Tom SHUPP
Froedtert Memorial Lutheran	Principal Investigator Co-Investigator(s) Study Coordinator(s)	John LYNCH Tom AUFDERHEIDE, Diana BOOK, Ann HELMS, Abigail LA NOU, Marc LAZZARO, Michel TORBEY, Osama ZAIDAT Erin BRANDENBURG, Amanda EMMRICH, Melissa MENA
George Washington University Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Kathleen BURGER Richard BENSON, Christopher LEON-GUERRERO, Andrew MELTZER, Zurab NADAREISHVILLI, Diane SAUTER Radwa ALY, Angela KELLY
Good Samaritan Hospital (Cincinnati, OH)	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Rahul KARAMCHANDANI, Kyle WALSH Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Rhonda CADENA, Elisheva COLEMAN, Felipe DE LOS RIOS LA ROSA, Stacie DEMEL, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Rachel GARVIN, Anna GENSIC, Sabreena GILLOW, Aaron GROSSMAN, Jonah GROSSMAN, Laura HEITSCH, Adam JASNE, Daniel KANTER, Brian KATZ, Pooja KHATRI, Brett KISSELA, Dawn KLEINDORFER, William KNIGHT, Natalie KREITZER, Julian MACEDO, Jason MACKEY, Sharyl MARTINI, Erin McDONOUGH, Meena MUNSHI, Brian OLOIZIA, Art PANCIOLI, Katrina PEARISO, Jonathan RATCLIFF, Sameer SHARMA, Blake SMITH, Michael STAR, Brian STETTLER, Daniel WOO, Muhammad ZAGHLOULEH Shannon DEEDS, Sara KEEGAN
Good Samaritan Hospital (San Jose, CA)	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Harmeet SACHDEV James QUINN Christine KELLER
	Principal Investigator	Michael ROSS

Grady Memorial Hospital	Co-Investigator(s)	Aaron ANDERSON, Anika BACKSTER, Samir BELAGAJE, Elizabeth ARROLL, Robin DHARIA, Adam EDWARDS, Tamara ESPINOZA, Michael FRANKEL, Minas GEBRU, Rishi GUPTA, Vijayakumar JAVALKAR, Omar KASS-HOUT, Tareq KASS-HOUT, Carlene KINGSTON, Andrey LIMA, Lisa MERCK, Fadi NAHAB, Raul NOGUEIRA, Mahmoud OBIDEEN, Anwar OSBORNE, Kumiko OWADA, Shelly OZARK, Vishal PATEL, Harrison PEARL, Haseeb RAHMAN, Jonathan RATCLIFF, Ali SAAD, Yasir SALEEM, Aaron STAYMAN, Melanie WINNINGHAM, David WRIGHT
	Study Coordinator(s)	Alex HALL, Nick STANLEY
Great Falls Clinic Hospital	Principal Investigator	Dennis DIETRICH
	Study Coordinator(s)	Laura ARMSTRONG
Guilford Neurological Associates	Principal Investigator	Pramod SETHI
	Co-Investigator(s)	William HICKLING, James LOVE, Michael REYNOLDS, Yijun YAN
	Study Coordinator(s)	Wesley HARBISON, Rizwan SABIR
Hackensack University Medical Center	Principal Investigator	Chinwe OGEDEGBE
	Co-Investigator(s)	Subasini DASH, Joseph FELDMAN, Nina GENTILE, Karen KEATING
	Study Coordinator(s)	Gordon HUIE, Bertha LAKE, Arelis VILLOT-SANTIAGO
Hahnemann University Hospital	Principal Investigators	Ralph RIVIELLO, Mark SAKS
	Co-Investigator(s)	Theodore CORBIN, Nina GENTILE, Sharon GRISWOLD-THEODORSON, Todd MCGRATH, Daniel MULLIN, Edward RAMOSKA, Eric STANDER, David TABBY
	Study Coordinator(s)	Lisa BONACQUISTI, Anne JOHNSON, John MASSEY, Patricia MCNELIS, Romy NOCERA
Harborview Medical Center	Principal Investigator	David TIRSCHWELL
	Co-Investigator(s)	Kyra BECKER, Claire CREUTZFELDT, Rizwan KALANI, Marlan KAY, Sandeep KHOT, Will LONGSTRETH, Sara SCHEPP, Jon WEINSTEIN
	Study Coordinator(s)	Allison KUNZE, Glenn SCHUBERT, Patricia TANZI
	Principal Investigators	Anthony LAGINA, Claire PEARSON

Harper University Hospital	Co-Investigator(s)	Benjamin ATKINSON, Pratik BHATTACHARYA, Seemant CHATURVEDI, Angela GROVES, Amit KANSARA, Phillip LEVY, Ramesh MADHAVAN, Aniel MAJJHOO, Wazim MOHAMED, Meenakshi MUNSHI, Greg NORRIS, Brian O'NEIL, Kumar RAJAMANI, Sunitha SANTHAKUMAR, Robert SHERWIN, Kushak SUCHDEV, Ambooj TIWARI, Preet VARADE, Robert WELCH
	Study Coordinator(s)	Farhan AYAZ, Saikat BHUIYAN, Valerie MIKA
Hartford Hospital	Principal Investigator	Louise MCCULLOUGH
	Co-Investigator(s)	Catherine HOSLEY, Lauren SANSING, Isaac SILVERMAN
	Study Coordinator(s)	Martha AHLQUIST
Hennepin County Medical Center	Principal Investigators	Michelle BIROS, Mustapha EZZEDDINE, Tapan THACKER
	Co-Investigator(s)	Mohammed ALKUWAITI, Shola ALUKO, David ANDERSON, Ganesh ASAITHAMBI, Kristen BARKLOW, Michelle BIROS, Laura FOSTER, Mikayel GRIGORYAN, Ameer HASSAN, Taka HIGASHIMORI, Haitham HUSSEIN, Katherine JACOBY, Chris JANSON, Jessica JARNOT, Daraspreet KAINTH, Amir KHAN, Asif KHAN, Jae KIM, Joni KOPITZKE, Saritha KUNDOOR, Shailesh MALE, Benjamin MILLER, Haejoe PARK, Rwoof RESHI, Gustavo RODRIGUEZ, Divyajot SANDHU, Biggya SAPKOTA, Kenneth SHEA, Nathan SIT, Jamie STARKS, Christopher STREIB, Robert TAYLOR, Wondwossen TEKLE, Huseyin TORE, Haralabos ZACHARATOS
	Study Coordinator(s)	Audrey HENDRICKSON, Kathleen MILLER, Mindy RUMBOLZ, Julie SCHERBER, Abbey STAUGAITIS
Henrico Doctors' Hospital - Forest Campus	Principal Investigator	Alan SCHULMAN
	Co-Investigator(s)	Matthew BOYCE, Daniel HARDY, George HARRIS, John O'BANNON, Stephen THURSTON, John WITTMAN
	Study Coordinator(s)	Melanie JOHNSON, Ileana KINNIE, Tamika WALTHOUR
Henry Ford Hospital	Principal Investigators	Hebah HEFZY, Andrew RUSSMAN
	Co-Investigator(s)	Christopher LEWANDOWSKI, Daniel MILLER, Joseph MILLER, Taher VOHRA
	Study Coordinator(s)	Shannen BERRY, Anne Marie LUNDELL

Henry Ford West Bloomfield Hospital	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Hebah HEFZY, Andrew RUSSMAN Christopher LEWANDOWSKI, Daniel MILLER, Joseph MILLER, Taher VOHRA Shannen BERRY, Anne Marie LUNDELL
Hollywood Presbyterian Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Tamika BURRUS Philip ABDOUUSH, Christian GALICIA Laurie BERNDT, Nancy RAPPARD
Hospital of the University of Pennsylvania	Principal Investigator Co-Investigator(s)	Brett CUCCHIARA Jill BAREN, Lauren BESLOW, Christina BLUM, Christopher FAVILLA, Kimberly GANNON, Koto ISHIDA, Judy JIA, Scott KASNER, Glenn KONSKY, Donna KUROWSKI, Ava LIBERMAN, Caitlin LOOMIS, Jean LUCIANO, Michael MCGARVEY, Steven MESSE, Michael MULLEN, Claude NGUYEN, Swaroop PAWAR, Jonathan RASER-SCHRAMM, Christopher RENNER, David ROSE, Igor RYBINNIK, Lauren SANSING, Neelofer SHAFI, James SIEGLER, Laura STEIN, Sally SULTAN, Jose TORRES, Louis VENTURA, Christina WILSON, QingYang YUAN, Ali ZANDIEH, Cen ZHANG
	Study Coordinator(s)	Katherine BLACKBURN (Lamond), Mary Elizabeth DESANTO
Houston Methodist Hospital	Principal Investigator Co-Investigator(s)	David CHIU Donald BLEDSOE, Rajan GADHIA, Delmar IMPERIAL-AUBIN, Jason A. LEE, David MCCANE, Vivek MISRA, Eva MISTRY, Ashkan MOWLA, Stacy MOYE, Haseed RAHMAN, Jenny RICHARDSON, Roger RIZZO, Abraham THOMAS, John VOLPI, Shannon WHITE
Huntington Memorial Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Arbi OHANIAN Candy CORRAL, Robert GOLDWEBER, Conrad LIANG, Artin MINAEIAN, Sharon YEGIAIAN Marilyn PEREZ
Ingalls Memorial Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Engin YILMAZ Tonya FULLER Deborah LAWRENCE
Jeanes Hospital	Principal Investigator Co-Investigator(s)	Marcia HALPERN Nina GENTILE

	Study Coordinator(s)	Maryellen NELSON
Jersey Shore University Medical Center	Principal Investigator	Stephen MARTINO
	Co-Investigator(s)	Alan DEUTSCH, John FITZPATRICK, Paul GILSON, Paul KOSTOULAKOS, Mary SEDAROUS, Edward SPELLMAN
	Study Coordinator(s)	Fiona COLLINS, Jennifer ORTIZ
JFK Medical Center	Principal Investigators	Jawad KIRMANI, Spozhmy PANEZAI
	Co-Investigator(s)	Jaskiran BRAR, Daniel KORYA, Ashish KULHARI, Siddhart MEHTA, Mohammad MOUSSAVI, Aashish PATEL, Amrinder SINGH, Sara STRAUSS
	Study Coordinator(s)	Briana DECARVALHO
John Muir Medical Center - Concord Campus	Principal Investigator	Ray STEPHENS
	Co-Investigator(s)	Leslie GILLUM, Steven SCHADENDORF
	Study Coordinator(s)	Janice STEPHENS
John Muir Medical Center - Walnut Creek Campus	Principal Investigator	Ray STEPHENS
	Co-Investigator(s)	Robert ALGAR, Leslie GILLUM, Steven HOLTZ, Janet LIN, Steven SCHADENDORF, Brad VOLPI
	Study Coordinator(s)	Janice STEPHENS
Johns Hopkins Hospital	Principal Investigator	Victor URRUTIA
	Co-Investigator(s)	Martinson ARNAN, Mona BAHOUTH, Mario CERDAN-TREVINO, Arjun CHANMUGAN, Yolanda CHIK, Jennifer DEARBORN, Romanus Roland FAIGLE, Ryan FELLING, Peter HILL, Shyian JEN, Richard LEIGH, Rafarl LINAS, Elisabeth MARSH, Bogachan SAHIN, Robert WITYK, Steven ZEILER
	Study Coordinator(s)	Susan RICE, Jennifer RONALD
Kaiser Permanente Los Angeles Medical Center	Principal Investigator	Zahra AJANI
	Co-Investigator(s)	Sierra FORD, Prasanth MANTHENA, Navdeep SANGHA, Theresa SEVILIS, Emanuela SOFRONI
	Study Coordinator(s)	Nancy FLORES, Raymond KIM, Catherine LUI, Vena SOBHWONGSE, Grace TU, Kim TURNER, Cristina VALDOVINOS
Kings County Hospital Center	Principal Investigators	Pia CHATTERJEE, Susan LAW, Steven LEVINE, Richard SINERT

	Co-Investigator(s)	Anika BACKSTER, Clotilde BALUCANI, Ethan BRANDLER, Qing HAO, Ashika JAIN, Yongwoo KIM, Adrian MARCHIDANN, Jennifer MARTINDALE, Jay MELTON, Lorenzo PALADINO, Diana ROJAS-SOTO, Artem SUNIK, Benedict TAN, Helen VALSAMIS, Volodymyr VULKANOV, Shahriar ZEHTABCHI
	Study Coordinator(s)	Vanessa ARNEDO, Marijayne BUSHEY, Nadege GILLES, Saroj KUNNAKKAT, Catherine LUSHBOOUGH, Schweta MALHOTRA, Shreya PANDYA, Bryce PETTY, Bruhati SHAH, Jonathan SINGER
Legacy Emanuel Medical Center	Principal Investigator Co-Investigator(s)	Helmi LUTSEP Wayne CLARK, Alexandra DIMITROVA, Elizabeth NORTH
	Study Coordinator(s)	Kelly FEEST, Jonathan FOLEY
Lehigh Valley Hospital	Principal Investigators Co-Investigator(s)	John CASTALDO, Frank-Chen ZHANG Gary CLAUSER, Adam EDWARDS, Mohammed EL-HUNJUL, Yevgeniy ISAYEV, Megan LEARY, Yuebing LI, Dev MEHTA, Christopher MELINOSKY, Kenneth REICHENBACH, Hermann SCHUMACHER, Lorraine SPIKOL, Jay VARRATO, Hussam YACOUB
	Study Coordinator(s)	Carol FOX, Leighanne HARTMAN, Terry KLOIBER, Susan NABHAN
Lincoln Medical and Mental Health Center	Principal Investigator Co-Investigator(s)	Shekar MURTHY Madan Mohan Reddy ARUGUNTA, Hussein ASSALLUM, Balavenkatesh KANNA, James ZISFEIN
	Study Coordinator(s)	Jessica MONTALVO
Long Beach Memorial Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Nima RAMEZAN-ARAB Nirav S. PATEL, Michael L. THOMPSON Roxana FLORES, Dena HOPKINS, Fran�ois TOUSSAINT-JONES, Angie WEST
Los Robles Hospital Medical Center, Thousand Oaks	Principal Investigator Co-Investigator(s)	M. Asif TAQI Sajid SURIYA
	Principal Investigator	Michael SCHNECK

Loyola University Medical Center	Co-Investigator(s)	Jose BILLER, Lisa MILLSAP, Sarkis MORALES-VIDAL
	Study Coordinator(s)	Tara BERNIER, Linda CHADWICK, Katelynn PRODOEHL
Maimonides Medical Center	Principal Investigator	Steven RUDOLPH
	Co-Investigator(s)	Susan LAW, Alina RABINOVICH
	Study Coordinator(s)	Holly MORHAIM
Manatee Memorial Hospital	Principal Investigator	W. Alvin MCELVEEN
	Co-Investigator(s)	Jane BESEN, Ralph GONZALEZ
	Study Coordinator(s)	Laurie EMMERT, Ericka MARINO, Vickie ROMAN
Marquette General Hospital	Principal Investigator	Karl MEISEL
	Study Coordinator(s)	Jodi NEASE
Massachusetts General Hospital	Principal Investigators	Ferdinando BUONANNO, Scott SILVERMAN
	Co-Investigator(s)	Edilberto AMORIM, Christopher ANDERSON, Khamid BAKHADIROV, Ribal BASSIL, Ayush BATRA, Matthew BEVERS, Gregoire BOULOUIS, Xuemei CAI, Andreas CHARIDIMOU, David CHUNG, Ming-Cheih DING, Brian EDLOW, Mark ETHERTON, Guido FALCONE, Ananda FINE, Rajan GADHIA, Anne-Katrin GIESE, Joshua GOLDSTEIN, Andrea HARRIOTT, Leigh HOCHBERG, Saef IZZY, Sameen JAFARI, Ruchira JHA, Abbas KHARAL, Ayaz KHAWAJA, Jennifer KIM, Minjee KIM, William Taylor KIMBERLY, Arne LAUER, David LERNER, Ariane LEWIS, David LIN, Sandro MARINI, Sanjay MENON, Christina MIJALSKI, Andrea MOROTTI, Sarah NELSON, MingMing NING, Casey OLM-SHIPMAN, Charlene ONG, Fadar OTITE, Marco PASI, Nils PETERSEN, Chia-Ling PHUAH, Pedro PINTO, Sergi RAMIREZ MARTINEZ, Shyam RAO, Ali RAZMARA, Jonathan ROSAND, Natalia ROST, Daniel RUBIN, Frieder SCHLUNK, Lee SCHWAMM, Shreyansh SHAH, Richa SHARMA, Starane SHEPHERD, Faheem SHERIFF, Matthew SIKET, Aneesh SINGHAL, Zachary THRELKELD, Anand ENKATRAMAN, Anand VISWANATHAN, Sarah WAHLSTER, Li XIONG, Sahar ZAFAR, Eli ZIMMERMAN

	Study Coordinator(s)	Lauren BARTON, Ryan CALLAHAN, Kathleen FEENEY, Melissa HOWELL, Eric LOESCH, Blair PARRY, Eric RIKLIN, Chun Mei SU, Greg TIRRELL
Mayo Clinic	Principal Investigator	Maria AGUILAR
	Co-Investigator(s)	Dan CAPAMPANGAN, Bart DEMAERSCHALK, David DODICK, Timothy INGALL, Terri KIERNAN, Joyce LEE-IANNOTTI, Bert VARGAS, Holly YANCY
	Study Coordinator(s)	Erica BOYD
Mayo Clinic Saint Mary's Campus	Principal Investigator	Fernanda BELLOLIO
	Co-Investigator(s)	Michelle BIROS, Jennifer FUGATE, Waqas GILANI, James KLAAS
	Study Coordinator(s)	Renee CABALKA
Medical University of South Carolina University Hospital	Principal Investigator	Christine HOLMSTEDT
	Co-Investigator(s)	Robert ADAMS, Opeolu ADEOYE, Charles ANDREWS, Chirantan BANERJEE, Julio CHALELA, Marc CHIMOWITZ, Wuwei FENG, Angela HAYS SHAPSHAK, Edward JAUCH, Shelly OZARK, Art PANCIOLI, Tanya TURAN, Ashley WABNITZ
	Study Coordinator(s)	Robert BURFEIND, Cheryl GRANT, Gina KELLER, Vicki STREETS
MedStar Washington Hospital Center	Principal Investigator	Munish GOYAL
	Co-Investigator(s)	Richard BENSON, Rahul BHAT, Amie HSIA, Lisa JACOBSON, Norine MCGRATH, Diane SAUTER
	Study Coordinator(s)	Theresa MORIARTY
	Principal Investigator	Elizabeth JONES

Memorial Hermann Texas Medical Center	Co-Investigator(s)	Arif AZAM, Carrie BAKUNAS, Andres BAYONA, Jonas BEYENE, Caroline BORGAN, Richard BRADLEY, Yashwant CHATHAMPALLY, Andrew COYNE, Daniel DE LOS SANTOS, Pratik DOSHI, Natalie ELLIOTT, Emily ENDACOTT, Lindley FOLKERSON, Christopher FREEMAN, Vanessa GARZA-MIRANDA, Keith GATES, Kasey GILDERSLEEVE, Joshua GUINDON, Kassie HAITZ, Stephen HECHT, Kevin HOFFMAN, Quyen HUYNH, Romeo JOSEPH, Brent KING, James LEONI, Jason LESNICK, Rohith MALYA, Justin MAZZILLO, Omar METWALLI, Amy NOLAND, Michael PANDYA, Andrew POTTER, Eric REICHMAN, David ROBINSON, Michael ROKYTA, Carlos ROLDAN, Jason SATTERFIELD, Paulina SERGOT, Justin SHEPARD, Soa-Yih SHER, Ian SMITH, Jeffrey STOWELL, Salvatore VALENTI, Richard WITKOV
	Study Coordinator(s)	Monica MENDOZA-MOORE, Misty OTTMAN
Mercy Franciscan Hospital - Mount Airy	Principal Investigator	Dawn KLEINDORFER
	Co-Investigator(s)	Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Rhonda CADENA, Felipe DE LOS RIOS LA ROSA, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Rachel GARVIN, Anna GENSIC, Aaron GROSSMAN, Laura HEITSCH, Daniel KANTER, Pooja KHATRI, Brett KISSELA, William KNIGHT, Jason MACKEY, Sharyl MARTINI, Erin MCDONOUGH, Meena MUNSHI, Art PANCIOLI, Jonathan RATCLIFF, Blake SMITH, Brian STETTLER, Daniel WOO
	Study Coordinator(s)	Irene EWING
Mercy Franciscan Hospital - Western Hills	Principal Investigator	Dawn KLEINDORFER
	Co-Investigator(s)	Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Rhonda CADENA, Felipe DE LOS RIOS LA ROSA, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Rachel GARVIN, Anna GENSIC, Aaron GROSSMAN, Laura HEITSCH, Daniel KANTER, Pooja KHATRI, Brett KISSELA, William KNIGHT, Jason MACKEY, Sharyl MARTINI, Erin MCDONOUGH, Meena MUNSHI, Art PANCIOLI, Jonathan RATCLIFF, Blake SMITH, Brian STETTLER, Daniel WOO
	Study Coordinator(s)	Irene EWING

Mercy General Hospital	Principal Investigators Co-Investigator(s)	Mohammad MAHMOOD, Lucian MAIDAN  Ryan ARMOUR, Asad CHAUDHARY, Edwin CRUZ, Michael-Karsten DENGEL, Ehsan HADI, Marc LENAERTS, Alex NEE, Reza PIRSAHELI, John SCHAFER, Alan SHATZEL, Peter SKAFF
	Study Coordinator(s)	Dawn DIORIO, Danielle HORNBUCKLE, Raveca PINTEA, Isabel REYES, Deidre WENTWORTH
Mercy Health Saint Mary's	Principal Investigator Co-Investigator(s)	Muhammad FAROOQ  Christopher GOSHGARIAN, Amy GROENHOUT, Bradley HAVEMAN-GOULD, Jiangyong MIN
	Study Coordinator(s)	Stacy L. SMITH
Mercy Health West Hospital	Principal Investigators Co-Investigator(s)	Rahul KARAMCHANDANI, Kyle WALSH  Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Elisheva COLEMAN, Stacie DEMEL, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Anna GENSIC, Sabreena GILLOW, Jonah GROSSMAN, Adam JASNE, Daniel KANTER, Brian KATZ, Pooja KHATRI, Brett KISSELLA, Dawn KLEINDORFER, William KNIGHT, Natalie KREITZER, Julian MACEDO, Erin McDONOUGH, Brian OLOIZIA, Art PANCIOLI, Katrina PEARISO, Sameer SHARMA, Blake SMITH, Michael STAR, Brian STETTLER, Daniel WOO, Muhammad ZAGHLOULEH
	Study Coordinator(s)	Shannon DEEDS, Sara KEEGAN
Mercy Hospital (Springfield, MO)	Principal Investigator Co-Investigator(s)	Robert DUFF  Emily CROUSE, Robert MEDLEY, Darwin RAMIREZ-ABREU
	Study Coordinator(s)	Linda THOMPSON
Mercy Hospital (St. Louis, MO)	Principal Investigators Co-Investigator(s)	Judd JENSEN, William LOGAN  Marnie DONOHOO, Barbara GREEN, David REMPE, Mary WILCOX
Mercy Hospital and Medical Center	Principal Investigator Co-Investigator(s)	Jeffrey KRAMER  Susan VAUGHAN
	Study Coordinator(s)	Amy-Leigh DAVIS, Elonia MARTIN
Mercy Hospital of Buffalo	Principal Investigator Co-Investigator(s)	Catalina IONITA  Lee GUTERMAN, Amy HEYDEN, Peterkin LEE-KWEN, Lorianne PEREIRA

	Study Coordinator(s)	Cheryl CONOVER, Shirley DUANE, Nicole ERNST, Kathy PARKES
Mercy San Juan Medical Center	Principal Investigator Co-Investigator(s)	Lucian MAIDAN  Ryan ARMOUR, Asad CHAUDHARY, Edwin CRUZ, Michael-Karsten DENGEL, Ehsan HADI, Alex NEE, Reza PIRSAHELI, John SCHAFER, Alan SHATZEL, Peter SKAFF
	Study Coordinator(s)	Dawn DIORIO, Danielle HORNBUCKLE, Raveca PINTEA, Isabel REYES
MetroHealth Medical Center	Principal Investigator Co-Investigator(s)	Joseph HANNA  Michael BAHNTGE, Boris GARBER, Jon SCHROCK, Sandra WERNER, Marc WINKELMAN
	Study Coordinator(s)	Dana COOK
Miami Valley Hospital	Principal Investigator Co-Investigator(s)	Bradley JACOBS  Jeri BRAUNLIN, Esteban CHENG-CHING, Ahmed FATHY, Jacob KITCHENER, Bryan LUDWIG, Elizabeth MARRIOTT, Robb SNIDER, John TERRY
	Study Coordinator(s)	Angela SHOEN
Mills Peninsula Medical Center	Principal Investigator Co-Investigator(s)	Mike KOHN  Howard BELFER, Michael COHEN, Michael SIEGEL, Robert TELFER
	Study Coordinator(s)	Anke HEBIG
Mission Hospital Memorial Campus	Principal Investigator Co-Investigator(s)	Reid TAYLOR  Cindy BENTON, Robin JONES, Jeanette LARSON, Seth LARSON, Rodney LEACOCK, Margaret PERKINS, Alex SCHNEIDER, Nora-Mae-Woolie WISHAM
	Study Coordinator(s)	Tracy NANNEY
Mount Sinai St. Luke's	Principal Investigator Co-Investigator(s)	Ji CHONG  Carolyn BROCKINGTON, Elissa FORY, John NASRALLAH, Christopher TEGTMEYER
	Study Coordinator(s)	Larissa BONILLA, Iris HARRIS
Mount Sinai West	Principal Investigator Co-Investigator(s)	Ji CHONG  Carolyn BROCKINGTON, Elissa FORY, David LIEBESKIND, John NASRALLAH, Shanna PATTERSON, Christopher TEGTMEYER

	Study Coordinator(s)	Larissa BONILLA, Iris HARRIS, Renata HARTUNG
New York-Presbyterian Brooklyn Methodist	Principal Investigator	Robert BIRKHAHN
	Co-Investigator(s)	Alp ARKUN, Jeffrey BENJAMIN, Hilary FAIRBROTHER, Laura MELVILLE
	Study Coordinator(s)	Paris DATILLO
Northern Westchester Hospital	Principal Investigator	Akira TODO
	Co-Investigator(s)	James DWYER, Miodrag VELIKOVIC
	Study Coordinator(s)	Jodi BELLANTONI
NorthShore Glenbrook Hospital	Principal Investigators	Rima DAFER, Archie ONG
	Co-Investigator(s)	Fulvio GIL, Deb LYNCH, Steven MEYERS, Richard MUNSON, Archie ONG, Mark RUBIN
	Study Coordinator(s)	Julie ANDERSON, Sherri LOEB, Mary-Lou MAHER, Stasia Diana ROUSE
Northwestern Memorial Hospital	Principal Investigators	Mark ALBERTS, Richard BERNSTEIN
	Co-Investigator(s)	Fan CAPRIO, Philip CHANG, Chen LIN, Scott MENDELSON, Shyam PRABHAKARAN, Ilana RUFF TREIBER
	Study Coordinator(s)	Kathryn MUSKOVICH, Erin WYMORE
Norton Brownsboro Hospital	Principal Investigators	Ali CHOUCAIR, Nadeem TALPUR
	Co-Investigator(s)	Shervin DASHTI, Roger HUMPHRIES, Tom YAO
	Study Coordinator(s)	Robyn MCLEAN
Norton Hospital	Principal Investigators	Ali CHOUCAIR, Nadeem TALPUR
	Co-Investigator(s)	Shervin DASHTI, Roger HUMPHRIES, Tom YAO
	Study Coordinator(s)	Robyn MCLEAN
	Principal Investigator	Joshua WILLEY

NYP Columbia University Medical Center	Co-Investigator(s)	Sachin AGARWAL, Fawaz AL MUFTI, Aws ALAWI, Ayham ALKHACHROUM, Neeraj BADJATIA, Andrew BAUERSCHMIDT, Huimahn CHOI, Jan CLAASSEN, Michael CRIMMINS, Barry CZEISLER, Elie DANCOUR, Neha DANGAYACH, Mandip DHAMOON, Charles ESENWA, Andres FERNANDEZ, Brandon FOREMAN, Shivani GHOSHAL, Randeep GILL, Emily GILMORE, Marco GONZALEZ CASTELLON, Jose GUTIERREZ, Khalid HANAFY, Gregory KAPINOS, Tomoko KITAGO, Shouri LAHIRI, Cappi LAY, Kiwon LEE, Tim LEKIC, Guillermo LINARES, Aaron LORD, Ali MAHTA, Rishi MALHOTRA, Adrian MARCHIDANN, Andrew MARTIN, Teresa MAY, Stephan MAYER, Kara R. MELMED, Alexander MERKLER, Eliza MILLER, Nicholas MORRIS, Sumiti NAYAR, Setareh S. OMRAN, Santiago ORTEGA-GUITERREZ, Gunjan PARIKH, Neal S. PARIKH, Nils PETERSEN, Jeremy RAGLAND, Alexandra REYNOLDS, Michael REZNIK, David ROH, Sara ROSTANSKI, Clio A. RUBINOS, Ayesha SHERZAI, Viktor SZEDER, Alan VELANDER, Matthew VIBBERT, Christopher ZAMMIT, Jiaying Jayne ZHANG Cristina FALO, Angela VELAZQUEZ
NYP Weill Cornell Medical Center	Principal Investigator Co-Investigator(s)	Babak NAVI Sunday CLARK, Michael CRIMMINS, Barry CZEISLER, Neha DANGAYACH, Jordan DUBOW, Matthew FINK, Brandon FOREMAN, Adam GANZMAN, Dara JAMIESON, Hooman KAMEL, Benjamin KUMMER, Richard LAPPIN, Dana LEIFER, Michael LERARIO, Atul MANGLA, Saad MIR, Sammy PISHANIDAR, Daniel SACCHETTI, Joseph SAFDIEH, Alan SEGAL, Jennifer SEVUSH, Rahul SHARMA, Natalie WEATHERED, Halina WHITE, Christopher ZAMMIT, Yi ZHANG Ryna MATHIAS, Blagovest NIKOLOV, Entila XHORI
O'Connor Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Raul GUISADO Raj GUPTA, Jenelle JINDAL, Xihua SUN Karen DE LA CUESTA, Christine KELLER

Oregon Health & Science University Hospital	Principal Investigator Co-Investigator(s)	Helmi LUTSEP  Noah BEADELL, Hormozd BOZORGCHAMI, Wayne CLARK, Amandeep DHILLON, Julia DURRANT, Sierra FORD, Erek HELSETH, Kory HERRICK, David HOAK, Amit KANSARA, Seth KAREUS, Robert LOWE, Theodore LOWENKOPF, Logan MCDANELD, Madeline NGUYEN, Olajide OLOGUNTOYE, Andrew RONTAL, Michelle STACEY, Courtney TAKAHASHI, Craig WARDEN, Stewart WEBER, Corey WHITE, Lisa YANASE, John ZURASKY
	<u>Study Coordinator(s)</u>	<u>Kelly FEEST, Jonathan FOLEY, Kali SEISLER</u>
OSU Wexner Medical Center	Principal Investigators Co-Investigator(s)	Reza BEHROUZ, Michel TORBEY  Karina CASTELLON LARIOS, Aixa ESPINOSA-MORALES, Bryan GOUGH, Diana GREENE-CHANDOS, Noah GROSE, Deepak GULATI, Omar HUSSEIN, Mahmoud Attia Mohamed KASSEM, Shraddha MAINALI, Stephen MARJORIBANKS, Chad MILLER, Mark MOSELEY, Alex PERCHUK, Juan PORTILLO, Fabrizio SACCHET, Andrew SLIVKA, Alberto URIBE  Julie AGRIESTI, Laura BUCHWALDER, Sarah KOCH, Areej TARIQ
Palmetto Health Richland	Principal Investigator Co-Investigator(s)	Souvik SEN  Xiao Michelle ANDROULAKIS, Tom FABER, Bill GERARD, David HAMMETT, Priyantha HERATH, Te-Long HWANG, Sonal MEHTA, Davit MRELASHVILI, Paisith PIRIYAWAT, James SELPH, Swamy VENKATESH  Kyrra HALL, Evelyn KENNEDY, Shelley LAIRD
Park Nicollet Methodist Hospital	Principal Investigators Co-Investigator(s) Study Coordinator(s)	John DAVENPORT, Matthew OSTRANDER  Krista MELVIN  Dianna MARTIN
Parkland Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Mark JOHNSON  Mark ALBERTS, Chirantan BANERJEE, Paul HANSEN, Yathish HARALUR SREEKANTAI, Rashedul HASAN, Jessica LEE, Alejandro MAGADAN, Tami SALAHUDDIN, Ty SHANG, Fazeel SIDDIQUI, Worthy WARNACK  Jan CAMERON-WATTS, Naomie GATHUA

Parkview Regional Medical Center	Principal Investigator Co-Investigator(s)	Fen-Lei CHANG Ahmed AL HAMDA, Thomas BANAS, Madhav BHAT, Marlene BULTEMEYER, TJ CURFMAN, Ajay GUPTA, Atiya KHAN, Jessica KNIRK, Paul LATER, Nils MUELLER-KRONAST, James STEVENS
	Study Coordinator(s)	Sue BUDZON, Jeanne CAROL
Penn Presbyterian Medical Center	Principal Investigator Co-Investigator(s)	Brett CUCCHIARA Jill BAREN, Christina BLUM, Maria CHEN, Christopher FAVILLA, Kimberly GANNON, Judy JIA, Scott KASNER, Sami KHELLA, Donna KUROWSKI, Ava LIBERMAN, Caitlin LOOMIS, Jean LUCIANO, Michael MCGARVEY, Steven MESSE, Michael MULLEN, Claude NGUYEN, Laura STEIN, Jose TORRES, Ali ZANDIEH, Cen ZHANG
	Study Coordinator(s)	Mary Elizabeth DESANTO
Penn State Hershey Medical Center	Principal Investigator Co-Investigator(s)	Raymond REICHWEIN Natalie AUCUTT-WALTER, Kerstin BETTERMANN, Mohammad EL-GHANEM, Prabhu EMMADY, David ERMAK, Michelle FISCHER, Kevin GARDNER, David GOOD, Muhammad IBRAHIMI, James LEAMING
	Study Coordinator(s)	Kimbra HITZ
Pennsylvania Hospital	Principal Investigators Co-Investigator(s)	Brett CUCCHIARA, Christopher REES Jill BAREN, Christopher FAVILLA, Kimberly GANNON, Judy JIA, Scott KASNER, Donna KUROWSKI, Ava LIBERMAN, Jean LUCIANO, Michael MCGARVEY, Ellen MCPARTLAND-MONGIORI, Steven MESSE, Michael MULLEN, Claude NGUYEN, Paul NOVELLO, Laura STEIN, Ali ZANDIEH, Cen ZHANG
	Study Coordinator(s)	Mary Elizabeth DESANTO, Scott DROBNIS
Portland VA Medical Center	Principal Investigator Co-Investigator(s)	Helmi LUTSEP Hormozd BOZORGCHAMI, Wayne CLARK, Sierra FORD, Kory HERRICK, David HOAK, Olajide OLOGUNTOYE, Courtney TAKAHASHI, Craig WARDEN, Stewart WEBER
	Study Coordinator(s)	Jonathan FOLEY
	Principal Investigator	Aamir BADRUDDIN

Presence Saint Joseph Medical Center	Co-Investigator(s) Study Coordinator(s)	Kaiz ASIF, Sherman CHEN, Jennifer JOHANSEN, Dhru PANDYA Lynn MCLENNAN, Laura PAGANESE
Providence Portland Medical Center	Principal Investigators Co-Investigator(s)	Amit KANSARA, Helmi LUTSEP  Cheri BELLING, Archit BHATT, Hormozd BOZORGCHAMI, Cesar David CACERES, Diane CLARK, Wayne CLARK, Sandy DANCER, Amandeep DHILLON, Braiden FREEMAN, Lilith JUDD, Seth KAREUS, Theodore LOWENKOPF, Bethany MCCLENATHAN, Logan MCDANELD, Paula PRINCE, John ROBISON, Andrew RONTAL, Tomoko SAMPSON, Biggya SAPKOTA, Tanya SCHEIBE-MIREK, Lisa YANASE, John ZURASKY
	Study Coordinator(s)	Kelly FEEST, Jonathan FOLEY, Emily JOHNSON, Darren LARSEN, Kali SEISLER, Alexis YOUNG, Courtney ZERIZEF
Providence Sacred Heart Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Madeleine GERAGHTY  Kathryn AL-HAFIAN, Esther RAWNER Beth AARON, Truman CANTRELL
Providence St. Vincent Medical Center	Principal Investigators Co-Investigator(s)	Amit KANSARA, Helmi LUTSEP  Cheri BELLING, Archit BHATT, Hormozd BOZORGCHAMI, Cesar David CACERES, Diane CLARK, Wayne CLARK, Sandy DANCER, Amandeep DHILLON, Braiden FREEMAN, Lilith JUDD, Seth KAREUS, Theodore LOWENKOPF, Bethany MCCLENATHAN, Logan MCDANELD, Paula PRINCE, John ROBISON, Andrew RONTAL, Tomoko SAMPSON, Biggya SAPKOTA, Tanya SCHEIBE-MIREK, Lisa YANASE, John ZURASKY
	Study Coordinator(s)	Kelly FEEST, Jonathan FOLEY, Emily JOHNSON, Darren LARSEN, Kali SEISLER, Alexis YOUNG, Courtney ZERIZEF
Regional Medical Center of San Jose	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Raul GUISADO, Raj GUPTA  Jenelle JINDAL, James QUINN, Akshay SHAH Christine KELLER
Regions Hospital	Principal Investigator Co-Investigator(s)	Aaron BURNETT  Michelle BIROS, Mustapha EZZEDDINE, Vivian FINK, Bret HAAKE, Kurt ISENBERGER, Josh SALZMAN, Michael ZWANK

	Study Coordinator(s)	Kari KRAGNESS, Emily MISCHEL-ABRAMOWSKI, Alyssa MORRIS, Sandi WEWERKA
Renown Regional Medical Center	Principal Investigator	Ivan LOPEZ
	Study Coordinator(s)	Peggie SMITH
Rhode Island Hospital	Principal Investigators	Brian SILVER, Shadi YAGHI
	Co-Investigator(s)	Jill BAREN, Brett CUCCHIARA, Shawna CUTTING, Lindsey FULLER, Muhib KHAN, Lisa MERCK, Lori OLIVER, Ali SAAD, Jo-Ann
	Study Coordinator(s)	Karina BERTSCH, Lesley D'URSO (Wasilewski), Ashley SCHOMER
Ridgeview Medical Center	Principal Investigator	David LARSON
	Co-Investigator(s)	Kevin BROWN, Mustapha EZZEDDINE
	Study Coordinator(s)	Brenda ANDERSON, Jane ARCHER, Kathleen MILLER, Mindy RUMBOLZ
Robert Wood Johnson University Hospital	Principal Investigators	James MCKINNEY, Deviyani MEHTA
	Co-Investigator(s)	Catherine ALBRECHT, Jill BAREN, Brett CUCCHIARA, Subasini DASH, Robert EISENSTEIN, Raffi KAPITANYAN, Jonathan MCCOY, Mark MERLIN, Michelle MOCCIO, Ugo PAOLUCCI, Igor RYBINNIK, Chirag SHAH, Patricia SONSALLA, Win TOE
Rochester General Hospital	Principal Investigators	Scott BURGIN, Kelly MATMATI
	Co-Investigator(s)	Jeffrey BURDETTE, Candice JOB, Tammy MAHER, Celia MCINTOSH, Lawrence SAMKOFF, Kathleen SCHINDLER
	Study Coordinator(s)	Cheryl WEBER
	Principal Investigator	Sidney STARKMAN

Ronald Reagan UCLA Medical Center	Co-Investigator(s)	Linda ABCEDE, Peter ADAMCZYK, Allison ARCH, Mersedeh BAHRHOSSEINI, Mateo CALDERON-ARNULPHI, Arun CHHABRA, Chuan Frances FAN ,Lindsey FRISCHMANN, Nathan GAINES, Jason HINMAN, Josephine HUANG, Doojin KIM, Conrad LIANG, David LIEBESKIND, Konark MALHOTRA, Neil MALUSTE, Michael MC MANUS, Royra MODIR, Kwan NG, Alireza NOORIAN, May NOUR, Bruce OVBIAGELE, Lucas RAMIREZ, Neal RAO, Rado RAYCHEV, Melissa REIDER-DEMERA, Jeffrey SAVER, Latisha SHARMA, Sunil SHETH, Parampreet SINGH, Sarah SONG, XianNan TANG, Aaron TANSY, Jason TARPLEY, Anita TIPIRNENI, Anil YALLAPRAGADA  Study Coordinator(s) Ileana GRUNBERG, Judy GUZY
Rush University Medical Center	Principal Investigator Co-Investigator(s)	James CONNERS  Fatmah AL-ZAHAMI, Tom AUFDERHEIDE, Laurel CHERIAN (SMIT), Shawna CUTTING, Rima DAFER, Kathryn ESS, Vivien LEE, Jamal MUTHANA, Nicholas OSTERAAS, Jordan SAMUELS, Nader SAWIRIS, Bilaal SIRDAR, Sarah SONG, Alejandro VARGAS  Study Coordinator(s) Stephanie DAHL, Tiffany SINGSON
Saint Barnabas Medical Center	Principal Investigators	Danielle HASKINS, Deviyani MEHTA
Saint Thomas West Hospital	Principal Investigator Co-Investigator(s)	Kelly ROE  Michael KAMINSKI  Robert FALLIS, James FLEMING, Frank LAFRANCHISE, Subir PRASAD, Timothy UPCHURCH  Study Coordinator(s) Diana COMAN, Marie PAYNE
San Antonio Community Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Faisal QAZI  James ROSENTHAL  Satish SOOD  Principal Investigator Claude HEMPHILL

San Francisco General Hospital	Co-Investigator(s)	Ahmad AHMAD, Aimee AYSENNE, John BETJEMANN, Molly BURNETT, Tamika BURRUS, Elizabeth CAHILL, Sheila CHAN, Judy CHANG, Natalie CHENG, Roger CHENG, Rene COLORADO, Vanja DOUGLAS, Julia DURRANT, Nancy EDWARDS, Christine FOX, Alan GELB, Trevor GREGATH, Cathra HALABI, Karen HIRSCH, Andrew JOSEPHSON, Hooman KAMEL, Kevin KEENAN, Anthony KIM, Nerissa KO, Mohan KOTTAPALLY, Karl MEISEL, Asma MOHEET, Arturo MONTANO, Kazuma NAKAGAWA, Bharath NARAVETLA, Babak NAVI, Anh NGUYEN, Mai NGUYEN-HUYNH, Sharon POISSON, Prasanthi RAMANUJAM, Nirav SHAH, Michel SHAMY, Kevin SHAPIRO, Peyman SHIRANI, Vineeta SINGH, Neel SINGHAL, Wade SMITH, Karl SPORER, Abraham THOMAS, Shahed TOOSSI, Christine WONG, Alan YEE, Debbie YI MADHOK, QingYang YUAN
	Study Coordinator(s)	Jun LAUDER, Michele MEEKER, Dominica RANDAZZO, Kelley ROSBOROUGH
Sarasota Memorial Hospital	Principal Investigator	Mauricio CONCHA
	Co-Investigator(s)	Julio CANTERO, Kyle RUFFING, Leonie VAN PASSEL
	Study Coordinator(s)	Jeanette WILSON
Scripps Mercy Hospital San Diego	Principal Investigator	Royya MODIR
	Co-Investigator(s)	Kunal AGRAWAL, Maysun ALI, Kevin ATTENHOFER, Robert CLAYCOMB, Thomas HEMMEN, Nabeel HERIAL, James HO, Branko HUISA, Abhishek LUNAGARIYA, Brett MEYER, Dawn MEYER, Rajiv NARULA, David NGUYEN, Lindsay OLSON-MACK, Mohsen PIRASTEHFAR, Hami RAMANI, Belma SADIKOVIC, Konrad SCHLICK, Pradeep SELVAN, Gilda TAFRESHI
	Study Coordinator(s)	Brittney LEHMANN, Karen RAPP, Kathleen RICKES, Kristin WOODS
Sentara Norfolk General Hospital	Principal Investigator	Richard ZWEIFLER
	Co-Investigator(s)	Pamela EVANS, Bruce LO, Renee-Scott WALKER
	Study Coordinator(s)	Samantha BRIGHT, Stacey CUMMINGS, Pam HOLLSTEN, Ana ROLDAN
Seton Medical Center	Principal Investigator	TJ MILLING

	Co-Investigator(s)	Atheer AHMED BALDAWI, John BEDOLLA, John BERTELSON, Ray BOGITCH, Pat CROCKER, Lisa DAVIS, Ming DING, Kent ELLINGTON, Jessica ERFAN, Clifford Jack FRAIM, Jeffrey HENDERSON, Eric HIGGINBOTHAM, Tameem HUSAIN, Elizabeth JONES, Jefferson MILEY, Johanna MORTON, Todd NASH, Sarah OLSTYN, Sohan PAREKH, Osvaldo PERURENA, Brian PRICE, Sheldon ROCKWOOD, Sara SCOTT, Jason SHEN, Kristen SMOLIK, Christopher TOPEL, Steven WARACH, Walter WERCHAN, Robert WESTON, Ira WOOD, Chris ZIEBELL
	Study Coordinator(s)	Sheree ADAMS, Kristen KIMMERLE, Laura LACHANCE
Sinai-Grace Hospital	Principal Investigators	Anthony LAGINA, Claire PEARSON
	Co-Investigator(s)	Benjamin ATKINSON, Pratik BHATTACHARYA, Seeman CHATURVEDI, Angela GROVES, Amit KANSARA, Phillip LEVY, Ramesh MADHAVAN, Wazim MOHAMED, Meenakshi MUNSHI, Greg NORRIS, Brian O'NEIL, Kumar RAJAMANI, Robert SHERWIN, Kushak SUCHDEV, Ambooj TIWARI, Preet VARADE, Marc-Anthony VELILLA, Robert WELCH
	Study Coordinator(s)	Farhan AYAZ, Saikat BHUIYAN, Valerie MIKA
Southern Illinois University Memorial Medical Center	Principal Investigator	Fazeel SIDDIQUI
	Co-Investigator(s)	Tamer ABDELHAK, Nicole ATWOOD, Rodger ELBLE, Sushant KALE, Sajjad MUEED, Valery SABODASH, Amita SINGH, Zeng WANG
	Study Coordinator(s)	Sally FRITZ, Dolly KELLEY
Sparrow Hospital	Principal Investigator	Syed HUSSAIN
	Co-Investigator(s)	Vibhav BANSAL, Vishal JANI, Mounzer KASSAB, Malathi RAO, Anmar RAZAK, Gautam SACHDEVA, Adan SAFDAR
	Study Coordinator(s)	Erin SHELL
Spectrum Health Hospitals - Butterworth	Principal Investigator	John OOSTEMA (Adam)
	Co-Investigator(s)	Michael BROWN, Jeffrey JONES, Joshua REYNOLDS
	Study Coordinator(s)	Tiffany FLEEGER
St. Anthony Hospital	Principal Investigator	Mark MURRAY
	Co-Investigator(s)	Christy CASPER, Bill COPLIN, Alex GRAVES, Rick SMITH

	Study Coordinator(s)	Sheryl GIAMBARTOLOMEI
St. David's Medical Center	Principal Investigators Co-Investigator(s)	Kent ELLINGTON, Johanna MORTON, Angel PULIDO, James WALDRON Hana AUBRECHTOVA, Ray BOGITCH, Elizabeth CARROLL, Albert HORN, David MORLEDGE
	Study Coordinator(s)	Sergio AVILA-MICHEL, Kaelyn KAPPELER, Karissa MORTON
St. Elizabeth Hospital	Principal Investigators Co-Investigator(s)	Rahul KARAMCHANDANI, Kyle WALSH Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Rhonda CADENA, Elisheva COLEMAN, Felipe DE LOS RIOS LA ROSA, Stacie DEMEL, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Rachel GARVIN, Anna GENSIC, Sabreena GILLOW, Aaron GROSSMAN, Jonah GROSSMAN, Laura HEITSCH, Adam JASNE, Daniel KANTER, Brian KATZ, Pooja KHATRI, Brett KISSELA, Dawn KLEINDORFER, William KNIGHT, Natalie KREITZER, Julian MACEDO, Jason MACKEY, Sharyl MARTINI, Erin McDONOUGH, Meena MUNSHI, Brian OLOIZIA, Art PANCIOLI, Katrina PEARISO, Jonathan RATCLIFF, Sameer SHARMA, Blake SMITH, Michael STAR, Brian STETTLER, Daniel WOO, Muhammad ZAGHLOULEH
	Study Coordinator(s)	Shannon DEEDS, Sara KEEGAN
St. Elizabeth Hospital Fort Thomas	Principal Investigators Co-Investigator(s)	Rahul KARAMCHANDANI, Kyle WALSH Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Rhonda CADENA, Elisheva COLEMAN, Felipe DE LOS RIOS LA ROSA, Stacie DEMEL, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Rachel GARVIN, Anna GENSIC, Sabreena GILLOW, Aaron GROSSMAN, Jonah GROSSMAN, Laura HEITSCH, Adam JASNE, Daniel KANTER, Brian KATZ, Pooja KHATRI, Brett KISSELA, Dawn KLEINDORFER, William KNIGHT, Natalie KREITZER, Julian MACEDO, Jason MACKEY, Sharyl MARTINI, Erin McDONOUGH, Meena MUNSHI, Brian OLOIZIA, Art PANCIOLI, Katrina PEARISO, Jonathan RATCLIFF, Sameer SHARMA, Blake SMITH, Michael STAR, Brian STETTLER, Daniel WOO, Muhammad ZAGHLOULEH

	Study Coordinator(s)	Shannon DEEDS, Sara KEEGAN
St. Elizabeth Medical Center South	Principal Investigators Co-Investigator(s)	Rahul KARAMCHANDANI, Kyle WALSH Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Rhonda CADENA, Elisheva COLEMAN, Felipe DE LOS RIOS LA ROSA, Stacie DEMEL, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Rachel GARVIN, Anna GENSIC, Sabreena GILLOW, Aaron GROSSMAN, Jonah GROSSMAN, Laura HEITSCH, Adam JASNE, Daniel KANTER, Brian KATZ, Pooja KHATRI, Brett KISSELA, Dawn KLEINDORFER, William KNIGHT, Natalie KREITZER, Julian MACEDO, Jason MACKEY, Sharyl MARTINI, Erin MCDONOUGH, Meena MUNSHI, Brian OLOIZIA, Art PANCIOLI, Katrina PEARISO, Jonathan RATCLIFF, Sameer SHARMA, Blake SMITH, Michael STAR, Brian STETTLER, Daniel WOO, Muhammad ZAGHLOULEH
	Study Coordinator(s)	Shannon DEEDS, Sara KEEGAN
St. John Hospital and Medical Center	Principal Investigators Co-Investigator(s)	Robert DUNNE, Claire PEARSON Elizabeth BASCOM, Paul CULLIS, Patricia NOUHAN, Margarita PENA, Makenzie THIMM, Robert WELCH, Michelle WIENER
	Study Coordinator(s)	Lynne FROEHLICH
St. John's Hospital	Principal Investigator Co-Investigator(s)	Fazeel SIDDIQUI Rodger ELBLE, Sushant KALE, Sajjad MUEED, Valeriy SABODASH, Amita SINGH, Zeng WANG
	Study Coordinator(s)	Sally FRITZ, Dolly KELLEY
St. Joseph Regional Health Center	Principal Investigator Co-Investigator(s)	Michael SPOHN Derek CARAWAY, Paul GOEN, Brandon LEWIS, Michael MCDONALD, Kimberly OAS, Marcus PURVIS, Carmen RAMIREZ
	Study Coordinator(s)	Debbie LEWIS, Donna WEBB
St. Jude Medical Center	Principal Investigator Co-Investigator(s)	Stephen WALDMAN Kiran BATH, Anthony CIABARRA, Johnson MOON
	Study Coordinator(s)	Sheraz MOSSA
	Principal Investigator	Salvador CRUZ-FLORES

St. Louis University Hospital	Co-Investigator(s)	Aninda ACHARYA, Amer ALSHEKHLEE, Charles CALLISON, Tagann CHAISAM, Randall EDGEELL, Eli FEEN, Sushant KALE, Jacob KITCHENER, Sonal MEHTA, Paisith PIRIYAWAT, Nirav VORA
	Study Coordinator(s)	Susan BROWN, Eve HOLZEMER
Stanford University Medical Center	Principal Investigators	Gregory ALBERS, Nirali VORA
	Co-Investigator(s)	Pablo BRAVO, Marion BUCKWALTER, Charlene CHEN, Anna FINLEY-CAULFIELD, Paul GEORGE, Karen HIRSCH, Kyle HOBBS, Michael KE, Sun KIM, Prashanth KRISHNAMOHAN, Soo Young KWON, Maarten LANSBERG, Sarah LEE, Catherine LEGAULT, Adam MACLELLAN, Sharan MANN, Christina MIJALSKI, Gracia MUI, Jean-Marc OLIVOT, Inder PAUL SINGH, Reza PIRSAHELI, Divya PRABHU, Archana PURUSHOTHAM, James QUINN, Basit RAHIM, Adam RIZVI, Edgar SAMANIEGO, Neil SCHWARTZ, Christopher SOUTHWOOD, Ilanit SPOKOYNY, Waimee Amy TAI, Mohamed TELEB, Jenny TSAI, Christie TUNG, Chitra VENKATASUBRAMANIAN, Christine WIJMAN
	Study Coordinator(s)	Christine KELLER, Rosen MANN, Anita VISWESWARAN
Stony Brook University Hospital	Principal Investigator	Ethan BRANDLER
	Co-Investigator(s)	Laura DONARUMMO, Michael GUIDO, Candice PERKINS, Galyna PUSHCHINSKA, Adam SINGER
	Study Coordinator(s)	Maria TAYLOR
Strong Memorial Hospital	Principal Investigators	Adam KELLY, David REMPE
	Co-Investigator(s)	Curtis BENESCH, Scott BURGIN, Ania BUSZA, Justin CHANDLER, Gaurav DIGHE, Fulvio GIL, Todd HOLMQUIST, Michael MANCHAK, Anthony NOTO, Jennifer RICHARD, Jorge RISCO, Bogachan SAHIN, Eugene SCHARF, Roople UNIA
	Study Coordinator(s)	Heather FINLEY, Dawn MARTIN
Summa Akron City Hospital	Principal Investigator	Susana BOWLING
	Co-Investigator(s)	Mary-Colleen BHALLA, Joao GOMES, Kristy JACOBSON, John KACHORIS, Kirk STIFFLER, Scott WILBER
	Study Coordinator(s)	Kathy CUNNINGHAM, Rachelle SCHARSU, Patricia WOOD

SUNY Downstate Medical Center	Principal Investigators Co-Investigator(s)	Pia CHATTERJEE, Steven LEVINE, Adrian MARCHIDANN, Richard SINERT Clotilde BALUCANI, Ethan BRANDLER, Qing HAO, Richard JACKSON, Yongwoo KIM, Susan LAW, Jennifer MARTINDALE, Jay MELTON, Lorenzo PALADINO, Diana ROJAS-SOTO, Artem SUNIK, Benedict TAN, Helen VALSAMIS, Volodymyr VULKANOV, Shahriar ZEHTABCHI
	Study Coordinator(s)	Vanessa ARNEDO, Nadege GILLES, Saroj KUNNAKKAT, Catherine LUSHBOOUGH, Sarah WEINGAST (ZELONIS)
SUNY Upstate Medical University	Principal Investigator Co-Investigator(s)	Julius-Gene LATORRE  Ahmad AHMAD, Sanam ANWER, Ilya BRAGIN, Elnour ELWALEED, Ziad EL-ZAMMAR, Anna Monica FERMIN, Shahnawaz KARIM, Michael MENDOZA, Mubashir PERVEZ, Wyssem RAMDANI, Rajbeer SANGHA, Elena SCHMIDT
	Study Coordinator(s)	Alisha HARTWELL, Muhammad IQBAL, Iulia MOVILEANU,
Sutter Medical Center	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Wendy BROWN, Mohammad-Asim MAHMOOD  Peter ADAMCZYK, Richard ATKINSON Barbara WELCHER
Sutter Memorial Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Wendy BROWN  Richard ATKINSON Barbara WELCHER
Sutter Roseville Medical Center	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Wendy BROWN, Mohammad-Asim MAHMOOD  Richard ATKINSON Teresa CARTER, Michele GUILLEN
Swedish Medical Center	Principal Investigator Co-Investigator(s)	Ira CHANG  Russell BARTT, Christian BURRELL, Christopher FANALE, Ananda FINE, Judd JENSEN, Emily LAMPE, Kathryn MCCARTHY (LEONARD), Amy NIEBERLEIN (LARSON), Robert PRATT, Stacy SHINE, Byron Rod SPENCER, Rebecca VANVLIET, Jeffrey WAGNER, Adrienne WALSH, Michelle WHALEY
	Study Coordinator(s)	Paula FISK, Tyler IRANI, Lenden NEEPER, Alicia NOVAK, Jeanne SWANSON
	Principal Investigator	Nina GENTILE

Temple University Hospital	Co-Investigator(s)	Derek ISENBERG, Mercedes JACOBSON, Paul KATZ, Yongwoo KIM, Tim LACHMAN, Guillermo LINARES, Imama NAQVI
	Study Coordinator(s)	Patricia MCNELIS, Hannah REIMER
Texas Health Presbyterian Hospital Dallas	Principal Investigator	Samir SHAH
	Co-Investigator(s)	Nicholas ABSALOM, Karen SACKS
	Study Coordinator(s)	Shelley LONG, Michelle MORGAN
The Jewish Hospital	Principal Investigators	Rahul KARAMCHANDANI, Kyle WALSH
	Co-Investigator(s)	Opeolu ADEOYE, Jordan BONOMO, Joseph BRODERICK, Rhonda CADENA, Elisheva COLEMAN, Felipe DE LOS RIOS LA ROSA, Stacie DEMEL, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Rachel GARVIN, Anna GENSIC, Sabreena GILLOW, Aaron GROSSMAN, Jonah GROSSMAN, Laura HEITSCH, Adam JASNE, Daniel KANTER, Brian KATZ, Pooja KHATRI, Charles KIRCHER, Brett KISSELA, Dawn KLEINDORFER, William KNIGHT, Natalie KREITZER, Julian MACEDO, Jason MACKEY, Sharyl MARTINI, Erin McDONOUGH, Eva MISTRY, Meena MUNSHI, Brian OLOIZIA, Art PANCIOLI, Katrina PEARISO, Jonathan RATCLIFF, Sameer SHARMA, Blake SMITH, Michael STAR, Brian STETTLER, Daniel WOO, Muhammad ZAGHLOULEH
	Study Coordinator(s)	Shannon DEEDS, Sara KEEGAN
The Mount Sinai Hospital	Principal Investigator	Jesse WEINBERGER
	Co-Investigator(s)	Yu-Feng-Yvonne CHAN, Deborah HOROWITZ, Frank KIM, Aviva LUBIN, Kara SHEINART, Stanley TUHRIM, Qingliang WANG
	Study Coordinator(s)	Sandra AUGUSTINE
The Queen's Medical Center	Principal Investigators	Douglas FRANZ, Rony SALEM, Douglas VALENTA
	Co-Investigator(s)	Cherylee CHANG, Matthew KOENIG, Garson LEE, Jeffery-Doug MILES, Kazuma NAKAGAWA
	Study Coordinator(s)	Lyle OSHITA, Tracy STERN
Thomas Jefferson	Principal Investigator	AnnaMarie CHANG

University Hospital	Co-Investigator(s)	Norman AJIBOYE, Sanjay ANANDARAM, Rodney BELL, Lisa BOWMAN, Shruti CHANDRA, Nina GENTILE, Jack JALLO, William MCBRIDE, Michael MOUSSOUTTAS, Maria Carissa PINEDA, Pranoti PRADHAN, Ray REGAN, Fred RINCON, Diana TZENG, Jacqueline URTECHO, Matthew VIBBERT, Jennifer WHITE, Sridhara YADDANAPUDI
	Study Coordinator(s)	Amanda FURLONG-SALVATORE, Jennifer GLENDENING, Nicole RENZI, Kiriaki SERENIDIS, Meghan-Patricia WAKEFIELD, Melissa WITT
UC Davis Medical Center	Principal Investigator	Daniel NISHIJIMA
	Co-Investigator(s)	Glen JICKLING, Kwan NG
	Study Coordinator(s)	Michaela CANOVA
UCSD Health La Jolla	Principal Investigator	Dawn MEYER
	Co-Investigator(s)	Kunal AGRAWAL, Maysun ALI, Kevin ATTENHOFER, Nhu BRUCE, Jessica CHOE, Robert CLAYCOMB, Amy GUZIK, Lovella HAILEY, Thomas HEMMEN, Nabeel HERIAL, James HO, Branko HUISA, Kiet LOC, Abhishek LUNAGARIYA, Brett MEYER, Royya MODIR, Melissa MORTIN, Rajiv NARULA, William NEIL, David NGUYEN, Bruce OVBIAGELE, Mohsen PIRASTEHFAR, Hami RAMANI, Belma SADIKOVIC, Konrad SCHLICK, Pradeep SELVAN, Ajeet SODHI
	Study Coordinator(s)	Nancy KELLY, Brittney LEHMANN, Karen RAPP, Kathleen RICKES, Kristin WOODS
UCSD Medical Center - Hillcrest Hospital	Principal Investigator	Dawn MEYER
	Co-Investigator(s)	Kunal AGRAWAL, Maysun ALI, Kevin ATTENHOFER, Nhu BRUCE, Jessica CHOE, Robert CLAYCOMB, Amy GUZIK, Lovella HAILEY, Thomas HEMMEN, Nabeel HERIAL, James HO, Branko HUISA, Kiet LOC, Abhishek LUNAGARIYA, Brett MEYER, Royya MODIR, Melissa MORTIN, Rajiv NARULA, William NEIL, David NGUYEN, Bruce OVBIAGELE, Mohsen PIRASTEHFAR, Hami RAMANI, Belma SADIKOVIC, Konrad SCHLICK, Pradeep SELVAN, Ajeet SODHI
	Study Coordinator(s)	Nancy KELLY, Brittney LEHMANN, Karen RAPP, Kathleen RICKES, Kristin WOODS

UCSF Medical Center	Principal Investigator Co-Investigator(s)	Wade SMITH  Ahmad AHMAD, Aimee AYSENNE, John BETJEMANN, Molly BURNETT, Tamika BURRUS, Elizabeth CAHILL, Sheila CHAN, Judy CHANG, Natalie CHENG, Roger CHENG, Rene COLORADO, Amar DHAND, Vanja DOUGLAS, Julia DURRANT, Nancy EDWARDS, Christine FOX, Alan GELB, Trevor GREGATH, Cathra HALABI, Claude HEMPHILL, Karen HIRSCH, Andrew JOSEPHSON, Hooman KAMEL, Kevin KEENAN, Anthony KIM, Nerissa KO, Mohan KOTTAPALLY, Kathryn KVAM, Karl MEISEL, Asma MOHEET, Arturo MONTANO, Kazuma NAKAGAWA, Bharath NARAVETLA, Babak NAVI, Anh NGUYEN, Mai NGUYEN-HUYNH, Sharon POISSON, Prasanthi RAMANUJAM, Maulik SHAH, Nirav SHAH, Michel SHAMY, Kevin SHAPIRO, Peyman SHIRANI, Vineeta SINGH, Neel SINGHAL, Karl SPORER, Abraham THOMAS, Shahed TOOSSI, Christine WONG, Alan YEE, Debbie YI MADHOK, QingYang YUAN
	Study Coordinator(s)	Jun LAUDER, Michele MEEKER, Dominica RANDAZZO, Kelley ROSBOROUGH
UF Health Jacksonville	Principal Investigator Co-Investigator(s)	Scott SILLIMAN  Nader ANTONIOS, Ryan CROOKS, Marianne DE LIMA, Mary-Ann FARES, Imran FAROOQUI, Constance KATSAFANAS, Zeshaun KHAWAJA, Somphanh KHOUSAKOUN, Shannon LABOY, Sherif MAKAR, Robert MANNEL, Fatima MILFRED, Omar MOORE, Raid OSSA, Wally Jamie PLANTE, Fatoumata SAKHO, Adil ZIA
	Study Coordinator(s)	Judy BULACAN, Rhonda CALHOUN, Jennifer ROBERTS, Mary STEGMAIER
UF Health Shands Hospital	Principal Investigator Co-Investigator(s)	Anna KHANNA  Ganesh ASAITHAMBI, Julie BERTHY, Haitham DABABNEH, Scott DELLORSO, Waldo GUERRERO, Paul MACDONALD, Katharine MASKAS, Walter MORGAN, Nandakumar NAGARAJA, Arash NAZIRIPOUR, Swetha RENATI, Christian ROSADO, Vishnumurthy SHUSRUTHA HEDNA, Michael SMITH, Arnaldo VELEZ, Michael WATERS, Melissa WEAVER, Christina WILSON, Jindong XU, Teddy YOUN

	Study Coordinator(s)	Rosie KIZZA, Teresa LYLES, Stacy MCCOMBS, Stacy MERRITT, David PARFITT, Sonisha WARREN
UMASS Memorial Medical Center	Principal Investigator Co-Investigator(s)	Majaz MOONIS  Ayman ALSALAIMEH, Raphael CARANDANG, Basad ESSA, Richard GODDEAU, Adalia JUN O'CONNELL, Muhib KHAN, Rajat KUMAR, Eugene LIN, Yunis MAYASI, Jennifer MEJILLA, Artin MINAEIAN, Jane MORRIS, Shashidhara NANJUNDASWAMY, Sanjeeva ONTEDDU, Rajiv PADMANABHAN, Anand PATEL, Josie PENA-GOMEZ, Muhammad RAMZAN, Mary RUCHO, Ajay TUNGUTURI, Jiaying ZHANG
United Hospital	Study Coordinator(s)	Melissa ADAMS
University of Alabama Hospital	Principal Investigator Co-Investigator(s)	Sandra HANSON  Ganesh ASAITHAMBI, Michelle BIROS, Jesse CORRY, Mustapha EZZEDDINE, Dimitrios GIANNAKIDIS, Jane MONITA, Sheetal PATEL, Karen PORTH
	Study Coordinator(s)	Bridget HO
	Principal Investigators	Andrei ALEXANDROV, Toby GOPEN, Gyanendra KUMAR  Karen ALBRIGHT, Asad CHAUDHARY, Michael LYERLY, Andrey SAMAL, Kara SANDS, Danny TKATCH
	Study Coordinator(s)	Brandie CLINE, Melissa GAZI, Lynn MERRITT, April SISSON
	Principal Investigators	Rahul KARAMCHANDANI, Kyle WALSH

University of Cincinnati Medical Center	Co-Investigator(s)	Opeolu ADEOYE, Samir BELAGAJE, Jordan BONOMO, Joseph BRODERICK, Rhonda CADENA, Elisheva COLEMAN, Felipe DE LOS RIOS LA ROSA, Stacie DEMEL, Bryan ECKERLE, Simona FERIOLI, Matthew FLAHERTY, Sabreena GALLOW, Rachel GARVIN, Anna GENSIC, Sabreena GILLOW, Aaron GROSSMAN, Jonah GROSSMAN, Laura HEITSCH, Adam JASNE, Daniel KANTER, Brian KATZ, Pooja KHATRI, Charles KIRCHER, Brett KISSELA, Dawn KLEINDORFER, William KNIGHT, Shannon KOHAKA, Natalie KREITZER, Julian MACEDO, Jason MACKEY, Sharyl MARTINI, Erin McDONOUGH, Eva MISTRY, Meena MUNSHI, Brian OLOIZIA, Arthur PANCIOLI, Katrina PEARISO, Jonathan RATCLIFF, Sameer SHARMA, Blake SMITH, Michael STAR, Brian STETTLER, Daniel WOO, Muhammad ZAGHLOULEH
	Study Coordinator(s)	Shannon Iris DEEDS, Irene Ewing, Sara KEEGAN
University of Colorado Hospital	Principal Investigator	Jennifer SIMPSON
	Co-Investigator(s)	David CASE, Christy CASPER, Dana COUTTS, Alexander GRAVES, William JONES, Pearce KORB, Michelle LEPPERT, Robert NEUMANN, Daniel PASTULA, Sharon POISSON, Angel PULIDO, Daniel VELA DUARTE, Matthew WEST
	Study Coordinator(s)	April BRYANT, Marissa HUDAK, Kaaren LINDSAY, Alexander STEIN, Ildiko TOROK
University of Illinois Hospital	Principal Investigators	Aslam KHAJA, Neelofer SHAIFI, Fernando TESTAI
	Co-Investigator(s)	Phil GORELICK, Rebbecca GRYSIEWICZ, Laura PEDELTY, Fernando TESTAI
	Study Coordinator(s)	Maureen HILLMANN
University of Iowa Hospitals & Clinics	Principal Investigator	Harold ADAMS
	Co-Investigator(s)	Salman AL JERDI, Sami AL KASAB, Sudeeptha DANDAPAT, Patricia DAVIS, Michael FROEHLER, Waldo GUERRERO, Emily JAKSICH, Enrique LEIRA, Kaustubh LIMAYE, Jeffrey MILLER, Nandakumar NAGARAJA, Santiago ORTEGA-GUITERREZ, Connie PIEPER, Edgar SAMANIEGO, Ali SHEHARYAR, Allison VOSS
	Study Coordinator(s)	Heena OLALDE, Jeri SIEREN

University of Kansas Hospital	Principal Investigator Co-Investigator(s)	Michael ABRAHAM  Rawan ALBADAREEN, Bradley BARTH, Michelle BIROS, Chad CANNON, Colleen LECHTENBERG, Manoj MITTAL, Michael RIPPEE, Lee ROSTERMAN, Craig SHIPLEY, Jayashree SUNDARARAJAN, Yunxia WANG
	Study Coordinator(s)	Alison BOYDSTON, Shannon GIFFORD
University of Kentucky Hospital	Principal Investigator Co-Investigator(s)	Roger HUMPHRIES  CRAIG CARTER, Sameer DESAI, Creed PETTIGREW
	Study Coordinator(s)	Joann SHORT
University of Louisville Hospital	Principal Investigators Co-Investigator(s)	Wei LIU, Anand VAISHNAV  Alex ABOU-CHEBL, Kerri REMMEL, Jignesh SHAH, Vincent TRUONG, Michael WILDER
	Study Coordinator(s)	Ann JERDE
University of Maryland Medical Center	Principal Investigator Co-Investigator(s)	Carolyn CRONIN  Michael ABRAHAM, Ermias AYTENFISU, John COLE, Tarra DUTTA, Bolanle FAMAKIN, Lisa HERMANN, Peter HILL, Jon-Mark HIRSHON, Jennifer HOPP, Chandni KALARIA, Steven KITTNER, Jose MERINO, Melissa MOTTA, Michael PHIPPS, Anna ROSENBAUM, Jay SHAH, Kevin SHETH, Christopher STACK, Barney STERN, Marcella WOZNIAK
	Study Coordinator(s)	Virginia GANLEY
University of Minnesota Medical Center Hospital	Principal Investigator Co-Investigator(s)	Mustapha EZZEDDINE  Mohammed ALKUWAITI, Shola ALUKO, David ANDERSON, Ganesh ASAITHAMBI, Kristen BARKLOW, Oladi BENTHO, Michelle BIROS, Laura FOSTER, Mikayel GRIGORYAN, Ameer HASSAN, Taka HIGASHIMORI, Haitham HUSSEIN, Vik JADHAV, Jessica JARNOT, Daraspreet KAINTH, Amir KHAN, Jae KIM, Saritha KUNDOOR, Shailesh MALE, Tapan MEHTA, Benjamin MILLER, Cathy O'BRIEN, Haejoe PARK, Rwoof RESHI, Gustavo RODRIGUEZ, Kalyan SAJJA, Divyajot SANDHU, Biggya SAPKOTA, Kenneth SHEA, Nathan SIT, Jamie STARKS, Christopher STREIB, Robert TAYLOR, Wondwossen TEKLE, Ruth THOMSON, Huseyin TORE, Haralabos ZACHARATOS

	Study Coordinator(s)	Audrey HENDRICKSON, Kathleen MILLER, Mindy RUMBOLZ, Julie SCHERBER, Abbey STAUGAITIS
University of New Mexico Hospital	Principal Investigators Co-Investigator(s)	Christopher CALDER, Branko HUISA, Vishnumurthy SHUSRUTHA HEDNA Kurt DENNINGHOFF, Marc MALKOFF, Matthew STARR
	Study Coordinator(s)	Jill PRESTOPNIK
University of North Carolina	Principal Investigator Co-Investigator(s)	Natalie AUCUTT-WALTER Aaron ABATE, Anne BECKWITH, Octavio DE MARCHENA, David HUANG, Anahit MEHRABYAN, Leonardo MORANTES, Matthew OSTRANDER, Matthew SMITH, Michael WANG, Susan WILSON
	Study Coordinator(s)	Sierra MARINO, Roxanne POOLE
University of Toledo Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Mouhammad JUMAA Gretchen TIETJEN, Syed ZAIDI Andrea KORSNACK
University of Washington Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	David TIRSCHWELL Claire CREUTZFELDT, Rizwan KALANI, Marlan KAY Allison KUNZE, Wesley PLINKE, Glenn SCHUBERT, Patricia TANZI
University of Wisconsin University Hospital	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Jim SVENSON, Natalie WHEELER Eric ADELMAN, Azam AHMED, Tom AUFDERHEIDE, Edward-Luke BRADBURY, Marcus CHACON, Jamie ELLIOTT, Azita HAMEDANI, Matthew JENSEN, Krishna MYLAVARAPU, Justin SATTIN, Erick TARULA Travis DORAN, Ashley HARRIS, Stephanie WILBRAND
UPMC Northwest	Principal Investigators Co-Investigator(s) Study Coordinator(s)	Vivek REDDY, Matthew STARR Amin AGHAEBRAHIM, Cliff CALLAWAY, David CAMPBELL, Cameron DEZFULIAN, Ankur DOSHI, Dan-Victor GIURGIUTIU, Deepak GULATI, Frank GUYETTE, Maxim HAMMER, Ashutosh JADHAV, Tudor JOVIN, James MCLAUGHLIN, Jon RITTENBERGER, Marcelo ROCHA, Christopher STREIB, Ruta TOTORAITIS Sara DIFIORE, Mary KRUTH

UPMC Presbyterian Hospital	Principal Investigators Co-Investigator(s)	Vivek REDDY, Matthew STARR  Amin AGHAEBRAHIM, Cliff CALLAWAY, David CAMPBELL, Ankur DOSHI, Jonathan ELMER, Dan-Victor GIURGIUTIU, Deepak GULATI, Frank GUYETTE, Maxim HAMMER, Anat HOREV, Ashutosh JADHAV, Tudor JOVIN, Sunanda NANDURI, Srikant RANGARAJU, Jon RITTENBERGER, Marcelo ROCHA, Christopher STREIB, Ruta TOTORAITIS, Lawrence WECHSLER
	Study Coordinator(s)	Sara DIFIORE, Mary KRUTH
UPMC Shadyside Hospital	Principal Investigators Co-Investigator(s)	Vivek REDDY, Matthew STARR  Amin AGHAEBRAHIM, Cliff CALLAWAY, David CAMPBELL, Cameron DEZFULIAN, Ankur DOSHI, Jonathan ELMER, Dan-Victor GIURGIUTIU, Deepak GULATI, Frank GUYETTE, Maxim HAMMER, Ashutosh JADHAV, Tudor JOVIN, Srikant RANGARAJU, Jon RITTENBERGER, Marcelo ROCHA, Christopher STREIB, Ruta TOTORAITIS
	Study Coordinator(s)	Sara DIFIORE, Mary KRUTH
UT Southwestern Zale Lipshy University Hospital	Principal Investigator Co-Investigator(s)	Mark JOHNSON  Mark ALBERTS, Chirantan BANERJEE, Mehari GEBREYOHANNAS, Paul HANSEN, Yathish HARALUR SREEKANTAIAH, Rashedul HASAN, Jessica LEE, Alejandro MAGADAN, Tami SALAHUDDIN, Ty SHANG, Fazeel SIDDIQUI
	Study Coordinator(s)	Jan CAMERON-WATTS, Naomie GATHUA
UVA Medical Center	Principal Investigator	Nina SOLENSKI

	Co-Investigator(s)	Leah ACOSTA, James ADDINGTON, Jimmy BERTHAUD, Halley BRIGLIA, Michael BROGAN, Michelle BROWN, Joseph CARRERA, Micaela CHATMAN, Christina CHEE, Nicole CHIOTA-MCCOLLUM, Allison CROWELL, Jason CROWELL, Bryan CUPKA, Alex DALRYMPLE, Maria DIAZ-ORDONEZ, Stephen DONAHUE, Byran ECKERLE, Matthew EHRLICH, Matthew ELLIOTT, Erin FOFF, Kaanchan GANGAL, Daryl GRESS, Christopher GROTH, Rahul GUHA, Amy GUZIK, Kelly GWATHMEY, Clark HALEY, Holly HENSLEY-JUDGE, Zsofia HOLE, Jasmin JO, Michelle JOHANSEN, Karen JOHNSTON, Sarah JONES, Kiran KANTH, Scott KOHLER, Noah KOLB, Greg KUHLMAN, David LAPIDES, Lauren MAHONEY, Shaneela MALIK, Sneha MANTRI, Matthew MCCONNELL, Mark MCDONALD, Prachi MEHNDIRATTA, Barnett NATHAN, Kathryn NEVEL, Whitney POLLOCK, Ryon POSTON, Surabhi RANJAN, Jeffrey RATLIFF, Chad SAUNDERS, Reza SEYEDSADJADI, Mohamed SHARABY, Sherita SMITH, Brian SORACE, Andrew SOUTHERLAND, Mohammad SUNBULLI, Joanna SUSKI, Lauren TALMAN, David TAPLINGER, Jennie TAYLOR, Liana THEROUX, Sarah TISEL, Lisa TORAN, Christopher VACHON, Hua WANG, Melanie WARD, Bradford WORRALL, Julie ZHOU
	Study Coordinator(s)	Theresa ALTHERR, Tracey BLOUNT, Amy FANSLER, Colleen HARMAN, Julia KRUPA, Claire McKinley
Valley Baptist Medical Center - Harlingen	Principal Investigator	Ameer HASSAN
	Co-Investigator(s)	Elizabeth JONES, Julio OLMEDA, Victoria PARADA, Wondwossen TEKLE
	Study Coordinator(s)	Cacy CATE, Lisa JONES-FULLINGIM, Pamela NAUERTH, Olive SANCHEZ
Vanderbilt University Hospital	Principal Investigator	Howard KIRSHNER
	Co-Investigator(s)	Mark BAKER, Brandi FRENCH, Ajay GUPTA, Rishi GUPTA, Lisa HERMANN, Shilpi MITTAL, Anne O'DUFFY, Derek RIEBAU, Eli ZIMMERMAN
	Study Coordinator(s)	Diane BROWN, Abbie HUDSON, Morgan PITTMAN, Dima SBENATY

VCU Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Warren FELTON Joseph ORNATO Mary Beth DONNER, Jeneane HENRY
Wake Forest Baptist Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Patrick REYNOLDS Martinson ARNAN, Sanam BAGHSHOMALI, Edward-Luke BRADBURY, Cheryl BUSHNELL, Jeffrey CRAIG, Amy GUZIK, David LEFKOWITZ, Charles TEGELER Barbara ANDERSON, LaGina BARKER, Sandra NORONA
Watauga Medical Center	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Jeffrey CRITTENDEN Burton KENNEDY Shannon STOUT
WellSpan York Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Erik KOCHERT Jill BAREN, Brent BECKER, Ronald BENENSON, Kalpesh BHUVA, Mark COLLIN, Brett CUCCHIARA, William FIELDS, Mark GONZALES, Jeremy HUTCHINS, Eric KLOTZ, Justin KOCH, David LEE, John MINGLE, Nicholas PAPPAS, Marc POLLACK, Kim POPE, Teri REBERT, Robert REIF, Nels ROSE, Eric SANDERS, Lisa SMALE, Matthew STEPHENS, Robert STERLING, Robert STUNTZ, Colleen TRAN, Guy YOUNGBLOOD Barbie STAHLMAN
William Beaumont Hospital	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Robert SWOR Carol CLARK, Russell RAE, Vito ROCCO, Sunitha SANTHAKUMAR, Kelly SAWYER, Michelle TRACY-WIENER, Robert WELCH Heather GRACE, Brian WALKER
William Beaumont Hospital-Troy	Principal Investigator Co-Investigator(s) Study Coordinator(s)	Aveh BASTANI Matthew CHRISTENSEN, Aharon Gedaliah COOPER, Steven DIMSDALE, David DONALDSON, Michael OPSOMMER, Albert ROCCHINI, Robert SWOR, Brett TODD, Robert WELCH Heonia HILLOCK, Pamela MARSACK
	Principal Investigators	Sarah CHERIAN, Elzbieta WIRKOWSKI

Winthrop University Hospital	Co-Investigator(s)	Karin ANTAKY, Feliks KOYFMAN, Kathleen MICHEL, Jay YASEN Kim BYRNES
WVU Healthcare	Principal Investigators	Amelia ADCOCK, John BRICK, Claudette BROOKS
Ruby Memorial Hospital	Co-Investigator(s)	Muhammad ALVI, Erica BLACKWELL, Todd CROCCO, Christopher CUMMINGS, Desiree GORDON, Laurie GUTMANN, Martha POWER, Adrienne SALOMON, Jay SHERMAN, Matthew S. SMITH, Tanya SMITH, Hannah YETZER
Yale-New Haven Hospital	Principal Investigator Study Coordinator(s)	Joseph SCHINDLER Zachary KING, Cora ORMSETH, Lynda RYALL, Sonya ZHOU