

SUPPLEMENTARY MATERIALS

Supplementary Table 1: NCI-MATCH committees and duties

Committee	Duties	Members
<p>ECOG-ACRIN, NCI Leadership</p>	<p>Trial progress and provision of resources</p>	<p>Co-chairs: Robert Comis, Barbara Conley, Jeffrey Abrams, Lyndsay Harris, Peter O'Dwyer</p> <p>Keith Flaherty, Alice Chen, Stanley Hamilton, Paul M. Williams, Mitchell Schnall, Lalitha Shankar, Jason Cristofaro, Sherry Ansher, JoyAnn Phillips Rohan, James Zwiebel, Carlos Arteaga, Matthias Weiss, Ruth Lambersky, Steven Adler, Donna Marinucci, Jean MacDonald, Kerry Higgins, Robert Catalano, Joseph Sparano, Richard Magnan, David Patton, Warren Kibbe, Carol Weil, James Tricoli, Ravie Kem, Rodney Howells, Tali Johnson, Charles Hall, Rita Misra, Jianqiao Zhang, Naoko Takebe, Diane Dragaud, Michael Miller, Rhonda DeJoice, Robert Gray, Larry Rubinstein, Lisa McShane, Julianne Human, Anthony Kerlavage, Amy Li, Suzanna Lee, Shuli Li, Wortia McCaskill-Stevens, Edith Mitchell, Lorna Patrick, Julie Rhie, Frank Lin, John Wright, Rebecca Enos, Tudor Cayden Maican, Benjamin Kim, Margaret Cavenagh, Pamela Cogliano, Kamalia Sazali, Becky Fillingham, Jeffrey Zhang, Kevin Pollard</p>
<p>Steering Committee</p>	<p>Oversight of trial and sub-protocols</p>	<p>Co-chairs: Keith Flaherty, Alice Chen</p> <p>Lyndsay Harris, Peter O'Dwyer, Barbara Conley, Jeffrey Abrams, Robert Comis, Carlos Arteaga, Stanley Hamilton, Paul M. Williams, Edith Mitchell, James Zwiebel, Larry Rubinstein, Lisa McShane, Robert Gray, Shuli Li, Sherry Ansher, Bruce Giantonio, James Tricoli, Suzanna Lee, Lalith Shankar, Richard Magnan, Jose Galvez, Warren Kibbe, David Patton, Mark Routbort, Irina Lubensky, Wortia McCaskill-Stevens, Michael Miller, Brian Alexander, Shaji Kumar, Diane Dragaud, Rhonda DeJoice, Kerry Higgins, Julianne Human, Chih-Jian Lih, Christopher Karlovich, Anthony Kerlavage, Amy Li, Lorna Patrick, Donna Marinucci, Jean MacDonald, Patricia Runge, Lalitha Shankar, David Sims, Lynne Wagner, Rebecca Enos, Tudor Cayden Maican, Pamela Cogliano, Kamalia Sazali, Jeffrey Zhang, Benjamin Kim, Margaret Cavenagh, Becky Fillingham, Kevin Pollard</p>

Protocol Logistics	Development and submission of the master protocol, sub-protocols and amendments for review. Troubleshooting issues threatening the progress of the trial; subcommittees develop informed consent documents and procedures for incidental findings	Co-Chairs: Alice Chen, Keith Flaherty Lyndsay Harris, Peter O'Dwyer, Barbara Conley, Edith Mitchell, Robert Gray, Shuli Li, Larry Rubinstein, Lisa McShane, Gary Schwartz, Matthias Weiss, Brian Alexander, John Leonard, Paolo Caimi, Michael Balco, Janielle Bryan, Steven Adler, Mitchell Schnall, Donna Marinucci, Becky Fillingham, Jean MacDonald, Robert Catalano, Joseph Sparano, Stanley Hamilton, Paul M. Williams, David Patton, Carol Weil, Michael Montello, Rodney Howells, Tali Johnson, Sherry Ansher, Jianqiao Zhang, Rita Misra, Lynne Wagner, Michael Fisch, Mary Lou Smith, Charles Hall, Lalitha Shankar, Jeffrey Abrams, Kerry Higgins, Julianne Human, A. John Iafrate, Chris Karlovich, Ryan Pepper, Julie Rhie, Cathy Rowe, Davide Sims, Jeffrey Sklar, Stephanie Smith, Michael Ferriere, James Tricoli, Cynthia Winter, Kamalia Sazali, Benjamin Kim, Margaret Cavenagh, Rebecca Enos, Tudor Cayden Maican, Erin Souhan, Brenda McCalister-Afflick, Sanita Bharti, Pamela Cogliano, Melissa Berry, Jeffrey Zhang, Kevin Pollard, Amy Li
Agents and Genes Selection	Evaluate potential targeted agents against mandatory levels of evidence and expected eligibility alteration frequency; Evaluate levels of evidence for proposed inclusion molecular alterations;	Co-chairs: Barbara Conley, Carlos Arteaga, Lyndsay Harris Jeffrey Abrams, Peter O'Dwyer, Keith Flaherty, Alice Chen, Stanley Hamilton, Paul M. Williams, , James Tricoli, Paolo Caimi, Gary Schwartz, Julie Rhie, Nita Seibel, John Wright, David Sims, Chih-Jian (Jason) Lih, JoyAnn Phillips Rohan, Vivekananda Datta, Martin Cheever, Nilofer Azad, Debasish Tripathy, Funda Meric-Bernstam, Christine Chung, David Patton, Jo Anne Zujewski, Naoko Takebe, James Zwiebel, Sherry Ansher, Scharla Estep, Sae Han, David Hyman, S. Percy Ivy, Christopher Karlovich, Donna Marinucci, Holly Massett, Rebecca Enos, Tudor Cayden Maican, Margaret Cavenagh, Tami Tamashiro, Kamalia Sazali, Pamela Cogliano, Jeffrey Zhang, Kevin Pollard
Samples/ Sequencing	Development of methods for sample procurement, handling and processing. Develop and validate assays for tumor profiling. Develop standard operating procedures. File the Abbreviated Device Exemption with the FDA and monitor laboratory performance	Co-chairs: Williams (Frederick Lab PI), Stanley Hamilton (MDACC lab PI), Paul M. Williams (MoCha Lab) David Sims, Chih-Jian Lih, Robin Harrington, Patricia Runge, Vivekananda Datta, Robin Harrington, Patricia Runge, Vivekananda Datta, Courtney Bouk, Kneshay Harper, Erin Mosher, Marvin Majano, Maria Saeed, Chris

		<p>Karlovich, Ting-Chia Chang, Ashley Fredlock, Sean McDermott</p> <p>(MDACC Lab) Rajyalakshmi Luthra , Mark Routbort, Geeta S. Mantha, Neelima G Reddy, Jonathan Yau, Keyur Pravinchandra Patel, Rajesh R Singh, Ryan Pepper, Divya Panditi</p> <p>(MGH Lab) A. John Iafrate (MGH lab PI), Hayley Robinson, Amelia Raymond, Michael Lambert, Kathy Vernovsky, Long Phi Le</p> <p>(Yale Lab) Jeffrey Sklar (Yale lab PI), Karin Finberg, Karyn Ronski, Sandra Canosa, Jennifer Huang, T. Zenta Walther</p> <p>(Dartmouth Lab) Gregory J. Tsongalis (Dartmouth lab PI), Brianna E. Houde, Kelley Godwin, Donald C. Green, Sophie J. Deharvengt, Torrey L. Gallagher, Heather B. Steinmetz, Francine B. de Abreu, Carolyn C. Hain, Xiangjun Xiao, Jason D. Peterson</p> <p>Jeffrey Abrams, Barbara Conley, Lyndsay Harris, Peter O'Dwyer, Larry Rubinstein, Lisa McShane, David Patton, Brent Coffey, Hala Makhoulouf, Irina Lubensky, James Tricoli, Julie Rhie, Donna Marinucci, Joseph Sparano, Naoko Takebe, Rita Misra, Gabriella Armin, Mary Anderson, Jeffrey Smith, Karen Friery, Katherine Rhodes, Michael Hafez, Mark Andersen, Michael Hogan, Seth Sadis, Joan Saunders, Vineet Bansal, Julie Choppa, Pamela Cogliano, James Godsey, Ryan Gruber, Nickolay Khazanov, Nina Lukinova, Michelle Millham, Anjan Purkayastha, Bhanu Ramineni, Cathy Rowe, Jianjun Wang, Cynthia Winter, Laura Yee, Benjamin Kim, Becky Fillingham, Jeffrey Zhang, Liz Lison</p>
Informatics	<p>Development of precision medicine workflows and treatment assignment platform. Integration with assay pipelines, registration, clinical and laboratory systems. Implement automated patient and treatment arm management. Validate and implement centralized algorithm-driven treatment assignment. Provide bioinformatics support. Perform data analysis, visualization and reporting.</p>	<p>Co-Chairs: David Patton, Rick Magnan</p> <p>(NCI-MATCHBox) Brent Coffey, Tony Fu, Jeremy Pumphrey, Vivek Ramani, Shan Yang, Joseph Verbeck, Frank Spina, Matt Smith, Dave Sims, Eric Polley, Mike Hammer, Sindhu Kadiyala, Ericka Dumene, Jennifer Lee, Anjan Purkayastha, Rick Zakharov, Cindy Winter, Subhash Vallala, Lawrence Brem, Anna Lu, Qing Yu, Mark Benson, John Thompson, Nathan Birus, Anna Steinfeld, Trevor O'Conner, Matti Hendriksson, Cathy Rowe, Das</p>

		<p>Chebattina, Joshua Scibelli, Hector Donolo, Waleed Osman, Mary Anderson</p> <p>Robert Comis, Jeffrey Abrams, Lyndsay Harris, Barbara Conley, Alice Chen, Keith Flaherty, Stanley Hamilton, Mark Routbort, Paul M. Williams, Warren Kibbe, James Tricoli, Robert Gray, Shuli Li, Lisa McShane, Chih-Jian Lih, Deborah Deal, Sean McDermott, Michael Ferriere, Donna Marinucci, Leslie Nesbitt, Geeta S. Mantha, Ruth Lambersky, Jean MacDonald, Tony Fu, Nancy Anderson, William Jacob, Brent Coffey, Frank Spina, Pamela Cogliano, Kamalia Sazali, Becky Fillingham, Jeffrey Zhang, Mike Ferriere, Tom Ballou, Hongwu Zhang</p>
Toxicity evaluation	Review toxicity reports from the screening protocol and all treatment arms of NCI MATCH, and take appropriate action when warranted	<p>Co-chairs: Edith Mitchell, James Zwiebel</p> <p>Lyndsay Harris, Barbara Conley, Keith Flaherty, Alice Chen, John Wright, Robert Gray, Shuli Li; Principal investigators of each sub-protocol</p>
Site participation and education	Develop educational materials and programs for the enrolling sites; answer questions from site investigators; propose protocol changes as needed	<p>Chair: Donna Marinucci</p> <p>Jean MacDonald, Ruth Lambersky, Diane Dragaud, Mary Lou Smith, Marissa Six, Ann Kolker, Pamela Cogliano, Laura Gagnon, Andrea Denicoff, Holly Massett, Lorna Patrick, Lynn Cave, Grace Schroer, Rhonda DeJoice, Claudia Menashe, John Horigan, Kamalia Sazali</p>
Regulatory Affairs	Interacts with and submits protocols and device validation reports to FDA; Develop and execute agreements with pharmaceutical companies	<p>Co-chairs: Barbara Conley, Sherry Ansher, Donna Marinucci, Lyndsay Harris, Peter O'Dwyer, Jan Casadei</p> <p>Julie Rhie, Jason Cristofaro, Rita Misra, Tali Johnson, Rodney Howells, Anna Amar, Bhanu Ramineni, Eileen Wu, Jianqiao Zhang, Linda Zane, Nicole Monteiro, Pamela Lee, Nita Seibel, Margaret Cavenagh, Becky Fillingham, Amy Li</p>
Correlative Proposals working group	Develops procedures of application for use of specimens and data from NCI-MATCH. Reviews proposed correlative studies	<p>Co-chairs: Irina Lubensky, Stanley Hamilton</p> <p>Lyndsay Harris, Peter O'Dwyer, Barbara Conley, Keith Flaherty, Alice Chen, Richard Little, Lisa McShane, P. Paul M. Williams, James Tricoli, Shuli Li, Robert Gray, Carlos Arteaga, Edith Mitchell, Sherry Ansher, Laura Yee, Michael Balco, Naoko Takebe, Ryan Gruber, Christopher Karlovich, Jason Denner, Becky Fillingham, Margaret Cavenagh</p>
Imaging	Develop procedures for appropriate imaging; develop methods for	Co-chairs: Lalitha Shankar, Suzanna Lee

	analyzing correlation between imaging parameters and molecular alterations	Keith Flaherty, Alice Chen, Frank Lin, Peter O'Dwyer, Barbara Conley David Mankoff, Mark Rosen, Paolo Caimi, Paul Kinahan, Cynthia Leysath, Charlie Apgar, James Gimpel, Mitchell Schnall, Cara Forte, Steven Adler, Donna Hartfeil, Sharon Mallett, Sandra Carney, Pamela Cogliano, Jeffrey Zhang
Patient advocate group	Provides patient voice in development of screening and treatment protocols. Suggests additions or changes to protocol documents as needed; educates other patient advocate groups about NCI-MATCH	Co-chairs: Donna Marinucci, Mary Lou Smith Lyndsay Harris, Peter O'Dwyer, Barbara Conley, Keith Flaherty, Alice Chen, Robert Catalano, Holly Massett, Michael Katz, Patrick Gavin, Lisa Tichenor, Charles Florsheim, Tom Simon, Richard Bangs, Patricia Spears, Nancy Roach, Diane Dragaud, Lauren Green, Lauren DiFerdinando, Peggy Anthony, Pamela Cogliano, Jeffrey Zhang, Kevin Pollard
Public Relations working group	Develop appropriate messaging about NCI- MATCH for websites, publication and presentation.	Co-chairs: Diane Dragaud, Robert Comis, Peter O'Dwyer Lyndsay Harris, Barbara Conley, Keith Flaherty, Alice Chen, Stanley Hamilton, Paul M. Williams, Rhonda DeJoice, Sherry Ansher, Christopher Karlovich, Lorna Patrick, Donna Marinucci, Mary Lou Smith, Andrea Denicoff, Deborah Pearson, Peter Garrett, Eileen Resnick, Sona Thakkar, Michael Levin, Holly Massett, Shannon Hatch, Cynthia Vitelli, Michael Miller, LaTonya Kittles Hendricks, Nancy Murphy, Wendy Rueda, Sarah Schmelling, Pamela Cogliano

Supplementary Table 2: Biopsy-Related Adverse Events at interim analysis (Biopsy data have been submitted for 651 subjects.

Adverse events at least possibly related to biopsy	n=651		
	Grade		
	1	2	3
Abdominal pain	2	0	1
Bleeding post biopsy	1	0	0
Bloating	1	0	0
Cardiac dysrhythmia	0	0	1
Hematoma	1	0	0
Hypertension	0	0	1
Pain at biopsy site	1	1	0
Pneumothorax	4	2	1
Postoperative hemorrhage	1	0	0
Worst Degree	9	3	3

* Adverse events at least possibly related to the biopsy have been reported for 15 cases. These AEs are given below.)

Supplementary Figure 1: CONSORT diagram at interim analysis: 10 open sub-protocols

