Statement on COVID-19:
for patients and families affected with aortic and vascular disease

The John Ritter Research Program in Aortic and Vascular Diseases compiled recommendations and resources regarding COVID-19 infections to provide information relevant to people with aortic and vascular diseases. We would like to remind everyone to review the recommendations issued by the Centers for Disease Control and Prevention (CDC) regarding the virus.

Who is at higher risk?
COVID-19 is a new disease; therefore, we are still learning about how this affects people and the risk factors that lead to severe complications. As far as we are aware, most patients with genetically-triggered aortic disease, thoracic aortic aneurysm or dissection, or other arterial aneurysms or dissections, are not at higher risk for developing severe COVID-19 complications, unless they fall into one or more of the high risk categories below. The following categories of individuals are at higher risk for developing more severe complications with COVID-19 infections and should employ the highest protective strategies to prevent infection:

- Age greater than 60 years
- People with chronic lung disease including moderate to severe asthma, emphysema, COPD
- People with high blood pressure (regardless of other cardiovascular disease), coronary artery disease, and heart failure
- People with diabetes
- People with significant valve regurgitation causing symptoms or requiring medicines, and cardiac dysfunction
- Immunocompromised individuals, such as those undergoing treatment for cancer or autoimmune disease, and anyone taking immune weakening medications

Patients with ACTA2 mutations that disrupt the 179 amino acid in the protein (i.e. R179 mutations), also called "smooth muscle dysfunction syndrome", may be at an increased risk for COVID-19 complications because they can also have pulmonary disease. The vast majority of individuals with ACTA2 alterations do not have pulmonary disease, and should not be at increased risk.
Statement on COVID-19:
for patients and families affected with aortic and vascular disease (continued)

Can I continue to take my prescribed medications?
In accordance with guidance published by the American Heart Association, American College of Cardiology, and Health Failure Society (3/17/20), we recommend that you continue to take your medications as prescribed and not make changes without consulting your healthcare provider. Many patients with aortic and vascular disease take blood pressure (BP) medications including angiotensin receptor blockers (i.e. losartan), beta blockers, and ACE inhibitors. These medications serve a critical function for patients with aortic and vascular disease. Currently, we do not have data to show that any of these medications lead to harmful or beneficial effects in patients affected with COVID-19. Please continue these medications because abruptly stopping your medications may increase your risk for acute aortic dissection.

What about cold medicine and antibiotics?
- We recommend avoiding certain types of over-the-counter cold and cough medicines that contain decongestants like pseudoephedrine, ephedrine, phenylephrine, naphazoline and oxymetazoline. These drugs may raise your blood pressure. Please consult with your provider or pharmacist about an alternative that might be safer for you.
- **Fluoroquinolone antibiotics should be avoided.** The antibiotics in this class are Avelox, Cipro, Factive, Levaquin, and Ofloxacin. These antibiotics are sometimes used to treat respiratory infections and may increase your risk for aortic dissection. If you are prescribed one of these antibiotics, please ask your provider for an alternative.

Resources
- Read the Marfan Foundation statement about COVID-19 [here](#).
- The Marfan Foundation released a webinar to address questions about COVID-19 that you can access [here](#), and will be hosting another webinar on March 31.
- The CDC’s guidance on COVID-19 can be found [here](#).

The JRRP is continuing to enroll research participants with aortic dissections and aneurysms at this time. **Contact us at JRRP.research@uth.tmc.edu.** Stay safe and healthy!