# Risk of Cardiovascular Disease and Rheumatoid Arthritis

Patients with rheumatoid arthritis (RA) have approximately 50% greater risk for cardiovascular disease (CVD) compared to the general population, and CVD is the leading cause of death in RA patients.<sup>1,2</sup>



is a general name for a wide variety of diseases, disorders and conditions that affect the heart and blood vessels.<sup>3</sup>

Inflammation throughout the entire body, also known as systemic inflammation, contributes to CVD risk separately from traditional CV risk factors, such as high blood pressure or smoking.<sup>4,5</sup>

#### RHEUMATOID ARTHRITIS

is a chronic inflammatory disease that causes joint pain, stiffness, swelling and decreased joint movement.<sup>6</sup>

Small joints in the hands and feet are most commonly affected.<sup>6</sup>

# Why are RA patients at a higher risk for CVD?

Inflammation caused by RA may affect your organs, such as eyes, skin, lungs, heart and arteries. Long-lasting inflammation can damage arteries and may cause the buildup of plaque over time. Plaque hardens and narrows the arteries, limiting blood flow to vital organs. L2

## What you can do

Systemic inflammation can affect arteries and organs and increase the risk for CVD. Monitoring and controlling inflammation from RA is important for reducing your CVD risk.<sup>6,8</sup>

Work with your healthcare provider to help control RA inflammation and learn your three-year CVD risk with the Vectra Cardiovascular Risk test.



CARDIOVASCULAR RISK

## Vectra® Cardiovascular (CV) Risk Helps Accurately Predict Risk for Cardiovascular Events Over the Next Three Years in Patients with Rheumatoid Arthritis, 40 years and Older



#### CARDIOVASCULAR RISK

Vectra CV Risk is a validated test that measures proteins in the blood, called biomarkers, to assess your RA inflammation and predict your risk of having a major cardiovascular event, e.g., heart attack or stroke, in the next three years. Vectra CV Risk is the only multibiomarker-based CV risk predictor for RA patients.<sup>9</sup>



Vectra Score



3 Blood Biomarkers



Age



**Clinical History** 

#### What does my Vectra CV Risk mean?

The Vectra CV Risk indicates the likelihood you will have a CV event in the three years from the date of the test. Your Vectra CV Risk result is calculated using your Vectra Score, three of the Vectra biomarkers, age and clinical risk factors, such as tobacco use, high blood pressure and diabetes. If your risk for CVD is elevated, treatment options should be discussed with your doctor and may include treating RA inflammation or other CV risk factors, starting medications and making lifestyle changes.

### How does my Vectra Score correlate with my Vectra CV Risk?

The Vectra Score measures your RA inflammation that may affect your CV risk. Patients of the same age, sex and medical risks have a lower chance of a CV event when their Vectra Score is in a low Vectra category. Vectra can be used to monitor your RA disease activity with the goal of getting your RA into low disease activity.

## Talk to your internist or cardiologist

Make sure to let your primary care provider, internist, or cardiologist know that you have RA, as RA increases your risk for a CV event. Discuss ways to improve your lifestyle with your provider, such as exercise and diet and discuss the types of medication you may be taking.

# MY VECTRA SCORE [Low: 1-29; Moderate: 30-44; High: 45-100]

# MY VECTRA CV RISK SCORE

Δ٦		T	C	г
 4				

# To learn more visit labcorp.com/vectracv

1. Aviña-Zubieta JA, Choi HK, Sadatsafavi M, Erminan M, Esdaile JM, Lacaille D. Risk of cardiovascular mortality in patients with rheumatoid arthritis: a meta-analysis of observational studies. Arthritis Rheum. 2008;59(12):1690-7.

2. Andrews LW. What Rheumatoid Arthritis Does to Your Heart. Healthgrades. https://www.healthgrades.com/right-care/rheumatoid-arthritis-does-to-your-heart. Published October 3, 2019. Accessed September 24, 2020. 3. Staff HE. Heart Disease. Healthgrades. https://www.healthgrades.com/right-care/heart-health/heart-disease. Published May 17, 2019. Accessed September 25, 2020. 4. Chodara AM, Wattiaux A, Bartels CM. Managing Cardiovascular Disease Risk in Rheumatoid Arthritis: Clinical Updates and Three Strategic Approaches. Curr Rheumatol Rep. 2017 Apr;19(4):16. doi: 10.1007/s11926-017-0643-y. PMID: 28361332; PMCID: PMC5789778.

5. Solomon DH, Kremer J, Curtis JR, Hochberg MC, Reed G, Tsao P, et al. Explaining the cardiovascular risk associated with rheumatoid arthritis: traditional risk factors versus markers of rheumatoid arthritis severity. Ann Rheumatoid. 2015; 2016;99:1920-5. 6. Rheumatoid Arthritis (RA). Centers for Disease Control and Prevention in https://www.cdc.gov/arthritis/basics/rheumatoid-arthritis.html. Published July 27, 2020. Accessed September 25, 2020. 7. Staff. Rheumatoid Arthritis (RA) Complications. https://www.webmd.com/rheumatoid-arthritis-complicationss#:-text=When%20you%20think%20of%20rheumatoid,blood%20vessels%2C%20and%20ther%20 organs. 8. Dhillon N, Liang K. Prevention of stroke in rheumatoid arthritis. Curr Treat Options Neurol. 2015;17(7):356. doi:10.1007/s11940-015-0356-3. 9. Curtis JR, Fenglong X, Crowson CS, et al. Derivation and internal validation of a multi-biomarker-based cardiovascular disease risk prediction score for rheumatoid arthritis Research & Therapy

