

# [Cardiovascular disease and cancer are the two](https://assignbuster.com/cardiovascular-disease-and-cancer-are-the-two/)

Cardiovasculardisease and cancer are the two leading causes of cancer worldwide (Koene1).  The two diseases are usuallyconsidered to be separate, but there may be a link between the two.  The experiment being tested is whether canceris linked to cardiovascular disease, and if having cancer will increase thechance of acquiring cardiovascular disease. Thedifferent experiments conducted were performed on different groups, which helpbetter understand if there is a link to cardiovascular disease and cancer inthe entire population, or just a specific group. In article one, Journal of ClinicalOncology, the scientists surveyed “ case data from the years 1973-2011. Theythen took that information to analyze the different races and genders, andtheir risk of contracting cardiovascular disease (Beckman 1). In article 2, ThePatient Education & Counseling article, the scientists “ recruited English speakingbreast cancer survivors in New Jersey” (Christian 1).  They conducted surveys and interviews tothose breast cancer survivors.

Theysurveyed those individuals and asked them questions about their medicalhistory, and any other questions that pertained to the scientists experiment.  In article three, the scientists “ explore therisk factors common to both CVD and cancer, highlighting the majorepidemiological studies and potential biological mechanisms that account forthem” (Koene 1). Thescientists found and reported that there was a link between cancer andcardiovascular disease in all three of the articles.

According to article three, there were modifiableCardiovascular Disease risk factors along with non-modifiable risk factors(Koene 1).  There was an alarming linkbetween obesity, cancer, and Cardiovascular disease.  In article three, the scientists researchedwhether obesity, cancer, and cardiovascular disease had a shared biology.  Leptin and interleukin-6 are both often foundin obese patients.  Leptin has beenproven to cause cardiovascular disease, while interleukin-6, often found inadipose tissue, was linked to cancer. A result found in all three of thearticles found that African Americans, who had previously had cancer as a childor younger adult, are far more likely to have cardiovascular disease and diefrom it than any other race.  All threearticles also found that breast cancer was a leading cause to cardiovasculardisease.

Allthree of the articles are trying to uncover if there is a link between cardiovasculardisease and cancer, and they all did similar experiments and received similarresults.  All three articles found thatAfrican American women are at the highest risk of cancer and cardiovasculardisease.  Two of the three articles foundthat breast cancer was the leading cancer that could cause cardiovasculardisease, which is why women are more likely to get cardiovascular disease afterhaving cancer. Articleone and two, studied and investigated whether “ cardiovascular risk differs as afunction of race and primary cancer type” (Berkman 1).  The scientists main goal in this article wasto determine whether race played a large role in cardiovascular disease riskafter having cancer. The scientist also observed whether different cancers weremore likely to cause cardiovascular disease. Article three differed fromarticle one and two because the scientist focused on the whole populationrather than a specific gender and cancer. The scientists also researched “ modifiable and non modifiable CVD risksrelated to cancer.

Thereare many different strengths and weaknesses in all of the research andexperiments performed.  Article one, studied 164, 316 different patients, which is a strong amount of individuals foran experiment.  Although they studied andobserved a lot of individuals, 10% were African Americans, 82% were white, and8% were other races (Berkman 1).  Thescientists results about African American women who had cancer are more likelyto develop cardiovascular disease could be different if they had an even amountof individuals among the different races. Article two also observed many individuals, which is a strength, but thescientists only observed English speaking African Americans and White breastcancer survivors in New Jersey.

This partof the experiment is a weakness because 45% of the population in New Jersey iswhite, while 12% are African American, according to Sergio Bichao, an author atCentral Jersey.  Article three has thestrongest amount of information.  Articlethree observed the entire population rather than specific genders andraces.

A large weakness is thescientists didn’t specifically state the amount of individuals they wereobserving, but the scientists providing statistics implying that a large amountof individuals were observed. Articletwo was the only article that contained bias. Article two only observed English speaking breast cancer survivors inthe state of New Jersey.

Since there aremore than three times the amount of white people in New Jersey, the scientistwere most likely trying to skew the results. Articleone and two were similar to the question, does cancer cause cardiovascular disease, but article three was the closest. Article one and two focused specifically on women and breastcancer.

Article three was very similarto the stated question because the scientists researched the entirepopulation.  The scientists also listednon modifiable risk factors, “ including age, sex, and race/ethnicity, areuncontrollable features that influence incidence rates of both cancer and CVD”(Koene 1).  Dr. Koene also listed “ modifiablecardiovascular risk facots and their cancer risk”.  Obesity was the leading cause of both Obesityand Cardiovascular disease (1). Articleone is relevant to cancer and cardiovascular disease because the scientists researchedthe affects that cancer at a young age had on women, and then the chances thesewomen would develop cardiovascular disease. Article two was also relevant because the scientists researched whetherbreast cancer lead to cardiovascular disease. Article three was the most relevant because it gave many risk factors tocardiovascular disease from multiple types of cancer.

The scientists also found some ways thatcardiovascular disease, and even cancer, can be prevented. Allthree articles further proved the point that cancer can lead to cardiovasculardisease.  Genetics play a large role inthe the risk of getting both cancer and cardiovascular disease.  Iwill be adding on to Dr. Berman’s Experiment, but I will be creating a biggerpopulation.  The experiment beingconducted will be a large group of both women and men separated into twogroups.

The twp groups will beindividuals with cancer, and individuals who were diagnosed with cardiovasculardisease after having cancer.  As thescientist, I will observe these individuals for 20 years.  For those 20 years, the individuals will haveyearly checkups.  The patients withcancer will be observed to see if they are starting the develop cardiovasculardisease.  The patients who already havecardiovascular disease will be observed and ask to record all of the activitythat is done in his or her life.  Thiswill help determine if the cardiovascular disease was non modifiable ormodifiable.