Annotated Bibliography

Primary Sources

"A CAR T Cell Killing an Acute Lymphoblastic Leukemia Cell." *Youtube,* uploaded by The Children's Hospital of Philadelphia, 16 Jan. 2019. https://www.youtube.com/watch?v=ADUOSKIN17k. Accessed 11 November 2019.

This video shows us the way a CAR-T cell kills a cancer cell. This helps us understand the process behind CAR-T cell therapy and how it works.

Adams, Mike. “Chemotherapy Stick.” Science-Based Medicine, 2009, https://sciencebasedmedicine.org/chemotherapy-doesnt-work/. Accessed 30 January 2020.

This image provides us with a political cartoon from the point of view of those who believe that chemotherapy is a scam from big corporations.

Adams, Mike. "The truth about Chemotherapy and the Cancer Industry." Science-Based Medicine, 2009, https://sciencebasedmedicine.org/chemotherapy-doesnt-work/. Accessed 30 January 2020.

This image is a political cartoon of big corporations making profits off patients who are desperate for treatments such as chemotherapy to save their lives, no matter the cost.

“Alfred Gilman (1908-1984), American Pharmacologist and Nitrogen Mustard Gas Researcher.” National Library of Medicine, 1963, medicine.yale.edu/news/yale-medicine-magazine/from-the-field-of-battle-an-early-strike. Accessed 15 November 2019.

This image is of Alfred Gilman, one of the main researchers of nitrogen mustard gas being used for chemotherapy. It adds emphasis to who he was and the type of research he conducted.

"All-Star Operation" from *William Stewart Halsted* by W. G. MacCallum, *Johns Hopkins Press*, 1904, www.ncbi.nlm.nih.gov/pmc/articles/PMC2804495/. Accessed 10 January 2020.

This image provides a visual representation of surgeries that were conducted before chemotherapy at The John Hopkins Medical Institution.

"An Original X-ray Cancer Therapy System in Use," *The Breast Cancer Resource*, 1922. https://www.imaginis.com/radiotherapy/history-of-radiation-therapy. Accessed 20 January 2020.

This image shows the original x-ray cancer therapy system that was used in the early 1900s. It provides a comparison on the progression of the medical systems used in the early 20th to the 21st century.

"Antifolate, Chemotherapy and a Cure for Leukemia." *50 Years Forward*, Boston Children Hospital, 20 Nov. 2018, bch150.childrenshospital.org/bch_timeline/antifolate-chemotherapy-and-a-cure-for-leukemia/. Accessed 10 January 2020.

Image shows a nurse treating a child that has cancer, leukemia. This provides how nurses led the first clinical trials of a chemotherapy drug to those who had leukemia.

"A Photo of a Surgical Amphitheatre Performing Surgery on a Patient." *Library Of Congress*, 1902, www.sciencephoto.com/media/681550/view/surgical-amphitheatre-1902. Accessed 10 December 2020.

This is a photo showcasing a surgery procedure of taking out cancer tumors in the brain in front

of medical students. This provides a visual representation on how the common treatment to get rid of cancer was surgery.

Beech, James. "Deadly effect of mustard gas in war time Australia brought to light in Death by Mustard Gas." *The Daily Telegraph*, 2015, https://www.dailytelegraph.com.au/newslocal/northern-beaches/deadly-effect-of-mustard-gas-in-war-time-australia-brought-to-light-in-death-by-mustard-gas/news-story/f51e586bd1e5539a654c9edc137726ee. Accessed 13 March 2020.

This image provided us with how the mustard gas affects the patient's body. In the image it can be seen that the patient has blisters and tumors from the gas.

Bessho, Marc. "Military orders from April 1944 for Japanese-American soldiers, including Bessho, who were part of the military's mustard gas testing at Edgewood Arsenal in Maryland." *NPR,* Army Service Forces, 2015, https://www.npr.org/2015/06/22/415194765/u-s-troops-tested-by-race-in-secret-world-war-ii-chemical-experiments. Accessed 10 March 2020.

This picture shows a list of Japanese-American soldiers who were subjected to testing in the mustard gas experiments. It shows how a lot of the testing was race-based.

Biden, Joe. "My Report to the President." Medium, Cancer Moonshot℠, 17 Oct. 2016, medium.com/cancer-moonshot/my-report-to-the-president-3c64b0dae863. Accessed 14 April 2020.

This Website gave us insight on how cancer research is being conducted by the government today. This is a report from Biden about how he plans on conducting more cancer research.

"Cancer Moonshot℠." National Cancer Institute, 2016, www.cancer.gov/research/key-initiatives/moonshot-cancer-initiative. Accessed 14 April 2020.

This website allowed us to investigate how the government today is handling cancer research today. This is the official site of the endeavour to the project suggested by Biden.

"Chemotherapy: What's Old Is New Again - Advancements in Chemotherapy for Cancer." Celgene, 23 May 2019, https://www.celgene.com/chemotherapy-treatment/. Accessed 25 November 2019.

This source allows us to see how chemotherapy has improved and evolved especially in today's modern times. It establishes chemotherapy's roles in helping cure cancer and how over the years chemotherapy is not as damaging as it once was.

"Comparison Between Sulfur Mustard and Nitrogen Mustard." Royal Society of Chemistry, 2012, pubs.rsc.org/en/content/articlelanding/2012/ob/c2ob26482j#!divAbstract. Accessed 27 January 2020.

This image showcases the chemical compounds used in nitrogen mustard and sulfur mustard. It is comparing the two, providing a background on the chemical components that made nitrogen mustard the better choice for the first trials of chemotherapy.

"Dean of Yale Medical School, Milton C Winternitz." Yale School of Medicine, 1998, doc1.med.yale.edu/historical/bicentennial/1910/1921.html. Accessed 20 November 2019.

This image was used to show Milton Winternitz, the Dean of Yale Medical School. This provided information on who was the first to want to conduct research on nitrogen mustard gas for cancer treatments.

"FDR Addresses NIH." FDR Library, 1940, www.fdrlibrary.org/nih-footage. Accessed 24 November 2019.

This image showcases Franklin D. Roosevlet's support on researching how cancer works and spreads. He also is supporting institutes to find a cure for one of the most top leading causes of death in the U.S., cancer.

Gilchrist Harry and Philip B. Matz. "The Residual Effects of Wartime Gases." *Chemical Warfare and Medical Response During World War I*, 1933, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2376985/#r44. Accessed 15 March 2020.

This is a quote from one of the doctors who saw the effects of mustard gas and its terror. This was added to the before chemotherapy page.

"Grant's Cancer Survival Story: Beating Acute Lymphoblastic Leukemia," *Youtube*, uploaded by Texas Children's Childrens Hospital, 2 Jan 2013.

This is a video of a leukemia survivor that recovered from cancer through chemotherapy treatments. This helped show us that chemotherapy has saved thousands of children affected by cancer such as leukemia. New technological advancements can help better cancer treatments and lower mortality rates.

"Gustaf E. Lindskog, Former Thoracic Surgeon and Chair of Surgery at Yale School of Medicine." National Library of Medicine, 1954, medicine.yale.edu/news/yale-medicine-magazine/surgeons-find-new-twists-to-an-old-story/. Accessed 16 November 2019.

The image of Lindskog provides background on his career, a thoracic surgeon. He was the one to provide Gilman and Goodman access to his clinic to conduct the first chemotherapy trial.

Hale, Amelia Phillips. "Rollins Edwards, who lives in Summerville, S.C., shows one of his many scars from exposure to mustard gas in World War II military experiments. More than 70 years after the exposure, his skin still falls off in flakes. For years, he carried around a jar full of the flakes to try to convince people of what happened to him." NPR, 2015, https://www.npr.org/2015/06/22/415194765/u-s-troops-tested-by-race-in-secret-world-war-ii-chemical-experiments. Accessed 10 March 2020.

This is a picture of a World War II veteran showing off the effects over the years of being exposed to mustard gas. It provides an insight to the pain and suffering that the mustard gas experiments caused.

"In 1953, 21-year-old Edward M. Kennedy (left) presented Ted Williams (second from right) with a $50,000 check from the Joseph P. Kennedy, Jr. Foundation for the Jimmy Fund." The Brearley Collection, 1953, www.dana-farber.org/newsroom/news-releases/2009/senator-kennedy-was-driving-force-against-cancer-at-dana-farber-and-beyond/. Accessed 29 January 2020.

This source showcases how American politicians such as Kennedy supported cancer institutes such as the Dana-Farber. American politicians were in favor of cancer research to help lower mortality rates.

Lao, Juan, et al. "Liposomal Doxorubicin in the Treatment of Breast Cancer Patients: A Review." *Journal of Drug Delivery*, Hindawi, 25 Mar. 2013, https://www.hindawi.com/journals/jdd/2013/456409/. Accessed 25 November 2019.

This source talks about the includement of Liposomal in Breast Cancer drugs and how it could possibly help with the process of getting the drugs to work faster. This allowed to understand how chemotherapy works and how sometimes scientists have to experiment in order to get a better result.

"Louis Goodman (1906-2000), American Pharmacologist and Graduate From John Hopkins Medical School." National Library of Medicine, 1965, resource.nlm.nih.gov/101416763. Accessed 29 January 2020.

This image shows Louis Goodman, one of the main researchers for using nitrogen mustard gas for chemotherapy. He was one of the scientists who conducted the first chemotherapy trials on J.D. This image provides historical background for the foundation of chemotherapy.

"Mary Lasker at the National Cancer Advisory Board." Lasker Foundation, circa 1950s, http://www.laskerfoundation.org/new-noteworthy/articles/richard-nixons-war-cancer/. Accessed 17 December 2019.

This is an image of Mary Lasker, Richard Nixon, and American politicians pressuring Congress to support cancer research. This image provides information on how cancer research became supported and funded by the government.

"Mary Lasker (second from left) at the Continental Insurance Company Research Institute in October 1968." Columbia University, 1968, http://www.columbia.edu/cu/lweb/digital/collections/nny///laskerm/photos/104467.html. Accessed 18 January 2020.

This image provides an insight of Mary Lasker in a laboratory supporting research on cancer as Columbia University.

"Mary Lasker: Still Determined To Beautify the City and Nation." NY Times, 28 Apr. 1974, www.nytimes.com/1974/04/28/archives/mary-lasker-still-determined-to-beautify-the-city-and-nation.html. Accessed 17 January 2020.

This is a newspaper article on Mary Lasker highlighting her need for changing society for the better. This showcases her philanthropy in wanting to help those in need, such as cancer patients.

"Medical Notes on the First 67 Patients Treated Using Chemotherapy." JAMA, 21 September 1946, medicine.yale.edu/news/yale-medicine-magazine/from-the-field-of-battle-an-early-strike/. Accessed 9 September 2019.

This image provides information on the first sixty-seven patients that were treated for cancer using chemotherapy.

Meller, Abbey, and Hauwa Ahmed. "How Big Pharma Reaps Profits While Hurting Everyday Americans." Center for American Progress, 30 Aug. 2019, https://www.americanprogress.org/issues/democracy/reports/2019/08/30/473911/big-pharma-reaps-profits-hurting-everyday-americans/. Accessed 25 November 2019.

This source talks about Big Pharma and their strategic plan in order to maximize profits from American citizens. Big Pharma is a big monopoly and consumers are always on the shorter end of the stick.

Mukherjee, Siddhartha. *The Emperor of All Maladies*. New York, Simon & Schuster, 2010, pp. 306.

This is an image of surgery that was done on the breast of patients who had breast cancer before chemotherapy was invented. This provides insight on how cancer treatments prior to chemotherapy had little to no effect on curing cancer.

Murphy SL, et al. "Number of Deaths from 10 Leading Causes — National Vital Statistics System, United States, 2010." *50 Years Forward*, Centers for Disease Control and Prevention, 1 Mar. 2013**,** www.cdc.gov/mmwr/preview/mmwrhtml/mm6208a8.htm. Accessed 13 January 2020.

This source talks about the world's leading causes of deaths and the second would be cancer. This helps us understand how impactful cancer is and why we need treatment for it.

Nga, Rachel. Personal Interview. 15 February 2020.

This interview helped us understand about how topic because it allowed us to understand modern technology and the way Biotech is involved with cancer research.

"NIH campus ca. 1947. The National Cancer Institute 'Building 6' can be seen on the right." *A Short History of the National Institutes of Health*, National Institute of Health, https://history.nih.gov/exhibits/history/docs/page_05a.html. Accessed 14 February 2020.

This is a source that allows us to see the National Cancer Institute back in 1947. Knowing about the National Cancer Institute is significant because it lets us understand the impact of cancer and how needed chemotherapy was.

"Nitrogen Mustard Gas Developed From World War I." Yale School of Medicine, 1918, medicine.yale.edu/news/yale-medicine-magazine/from-the-field-of-battle-an-early-strike. Accessed 14 December 2019.

This source provides the history of how nitrogen mustard was derived from World War I. It was then used to study chemical compounds that may help treat cancer, thus chemotherapy was developed.

Nixon, Richard. National Cancer Act of 1971. Washington D.C., 1971. https://dtp.cancer.gov/timeline/flash/milestones/M4_Nixon.htm. Accessed 26 November 2019.

This source gave us information about Nixon's dealing with Cancer. He promised that there would be a cure from the researchers and promised to fund research on any cancer research in his speech when declaring a war on cancer.

"Our Journey." *Emily Whitehead Foundation*, 2014, emilywhiteheadfoundation.org/our-journey/. Accessed 15 March 2020.

This source allowed us to see a more in-depth story on Emily's treatment and what was the process behind her treatment. This also gives an updated tab on Emily and how she is progressing through life today.

"Photograph of Rhoads taken by the U.S. Army." United States Army, 1943.

This is a picture of Dr. Cornelius Rhoads when he was serving in the military of the United States. It shows him as an important figure in the development of chemotherapy.

"President Nixon signing the National Cancer Act 0f 1971." National Cancer Institute, 1971, www.cancer.gov/about-nci/overview/history/national-cancer-act-1971. Accessed 23 January 2020.

This source goes talks broadly about the National Cancer Act of 1971 and how it was played out during this year. It also talks about what the act actually was and how it was able to actually do

something in the U.S.

"Public Laws Enacted During the First Session of the Seventy-Fifth Congress of the United States of America." Statutes at Large, Library of Congress, 5 Aug. 1937, https://www.loc.gov/law/help/statutes-at-large/75th-congress/session-1/c75s1ch565.pdf. Accessed 21 Oct. 2019.

A primary source document that records the details of how the Seventy-Fifth Congress of the United States and President Franklin D. Roosevelt passed the National Cancer Act of 1937. Describes the resources given by the government towards cancer research.

Poston Chronicle. (Poston, AZ) 16 Dec. 1944. Retrieved from the Library of Congress, www.loc.gov/item/sn83025333/1944-12-16/ed-1/. Accessed 25 November 2019.

The source provides us with fear of reusing nitrogen mustard gas during World War II. It also gave us historical context during the research of nitrogen mustard compounds for chemotherapy.

Roosevelt, Franklin D. National Cancer Act of 1937. Washington D.C., 1937, https://www.cancer.gov/about-nci/overview/history/national-cancer-act-1937. Accessed 26 November 2019.

This source helped us see how the government helped with the development of cancer treatments through help funding their research. Franklin D. Roosevelt enacted an act that established the National Cancer Institute which is one of the leading cancer research institutes in America.

"Sidney Farber, M.D. - founder of Children's Hospital Cancer Research Foundation in the 1950's and 1960's." Dana-Farber Cancer Institute, 1960, www.dana-farber.org/about-us/history-and-milestones/. Accessed 29 Sept. 2019.

This source talks about the founding of the Dana Farber Institute which is a prominent cancer

institution which helped with the research and funding of curing cancer.

"Soldier Affected by Nitrogen Mustard Gas in WWI." Library and Archives Canada, 1916, www.worldwar1centennial.org/index.php/injuries-in-world-war-i.html. Accessed 16 December 2019.

This source talks about World War I and the injuries the soldiers faced during the war. It also mentions the usage of mustard gas which was the basis of chemotherapy and how it affected soldiers.

Stock H., John. William Stewart Halsted, National Library of Medicine, 1922, ihm.nlm.nih.gov/images/B14034. Accessed 20 January 2020.

This source provides us with an image that we were able to use for our website. It gave us a picture that helped us give a visual to what we were trying to convey.

Strong, Wendell M. "Is Cancer Mortality Increasing?." *Cancer Research*, American Association for Cancer Research, July 1921, https://cancerres.aacrjournals.org/content/68/21/8643#ref-list-1. Accessed 29 Sept. 2019.

Research conducted with the purpose of recording the death rates in the early 20th century due to cancer. Includes surveys and percentage rates categorized by age.

"Survival after radical mastectomy or breast-conserving therapy." *Oncohema Key,* 2002, oncohemakey.com/halsted-radical-mastectomy. Accessed 30 January 2020.

This source describes mastectomies throughout history and how they were conducted. It helped with the Before Chemotherapy tab of our website.

"Ted Williams and Tom Yawkey talk baseball with Dr. Farber." *Dana-Farber Cancer Institute*, 1960, www.dana-farber.org/about-us/history-and-milestones/sidney-farber,-md/. Accessed 4 November 2019.

This source talks about Sidney Farber who was a significant figure in the cancer research community. He would study leukemia and try to find out the cure for it. This also talks about his life and what led up to his medicine career.

"The Vice President's Cancer Moonshot." *National Archives and Records Administration*, National Archives and Records Administration, obamawhitehouse.archives.gov/cancermoonshot. Accessed 15 April 2020.

This website is an official website from the Obama administration. It informed us about how the research for cancer treatments was being conducted.

"This photograph of Hugh Hampton Young performing perineal prostatectomy was taken in 1927." *John Hopkins Magazine*, 1927, pages.jh.edu/jhumag/0209web/archives.html. Accessed 17 January 2020.

This source gave is pictures of a perineal prostatectomy which was something they would do before chemotherapy. This lets us see how cancer was treated before chemotherapy and understand how dangerous the procedures.

"Treatment with the Finsen lamp in 1900." Wellcome Library, London, 1900, https://rarehistoricalphotos.com/history-of-light-therapy-1900-1950/. Accessed 7 January 2020.

This source shows us another way to treat cancer before chemotherapy. The logic behind this would be that light would kill bacteria and infections. They would leave patients in the light for

hours.

"World War history : daily records and comments as appeared in American and foreign newspapers, 1914-1926 ([New York]), November 1, 1919, (1919 November 1-30)." *Library of Congress* 1 Nov. 1919, www.loc.gov/item/2004540423/1919-11-01/ed-1/. Accessed 25 November 2019.

This source provided us with information on World War I and what derived from the war, such as nitrogen mustard gas that was later used for chemotherapy treatments.

"World War I Nurses: The Journal of Emma Elizabeth Weaver." *The Women's Memorial*, Women's Memorial, 2019, https://www.womensmemorial.org/exhibits/detail/?s=world-war-i-nurses-the-journal-of-emma-elizabeth-weaver. Accessed 25 December 2019.

World War I nurse Elizabeth Weaver's journal provides us with primary sources of the hardships nurses went through during World War I warfare, especially nitrogen mustard gas. A direct quote provides us with how terrifying the gas was, killing many men.

Secondary Sources

"About Us." Dana, www.dana-farber.org/about-us/history-and-milestones/sidney-farber,-md/. Accessed 11 Nov 2019.

This article talks about Sidney Farber's successes in finding a cure for leukemia. He found remission within cancer cells. I thought this source was very helpful in helping us find the progression and progress in cancer treatments from chemotherapy.

Altman, Lawrence K. "Dr. Louis S. Goodman, 94, Chemotherapy Pioneer, Dies." *The New York Times*, The New York Times Company, 28 Nov. 2000,

https://www.nytimes.com/2000/11/28/us/dr-louis-s-goodman-94-chemotherapy-pioneer-dies.html. Accessed 26 Oct. 2019.

This article describes the life and accomplishments of Dr. Louis Goodman. Details his entire life's work and how much time he dedicated to his work.

"Approved checkpoint inhibitor drugs." Chemistry World, 2018, www.chemistryworld.com/news/cancer-immunotherapy-spreads-rapidly/3009638.article. Accessed 5 January 2020.

This talks about how more immunotherapy drugs are getting approved specifically Libtayo which helped recognize and kill cancer cells. Most of these new and approved drugs are being used hand in hand with chemotherapy.

Barker, Anna D. "Legislative History of the National Cancer Program." Holland-Frei Cancer Medicine. 6th Edition., U.S. National Library of Medicine, 1 Jan. 1970, https://www.ncbi.nlm.nih.gov/books/NBK13873/. Accessed 25 November 2019.

This source lets us understand the negative impact of cancer on the country and how badly it needed to be solved. Which is why the National Cancer Program was made and it allows us to see a broader view of the country's history with the U.S.

Bartosch, Jamie. "Three years after CAR T-cell therapy for lymphoma, patient still cancer-free." *UChicago Medicine*, The University of Chicago Medical Center, 18 Oct. 2019, https://www.uchicagomedicine.org/forefront/cancer-articles/a-walking-miracle-car-t-cell-therapy. Accessed 26 January 2020.

This talks about one of the more modern ways of curing cancer and it is CAR-T cell therapy which is derived from chemotherapy. It takes account of a surviving patient who has used this

method and how he is still cancer free.

"Biographical Overview | Mary Lasker - Profiles in Science." *U.S. National Library of Medicine*, National Institutes of Health, profiles.nlm.nih.gov/spotlight/tl/feature/biographical-overview.

This source helps inform us about Mary Lasker and her influence on everyone around her and her life dedicated to cancer research and studies.

Blankenship, Kyle. "Novartis' new cell therapy facility could ease manufacturing squeeze for CAR-T med Kymriah," FiercePharma, 2019, https://www.fiercepharma.com/manufacturing/novartis-new-cell-therapy-facility-could-ease-manufacturing-squeeze-for-car-t-med. Accessed 7 February 2020.

This source shows us how a specific type of CAR-T cell drug looks and how it is taken in by a patient. This helps us understand the process behind cancer treatment.

Bonadonna, G. "Does Chemotherapy Fulfill its Expectations in Cancer Treatment?." *Annals of Oncology*, Kluwer Academic Publishers, 5 Sept. 1989, https://www.annalsofoncology.org/article/S0923-7534(20)30944-3/pdf. Accessed 12 March 2020.

This is a document that reviews the successes of chemotherapy as a cancer treatment. It also gives context as to how chemotherapy was developed and who contributed to its development.

"Cancer Progress Timeline." ASCO, https://www.asco.org/research-progress/cancer-progress-timeline/chemotherapy. Accessed 25 November 2019.

This source gives a broad view of achievements against cancer over the years. The timeline starts

back in the mid 1800s and goes up today, which really helps us understand how far we have come with cancer research.

"Cancer Stat Facts: Cancer of Any Site." *Surveillance, Epidemiology, and End Results Program*, National Cancer Institute, 2019, https://seer.cancer.gov/statfacts/html/all.html. Accessed 20 January 2020.

This source gives us basic facts about cancer and its mortality rates. It lets us understand how many people are affected by cancer each year and helps us understand why chemotherapy and its impact is so important.

"Cancer Survivorship --- United States, 1971--2001." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5324a3.htm. Accessed 25 November 2019.

This source talks about cancer survivorship from 1971-2001. We can use this source to compare the survivorship back in those years to now, which could help us see how advancements in medical research has made an impact on cancer survivorship.

"CAR T-cell Therapy." *Siteman Cancer Center*, National Comprehensive Cancer Network, 2017, https://siteman.wustl.edu/treatment/cancer-types/lymphoma/car-t/. Accessed 19 February 2020.

This talks about CAR-T cell therapy which is a new type of way to treat cancer. It helps define what it is and how it could be used the best. This allows us to understand the new modern medicine and how it has helped with cancer survivorship.

"CAR T-Cell Therapy Approved for Some Children and Young Adults with Leukemia." National Cancer Institute, 2017, https://www.cancer.gov/news-events/cancer-currents-blog/2017/tisagenlecleucel-fda-childhood-leukemia. Accessed 7 February 2020.

This source talks about CAR-T cell therapy and how it is being approved for some children and young adults. It talks about how it is becoming more personalized and caters to the patients' specific needs.

"CAR T-cell Therapy: Reprogramming the immune system to treat cancer | Rob Weinkove | TEDxTauranga," TedX, 2019, www.technologynetworks.com/cancer-research/videos/car-t-cell-therapy-reprogramming-the-immune-system-to-treat-cancer-324726. Accessed 4 Feburary 2020.

This source talks about CAR-T therapy and goes into more detail about how it works. Rob Weinkove explains the process of developing his own CAR-T drug.

"Chemotherapy doesn't work? Not so fast." *Career Science and Medicine*, Science-Based Medicine, 12 Sept. 2011, https://sciencebasedmedicine.org/chemotherapy-doesnt-work/. Accessed 13 January 2020.

Source provides the point of view of people who think that chemotherapy is a scam by big corporations to get money from those affected by cancer. It also gave us political cartoons and media for our website.

"Chemotherapy for Breast Cancer." *Breastcancer.org*, Breastcancer.org, 20 Jun. 2019, https://www.breastcancer.org/treatment/chemotherapy. Accessed 8 November 2019.

This showed us how chemotherapy directly affected victims of Breast Cancer and how chemotherapy helped with their effects.

"Chemotherapy: From the Trenches of Warfare A Weapon to Fight Cancer." *Clinical Research at Yale*, Yale School of Medicine, 2019, medicine.yale.edu/ycci/clinicaltrials/abut/tradition/chemotherapy/. Accessed 11 Nov 2019.

This source talks about the development of chemotherapy from a toxic gas used in World War I. We used this source to explain the gas' influence on chemotherapy and its impact on cancer research.

"Chemotherapy: What's Old Is New Again - Advancements in Chemotherapy for Cancer." *Celgene*, Celgene Corporation, 23 May 2019, https://www.celgene.com/chemotherapy-treatment/. Accessed 25 November 2019.

This source talks about the advancements in chemotherapy and how it has improved over the years. It talks about how chemotherapy could be used as a standalone drug or be taken with other forms of therapy in order to get the best result.

Chew, H K. "Adjuvant Therapy for Breast Cancer: Who Should Get What?." The Western Journal of Medicine, Copyright 2001 BMJ Publishing Group, Apr. 2001, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1071360/. Accessed 25 November 2019.

This source talks about breast cancer which is one of the most common forms of cancer. It helps us understand put into perspective the impact of breast cancer, it allows for us to get a grasp on what our barrier is.

Christakis, Panos. "The Birth of Chemotherapy at Yale. Bicentennial Lecture Series: Surgery Grand Round." *The Yale Journal of Biology and Medicine*, YJBM, June 2011, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3117414/. Accessed 25 November 2019.

This source talks about the development of cancer and chemotherapy research at Yale due to the fact that cancer is the country's 2nd leading cause of death. It started with a patient named JD who cancer case remained a mystery until doctors at Yale decided to research it.

"Common Questions About Chemotherapy." *Cancer Council*, Cancer Council NSW, 2015, https://www.cancercouncil.com.au/cancer-information/cancer-treatment/chemotherapy/common-questions-chemotherapy/. Accessed 28 Dec. 2019.

This source discusses a few commonly asked questions about chemotherapy and answers them in a very descriptive manner.

Connell, Philip P., and Samuel Hellman. "Advances in Radiotherapy and Implications for the Next Century: A Historical Perspective." *Cancer Research*, American Association for Cancer Research, 15 Jan. 2009, cancerres.aacrjournals.org/content/69/2/383. Accessed 21 October 2020.

This source talks about radiotherapy, which was a way to treat cancer before chemotherapy. This reveals to us what doctors believed and the state of cancer research and development during this time.

Curtis, John. "From the field battle, an early strike at cancer." *Yale School of Medicine*, Yale School of Medicine, 2005, https://medicine.yale.edu/news/yale-medicine-magazine/from-the-field-of-battle-an-early-strike/. Accessed 3 Oct. 2019.

A description of how nitrogen mustard was discovered to help treat cancer. This is a trusted source because chemotherapy was first experimented with at Yale University.

Davis, Devra. The Secret History of the War on Cancer. Basic Books, New York, 2007.

A detailed recording of the history of cancer, from the beginnings of ancient civilization to today's society.

Dennis, Tami. "For one early adopter, CAR T therapy means 18 months cancer-free and counting UCLA Health becomes one of the few centers in U.S. to offer FDA-approved treatment outside clinical trials." *UCLA Health*, UCLA, 14 Feb. 2018, https://www.uclahealth.org/for-one-early-adopter-car-t-therapy-means-18-months-cancer free-and-counting. Accessed 17 January 2020.

This source talks about CAR-T cell therapy and how it was able to cure Josh Feldman's cancer, and how he is still cancer free to this day. This helps reinforce the impact that CAR-T has which was derived from chemotherapy.

DeVita, Vincent T. "A History of Cancer Chemotherapy." Cancer Research, Edward Chu, American Association for Cancer Research, Nov. 2008, https://cancerres.aacrjournals.org/content/68/21/8643. Accessed 05 Oct. 2019.

A specific excerpt on the process of inventing chemotherapy. Describes how chemotherapy really was experimented and discovered.

Devita, Vincent T. The Death of Cancer. Sarah Crichton Books, New York, 2015.

This book talks about how chemotherapy leads to the possibility of eradicating cancer from the world.

Dickerson, Caitlin. "Secret World War II Chemical Experiments Tested Troops by Race." *World War II Secret Mustard Gas Testing*, NPR, 22 Jun. 2015, https://www.npr.org/2015/06/22/415194765/u-s-troops-tested-by-race-in-secret-world-war-ii-chemical-experiments. Accessed 10 March 2020.

This source gave us detailed information about the secret mustard gas experiments done on American soldiers. It went into detail about the suffering that the soldiers went through and the amount of secrets that the government hid connected to these experiments.

"Does chemotherapy fulfill its expectations in cancer treatment?." *National Center for Biotechnology Information,* 1990, https://www.ncbi.nlm.nih.gov/pubmed/2078481. Accessed 15 March 2020.

This abstract gave us some insight on the scientist Cornelius Rhoads and his discovery of a possible cancer treatment through his testing on human subjects through using mustard gas.

"Emily Whitehead, Immunotherapy Patient Story." *Cancer Research Institute*, 2013, www.cancerresearch.org/immunotherapy/stories/patients/emily-whitehead. Accessed 15 March 2020.

This source gave us a childhood cancer patient and survivor. We got to see and understand the empathetic side of cancer treatment and how it affects not just the patient, but also everyone associated with the patient. It also showed us the beginnings of the Emily Whitehead Foundation.

"Empress of All Maladies: Mary Lasker." *Science News*, Albert and Mary Lasker Foundation, 20 Mar. 2015, http://www.laskerfoundation.org/new-noteworthy/articles/empress-all-maladies-mary-lasker/. Accessed 28 January 2020.

This source talks about Mary Lasker who was a significant figure in history. We get to understand the impact she had on history and cancer research.

Everts, Sarah. "A Brief History of Chemical War." *Distillation*, Science History Institute, 11 May 2019, www.sciencehistory.org/distillations/a-brief-history-of-chemical-war. Accessed 11 Nov 2019.

We used this source to explain how people saw mustard gas as a threat and only a threat. However, it was soon able to develop new cancer drugs and chemotherapy.

"Evolution of Cancer Treatments: Chemotherapy." American Cancer Society, 2014, www.cancer.org/cancer/cancer-basics/history-of-cancer/cancer-treatment-chemo.html. 11 Nov 2019.

We used this source to explain how chemotherapy helped develop new cancer drugs to help remission in cancer cells.

"Favorable Five-Year Survival Reported For Patients With Advanced Cancer Treated With The Immunotherapy Drug Nivolumab." *Newsroom*, John Hopkins Medicine, 25 July 2019, https://www.hopkinsmedicine.org/news/newsroom/news-releases/favorable-five-year-survival-reported-for-patients-with-advanced-cancer-treated-with-the-immunotherapy-drug-nivolumab. Accessed 28 December 2019.

This source talks about immunotherapy and the impact it has on survival rates on patients with Cancer. It talks about the trials with immunotherapy and the effects it had on its patients. This allows us to understand the new modern medicine that are being used for cancer.

Fischer, Andrea, and Angela Stark. "FDA Approval Brings First Gene Therapy to the United States." *U.S. Food and Drug Administration*, FDA, 30 Aug. 2017,

www.fda.gov/news-events/press-announcements/fda-approval-brings-first-gene-therapy-united-states.

This source talks about the first gene therapy drug that was approved by the FDA and allowed to be used among patients. This gives us insight on modern medicine.

Foley, George. “Cancer Research.” *The Journal of Cancer Research*, American Association for Cancer Research, 1974, cancerres.aacrjournals.org/content/canres/34/3/658.full.pdf. Accessed 26 November 2019.

This source showed us that Sidney Farber’s successes in finding remission in cancer cells showing that cancer can be cured because his example shows that there is a possibility for the eradication of cancer cells.

"Gene Therapy Example," *Youtube,* uploaded by ppornelubio, 22 January 2007. https://www.youtube.com/watch?v=EfXK50Bxod8. Accessed 23 February 2020.

This video talks about the introduction of gene therapy into modern everyday medicine. It can also be used to treat cancer and help with its symptoms.

Hage, Joe. “Is Cancer Too Profitable to Cure?.” *Medical Devices Group*, Apr. 2019, https://www.medicaldevicesgroup.net/medical-devices/cancer-profitable-cure/. Accessed 14 December 2020.

This source talks about Big Pharma and how instead of funding more research, they instead use that research money into making more drugs. This allows us to realize how big of a business cancer is.

Hagopian, Joachim. “The Evils of Big Pharma Exposed.” Global Research, 31 Oct. 2018, https://www.globalresearch.ca/the-evils-of-big-pharma-exposed/5425382. Accessed 25 November 2019.

This source reveals the bitter reality behind Big Pharma and the treatment for cancer. It goes into great detail about how only a couple big companies get to control the industry and they have made nearly 3 million just by themselves. This text also looks at the U.S. healthcare system and comment on how corrupt and broken it is.

Hawkes, Nigel. “A Comprehensive History of Cancer Treatment.” *Healthcare/ Cancer Treatments*, Raconteur Media, 4 Jun. 2015, https://www.raconteur.net/healthcare/history-of-cancer-treatment. Accessed 11 Oct. 2019.

A history of previous treatments to cancer and how they were effective and how they failed. Source provides historical context prior to chemotherapy such as radiation and surgery.

Hazell, Sarah. “Mustard Gas – from the Great War to Frontline Chemotherapy.” *Cancer Research UK - Science Blog*, Cancer Research UK, 2014, scienceblog.cancerresearchuk.org/2014/08/27/mustard-gas-from-the-great-war-to-frontline-chemotherapy/. Accessed 11 Nov 2019.

We explained how mustard gas developed cancer treatments. We also corroborated other sources explaining that Goodman and Gilman found that the toxic gas killed white blood cells and which also begged the question that may be nitrogen gas could kill cancer cells.

Heron, D E, et al. “Innovations in Chemotherapy and Radiation Therapy: Implications and Opportunities for the Asia-Pacific Rim.” *Biomedical Imaging and Intervention Journal,*

Department of Biomedical Imaging, Faculty of Medicine, University of Malaya, Malaysia, July 2008, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3097728/. Accessed 20 October 2019.

This goes into deep detail about all treatments of cancer, we was really more focused on the chemotherapy side because it was my topic. It was really specific with its details and how these drugs had helped patients with their certain types of cancer.

"History of the Jimmy Fund." *Jimmy Fund*, www.jimmyfund.org/about-us/about-the-jimmy-fund/history-of-the-jimmy-fund/.

This source talks about Jimmy Fund and how it was started based off a cancer patient named "Jimmy". This cause helped raise millions of money and people to help fight off childhood leukemia.

"How does cancer immunotherapy work?." *Youtube*, uploaded by MD Anderson Cancer Center, 20 Apr. 2017, https://www.youtube.com/watch?v=CwaMZCu4kpI. Accessed 17 December 2019.

This video goes ahead and explains how immunotherapy works on the human body. It goes into great detail on how sometimes for cancer a person does not need to take drugs or anything like that in order to cure their cancer, but instead build an immunity to it.

"How Immunotherapy is Used to Treat Cancer." *Treatment and Support*, American Cancer Society, 27 Dec. 2019, https://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy/what-is-immunotherapy.html. Accessed 20 December 2019.

This text talks about the side effects of immunotherapy, which is not common especially with

cancer drugs and treatments. Cancer treatment will never just be positive and it is like that with immunotherapy as well.

Howe. “A Medical Marvel Misused - Early Uses of X-Rays Included Treatments for Tonsils, Asthma.” *PostBulletin.com*, 6 Dec. 1997, www.postbulletin.com/a-medical-marvel-misused---early-uses-of-x-rays-included-treatments-for-tonsils/article_8f4d7c75-432b-546b-beeb-97f80879b40c.html.

This article talked about how radiation therapy needed more improvements because it is also the cause of cancer.

“Imagining the World's First Cancer Center.” Roswell Park Comprehensive Cancer Center, 13 Mar. 2018, www.roswellpark.org/cancertalk/201803/imagining-worlds-first-cancer-center. Accessed 11 Nov 2019.

This source showed the urgency of cancer research even before the discovery of chemotherapy. The first cancer institute was made in 1847 and helped find out how cancer worked and how it developed

“Immunotherapy.” *MD Anderson Cancer Center*, University of Texas, 2020, https://www.mdanderson.org/treatment-options/immunotherapy.html. Accessed 16 January 2020.

This source describes the three main different types of immunotherapy and how they work. It thoroughly details how immunotherapy works and what it does to fight cancer.

"Immunotherapy: How the Immune System Fights Cancer," *YouTube,* uploaded by National Cancer Institute, 13 Jun. 2018. https://www.youtube.com/watch?v=jDdL2bMQXfE. Accessed 17 January 2020.

This source talks about immunotherapy and how it is used. This helps us understand modern medicines and the effects of immunotherapy on patients.

"Immunotherapy: Is it Right for Your Cancer Type?." *HealthEssentials*, Cleveland Clinic, 16 Nov. 2017, https://health.clevelandclinic.org/immunotherapy-is-it-right-for-your-cancer-type/. Accessed 13 January 2020.

This source talks about whether or not immunotherapy would be right for a person's cancer type. It allows us to understand how immunotherapy could be paired with other forms of therapy or might not be used at all during treatment.

"Immunotherapy to Treat Cancer." *National Cancer Institute*, National Institutes of Health, 24 Sept. 2019, https://www.cancer.gov/about-cancer/treatment/types/immunotherapy#how-does-immunotherapy-work-against-cancer. Accessed 15 December 2019.

This source goes into greater depth in how immunotherapy works against cancer and the different types of immunotherapy that are offered to patients. This lets us understand immunotherapy to a greater depth and get a grasp of the negative and positives sides of this treatment.

Individualized Neoantigen Specific Immunotherapy, *Biontech.* https://biontech.de/science/platforms Accessed 6 January 2020.

This source talks about the biotech company Biontech and their products that are used against cancer. We learn about their FixVac product which is a fixed vaccine medicine which is used against similar cancer tumors in patients.

Joensuu, Heikii. "Systemic chemotherapy for cancer: from weapon to treatment." *The Lancet Oncology*, Elsevier, Mar. 2008, https://www.researchgate.net/publication/5544679_Systemic_chemotherapy_for_cancer_from_weapon_to_treatment. Accessed 7 November 2019.

This article talks about the changed expectations of nitrogen mustards and how the perception of it was changed.

Lederer, Susan E. "'Porto Ricochet': Joking about Germs, Cancer, and Race Extermination in the 1930s." *American Literary History*, vol. 14, no. 4, 2002, pp. 720–746. *JSTOR*, www.jstor.org/stable/3568022. Accessed 17 Mar. 2020.

This article talks about how Cornelius Rhodes worked and how much his work was trusted that no one seemed to care that it cost a lot of lives. Although He moved cancer research farther, he still has taken many lives of Puerto Ricans.

Liposomal Doxorubicin Based Chemotherapy Compared to Non-Liposomal Doxorubicin Based Chemotherapy. *Anticancer Research*, 2014. http://ar.iiarjournals.org/content/34/12/7319/F1.expansion.html Accessed 13 January 2020.

This source shows me 4 graphs depicting the usage adjuvant chemotherapy in patients with stage 1-3 breast cancer. This helps us understand the effectiveness of chemotherapy in the late and early stages of breast cancer.

Liposomal Doxorubicin's Effect During Combination Chemotherapy. *Research Gate*, 2016.https://www.researchgate.net/figure/Combination-chemotherapy-with-ligand-targeted-delivery-of-doxorubicin-and-vinorelbine_fig1_291186297 Accessed 17 October 2019.

This source talks about the combination of chemotherapy drugs and how effective it is towards patients. It also mentions how patients will develop a drug tolerance and so the cycle repeats with a new series of drugs

"Machine For Cancer Treatment (1962)." *Youtube*, uploaded by British Pathé, 13 Apr. 2014, https://www.youtube.com/watch?v=kZoRIzKTtVM. Accessed 18 November 2019.

This source shows us the machine that was used for cancer treatment before chemotherapy and it helps us understand the treatment that was used for cancer and how dangerous and at risk it was.

"Magic Bullets." *Cancer: The Emperor of All Maladies*, directed by Barak Goodman, Jack Youngelson, Deborah Dockson, and Chris Durrance, PBS, 2015.

This is an episode of the documentary The Emperor of All Maladies which gave us insight about the key people who helped with cancer research and further advocates of cancer research.

"Making It Count – the Real Life Stories of People Benefiting from Inn." *The Institute of Cancer Research*, 2018, www.icr.ac.uk/news-features/latest-features/making-it-count-the-real-life-stories-of-people-benefiting-from-innovative-new-cancer-treatments. Accessed 15 March 2020.

This source gives us multiple accounts of people being treated with new cancer treatments and how it worked out for them in the long term.

"Modern Cancer Treatment." *Focus for Health*, Focus for Health, 2019, https://www.focusforhealth.org/modern-cancer-treatment-miracle-or-money-maker/. Accessed 8 February 2020.

This source talks about how expensive modern cancer treatment is, despite how effective it is. It also makes a commentary on how messed up the U.S. healthcare is and how it preying on its patients and making them pay more money.

Moore, Peter. "The High Cost of Cancer Treatment." *Managing Debt*, AARP, 1 Jun. 2018, https://www.aarp.org/money/credit-loans-debt/info-2018/the-high-cost-of-cancer-treatment.html. Accessed 9 January 2020.

This text talks about about the high cost of cancer treatment and how a patient could possibly help with the cost of the treatment. It also talks about the aftermath of cancer treatment and how that lack of money they have could lead them to depression.

"National Cancer Institute." *The NCI Almanac*, National Institutes of Health, 27 Nov. 2019, https://www.nih.gov/about-nih/what-we-do/nih-almanac/national-cancer-institute-nci. Accessed 30 December 2019.

Source provides information on training and support for cancer researchers. It also provides a historical timeline of main events that helped advance cancer research for chemotherapy.

Nbains. "War on Cancer Pt.2: Landmarks in the Development of Chemotherapy." *The Biomedical Scientist*, 3 May 2019, thebiomedicalscientist.net/science/war-cancer-pt2-landmarks-development-chemotherapy 23 February 2020.

This source talks about the War on Cancer and the different ways that cancer used to be treated

before the introduction of chemotherapy.

"Novartis' new cell therapy facility could ease manufacturing squeeze for CAR-T med Kymriah," FiercePharma, 2019, https://www.fiercepharma.com/manufacturing/novartis-new-cell-therapy-facility-could-ease-manufacturing-squeeze-for-car-t-med. Accessed 7 February 2020.

This source talks about a new CAR-T medicine that is being distributed among patients and whether or not it works for those specific patients.

Patton, James. "Gas in the Great War." *Medicine in the First World War*, The University of Kansas, 8 Apr. 2019, http://www.kumc.edu/wwi/medicine/gas-in-the-great-war.html. Accessed 10 December 2019.

Source gives historical context based on the gases used in World War I and World War II. It gives the most information on nitrogen mustard gas, the chemical compound that was later used for chemotherapy. Also describes how lethal the gases were to the human body.

"Paying for Cancer Treatment." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 19 Apr. 2018, www.cdc.gov/cancer/survivors/patients/paying-for-cancer-treatment.htm. Accessed 26 November 2019.

This article talks about the expenses of all the treatments and can maybe discourage people from doing these treatments.

Rajagopal, Padma Sheila, and Kathy J. Selvaggi. "Chemotherapy for Advanced Cancers." *Annals of Palliative Medicine*, AME Publishing Company, 2014, apm.amegroups.com/article/view/4151/5063. Accessed 10 January 2020.

This source talks about the usage of chemotherapy for late stages of cancer. This helps us understand the process behind the treatment and how effective it is for the late stages.

Rall, David. "Veterans at Risk: The Health Effects of Mustard Gas and Lewisite." *National Center for Biotechnology Information*, National Academies Press, 1993. https://www.ncbi.nlm.nih.gov/books/NBK236059/. Accessed 3 December 2019.

Article provides information about the history and information of the chemical compounds inside nitrogen mustard gas and how it was beneficial to chemotherapy. It describes how nitrogen mustard killed cancer cells as well as healthy cells.

"Rare Cancer Statistics | Did You Know?." *Youtube*, uploaded by National Cancer Institute, 5 Apr. 2018, https://www.youtube.com/watch?v=ES5KylRT1qY. Accessed 19 Dec. 2019.

Video gives information by the National Cancer Institute about different rare cancers and how they are treated. Also provides statistics of mortality rates and the likely probability that one might get a specific rare cancer.

Ruiz-Marrero, Carmelo. "HEALTH: Puerto Ricans Outraged Over Secret Medical Experiments." Inter Press New Service Agency, IPS, 21 Oct. 2002. http://www.ipsnews.net/2002/10/health-puerto-ricans-outraged-over-secret-medical-experiments/. Accessed 17 March 2020.

This site helped us see the horrible things done to a nation to peek through the discovery of chemotherapy. This gave us some insight on how the experiments impacted the patients

"Safety and Efficacy of Pegylated Liposomal Doxorubicin-based Adjuvant Chemotherapy in Patients with Stage I-III Triple-negative Breast Cancer." *AntiCancer Research International Journal of Cancer Research and Treatment*, The International Institute of

Anticancer Research, Dec. 2014, http://ar.iiarjournals.org/content/34/12/7319/F1.expansion.html. Accessed 5 November 2019.

Source provides information on new drug, liposomal doxorubicin. It shows how effective the new drug is compared to regular chemotherapy. This is an example of a new drug based on the foundation of chemotherapy.

Schiff, Judith Ann, and Yale University Library. "Pioneers in Chemotherapy." *Old Yale | Yale Alumni Magazine*, Yale Alumni Publications, 2011, https://yalealumnimagazine.com/articles/3173-pioneers-in-chemotherapy. Accessed 25 November 2019.

This source provides the research conducted by Gilman and Goodman by observing the effects of nitrogen mustard on mice and rabbits. Their research gave them accessibility to perform the first trial of chemotherapy on patient J.D.

"Scott McIntyre: CAR T-cell Therapy for Lymphoma,"*UChicago Medicine,* uploaded by Jamie Bartosch, 18 October 2019. https://www.uchicagomedicine.org/forefront/cancer-articles/a-walking-miracle-car-t-cell-therapy. Accessed 19 January 2020.

This source talks about Scott McIntyre, who was a patient and a user of the CAR-T cell therapy. He talks about how much better it has been on him and how it helped him cure his cancer. This allows us to see the impact of the CAR-T cell therapy.

"Secret World War II Chemical Experiments Tested Troops By Race." NPR, 22 June 2015, https://www.npr.org/2015/06/22/415194765/u-s-troops-tested-by-race-in-secret-world-war-ii-chemical-experiments, Accessed 14 March 2020.

This source gave us insight regarding the ongoing gas tests on Puerto Ricans and African Americans. Through this article we were able to identify that this test resulted in many deaths and injuries

"Sidney Farber: Declaring the War on Cancer." *Youtube*, uploaded Margaret Perrotta, 21 Oct. 2017, https://www.youtube.com/watch?v=dPOAw1-Htsg&t=3s. Accessed 23 October 2019.

This source allows us to see and understand why the U.S. declared war on cancer. It just helped reinforce to the people why cancer was such a problem and it needed to be taken care of.

Smith, Susan. "War! What is it Good For? Mustard Gas Medicine." *U.S. National Library of Medicine National Institutes of Health*, Canadian Medical Association, 2017, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5325736/. Accessed 18 October 2019.

This source talks about the benefits of World War I such as nitrogen mustard. After World War I, it was researched to be apart of a new cancer treatment, chemotherapy. Although it is not used anymore, it laid the foundation for chemotherapy and other cancer treatments such as immunotherapy.

Tallarida, Alex. "War On Cancer." Richard Nixon Foundation, Richard Nixon Foundation, 14 Apr. 2010, www.nixonfoundation.org/2010/04/war-on-cancer/. Accessed 26 November 2019.

This article talks about the benefits that came from the war on cancer that Nixon declared. There were more drugs that were invented at the time and they had a better understanding of cancer.

"Types of Chemotherapy: MedlinePlus Medical Encyclopedia." *MedlinePlus*, U.S. National Library of Medicine, 21 Oct. 2017, medlineplus.gov/ency/patientinstructions/000910.htm. Accessed 26 November 2019.

This article talks about the many cancer drugs that are used today and the evolvement of many other cancer treatments that accompany the chemotherapy process.

"Understanding Chemotherapy." Cancer.Net, 29 May 2019, https://www.cancer.net/navigating-cancer-care/how-cancer-treated/chemotherapy/understanding-chemotherapy. Accessed 20 December 2019.

This allowed us to understand the different types of ways a patient can consume chemotherapy and other alternative ways to treat chemotherapy.

User, Super. "The Birth of Cancer Chemotherapy: Accident and Research." Pan American Health Organization / World Health Organization, 15 May 2014, https://www.paho.org/hq/index.php?option=com_content&view=article&id=9583:2014-birth-of-cancer-chemotherapy-accident-and-research&Itemid=40275&lang=fr. Accessed 20 December 2019.

This allowed us to see the beginnings of chemotherapy. It also gave us a more detailed insight into mustard gas and how it was used in experiments for cancer.

"Video: CAR T Cell Killing an Acute Lymphoblastic Leukemia Cell." *Cancer Immunotherapy Program*, uploaded by Children's Hospital of Philadelphia, 2020,

https://www.chop.edu/video/video-car-t-cell-killing-acute-lymphoblastic-leukemia-cell. Accessed 10 February 2020.

The source provided us with a visual representation of how a cancer drug attacks a cancer cell. This video was used under the category of how biotechnology is a form of innovation for chemotherapy allowing a more accurate precision to killing cancer cells.

"What are the most curable cancers?" Medical News Today, Healthline Media UK, 2018, https://www.medicalnewstoday.com/articles/322700.php#takeaway. Accessed 23 Nov. 2019.

A comprehensive list of the most curable cancers today. Provides current survival rates from a variety of strains of cancer.

Wilke, Caroline. "From Chemical Weapon to Chemotherapy, 1917–1946." The Scientist, Apr. 2019, https://www.the-scientist.com/foundations/from-chemical-weapon-to-chemotherapy--19171946-65655. Accessed 20 Oct. 2019.

Another article that talks about how nitrogen mustard went from a chemical war weapon intended to kill humans to a medical treatment that saved thousands of lives.

Wisnia, Saul. "Senator Kennedy was driving force against cancer at Dana-Farber and beyond." *Dana-Farber Cancer Institute,* 26 August 2009. https://www.dana-farber.org/newsroom/news-releases/2009/senator-kennedy-was-driving-force-against-cancer-at-dana-farber-and-beyond Accessed 24 Feburary 2020

This source talks about how the government tries to get involved with cancer research. Kennedy visits the Dana-Farber foundation to celebrate their success and their devotion to their studies and their achievements.

Wu, Chien-Hsun, et al. "Advancements and Applications of Peptide Phage Display Technology in Biomedical Science." *Research Gate*, Journal of Biomedical Science, Dec. 2016, https://www.researchgate.net/publication/291186297_Advancement_and_applications_of_peptide_phage_display_technology_in_biomedical_science. Accessed 27 December 2019.

This image shows the specific areas the liposomal doxorubicin effects. It also compares specific targeted liposomal doxorubicin and if it was combined. This is an example of combination chemotherapy.

Yarish J. "Dr. Yesner, Department Historian." *Pathology*, Yale School of Medicine, 24 Sept. 2019, https://medicine.yale.edu/pathology/about/history/historian/. Accessed 28 December 2019.

This source provides historical information on Milton Winternitz, the Dean of Yale Medical School. He conducted Alfred Gilman and Louis Goodman to research the chemical compounds of nitrogen mustard for the use of chemotherapy.