

Limiting the Side Effects of Coronary Artery Disease Treatments Logbook

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Date	Action	Resources Used	Other Notes (goals for next week, etc)
November 10, 2023	Worked on preliminary research for project pitch, specifically background information and plan for future research	Coronary heart disease - NHS What Is Coronary Heart Disease? NHLBI, NIH Coronary heart disease Risk Factors, Prevention & Treatment Britannica Heart Disease in Canada	Project pitch will be checked by my mentor.
November 14, 2023	Project pitch presentation edited by mentor.	Dr. Soares	I plan to make edits suggested by my mentor.
November 15, 2023	I made edits suggested by my mentor to my project pitch.	Heart and Stroke Month - Statistics Canada Calcium Channels in the Heart: Disease States and Drugs	I will present my project pitch on November 17th.
November 17, 2023	I presented my project pitch to judges, and was chosen to participate in CYSF.	N/A	I will start working on in-depth research.

<p>January 18, 2024</p>	<p>I researched treatment options, specifically ACE inhibitors and calcium channel blockers.</p>	<p>Insight into the mode of action of ACE inhibition in coronary artery disease: the ultimate 'EUROPA' story Calcium channel blockers - Mayo Clinic Previously mentioned sources were also used.</p>	<p>I will continue my in-depth research into treatment options.</p>
<p>January 19, 2024</p>	<p>I further researched treatment options, specifically nitrates, ranolazine, statins, coronary angioplasty, and coronary bypass graft surgery.</p> <p>I also met with my mentor, Dr. Soares, to determine the future direction of my project.</p>	<p>The role of nitrates in coronary heart disease Silent Ischemia and Ischemic Heart Disease Ranolazine in patients with coronary artery disease Ranolazine: MedlinePlus Drug Information Statins - Side effects - NHS Coronary angioplasty and stent insertion - NHS Coronary artery bypass graft (CABG) - NHS Dr. Soares Previously mentioned sources were also used.</p>	<p>I will follow the plan that me and my mentor came up with in order to be efficient. The next step is researching my selected treatments, nitrates & statins & CABG, in more depth.</p>
<p>February 9, 2024</p>	<p>I started researching my selected treatments in more depth, starting with the interactions of nitrates and statins at a molecular level.</p>	<p>Mechanisms of action of nitrates Statin Medications - StatPearls - NCBI Bookshelf Relationship between Nitrate-Induced Headache and Coronary Artery Lesion Complexity - PMC</p>	<p>From here, I will research the causes of the treatment side effects.</p>

<p>February 12, 2024</p>	<p>I transformed my research on the different treatment options from bullet points into paragraph form. From there, I got that part of my research paper edited by a volunteer.</p> <p>I also met with Dr. Soares to go over what research I completed so far.</p>	<p>Dr. Soares</p>	<p>I will implement the edits she suggested and further continue my in-depth research.</p>
<p>February 25, 2024</p>	<p>I continued my research into the causes for the side effects that patients experience when they take nitrates, statins, and CABG.</p>	<p>Blushing and flushing - Better Health Channel What Is Cholesterol? Effect of Statins on Platelet Activation and Function: From Molecular Pathways to Clinical Effects - PMC Nitrates - Drug cabinet - Heart Matters magazine - BHF Dizziness - orthostatic hypotension - Better Health Channel</p>	<p>I plan to meet with my mentor on February 26, and to continue my in-depth research on the selected treatments.</p>
<p>February 26, 2024</p>	<p>I continued my research on the causes of the side effects and started researching the routes available to mitigate them.</p> <p>Later, I met with my mentor in order to discuss my progress so far and future steps.</p>	<p>Nitrate Therapy Circulation What Do Coronary Artery Disease Patients Think about Their Treatments? An Assessment of Patients' Treatment Representations Mechanisms of nitrate tolerance Statin Medications - StatPearls - NCBI Bookshelf Alternative Headache Treatments: Nutraceuticals, Behavioral and Physical Treatments - Sun-Edelstein - 2011 Low blood pressure (hypotension) - NHS</p>	<p>I plan to finish my research into side effects in the near future and move onto focusing on preventing them. Next week, I plan to meet with my mentor in order to go through the first draft of my research paper.</p>

		Low blood pressure (hypotension) - Diagnosis and treatment - Mayo Clinic Dr. Soares	
March 6, 2024	I transformed my method section into paragraph form.	N/A	I plan to transform the rest of my research paper into bullet points. I also postponed the meeting with my mentor because I was unable to finish the first draft.
March 7, 2024	I typed up my problem/introduction and acknowledgements sections in my research paper.	Heart Disease Facts cdc.gov	See March 6.
March 8, 2024	I finished the in-depth research section for nitrates.	Riboflavin (Oral Route) Side Effects - Mayo Clinic Oxymetazoline (Topical Application Route) Side Effects - Mayo Clinic Brimonidine (Topical Application Route) Side Effects - Mayo Clinic Fludrocortisone (Oral Route) Before Using - Mayo Clinic How wounds heal: MedlinePlus Medical Encyclopedia	My next step is to finish the data section research for the other two treatments that I selected.
March 10, 2024	I finished my in-depth research into CABG surgery and formatted my data and conclusion sections into paragraphs, completing my first draft. Then, my mum checked and edited my first draft for grammatical errors.	Postoperative fatigue The Surgery Was a Success. So Why Do I Feel So Bad? Loss of Appetite: Causes & Treatment The Problem of Appetite Loss After Major Abdominal Surgery -	I removed statins from my in depth analysis because it would have been overly ambitious to research each of the 10+ side effects.

		<p>PMC Understanding Post-Op Depression - NYSI Wounds - how to care for them - Better Health Channel Paracetamol – uses, side effects and how to take it healthdirect Mood Disorders: What They Are, Symptoms & Treatment</p> <p>Previously mentioned sources were also used.</p>	
March 11, 2024	I met with my mentor and I showed the first version of my presentation to her.	Previously mentioned sources were used.	
March 12, 2024	My mentor, Dr. Soares, looked over and edited my research paper.	Dr. Soares	After this round of editing, I will finalise my research paper.
March 13, 2024	I finished APA citations for my research paper.	Google citation machine	From here, I will submit my research to CYSF and work on the additional requirements.
March 14, 2024	I finalised my research paper and inserted 2 diagrams in order to illustrate my points. I also submitted all required materials to the CYSF platform.	<p>Liverpool Heart and Chest Hospital Coronary Artery Bypass Grafting</p> <p>Previously mentioned sources were also used.</p>	