

**AACP 2019 Paper Presentation**  
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**MODIFIED BLOOD RICH DEL NIDO VS THE TRADITIONAL DEL NIDO RELATIVE TO CLINICAL OUTCOMES**

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Introduction: Modern cardiac surgery would not be possible without the myocardial protection we achieve from cardioplegia solutions delivered to the patient's heart. With great advances being made in surgical technique, the topic of myocardial protection has not seen the same attention although *patient* outcome is directly linked to the degree of protection achieved by both the surgeon and perfusionist. The traditional concept of Del Nido cardioplegia formulation is largely crystalloid based. Del Nido cardioplegia is one of the most commonly used solutions. However, very little research has been done to formulate a standard algorithm and protocol for timely re-dosing and amount to complete a complex cardiac surgery. This study will look at the different methods used when re-dosing Del Nido cardioplegia with two formulation. A comparative analysis of outcomes may conclude in a standardized method.

Objective: This study will examine different methods of re-dosing using traditional Del Nido Cardioplegia (ratio 1:4) and blood rich Del Nido (4:1), looking at surgical outcome, pressor requirement, length of stay, presence of arrhythmias and hemodilution among a group of patients with varying age, weight, and sex. The methods of re-dosing cardioplegia are non-traditional Del Nido (4 blood: 1 crystalloid or reverse ratio in a similar route as the original dose with a volume of 250mL every 30 minutes at 90 minutes after the original dose) or traditional Del Nido (1 blood: 4 crystalloid original ratio delivered in a similar method as the original dose with a volume of .5 – 1 times the amount of the originals dose every 60-90 minutes).

Methods: This will be a single center, multi surgeon, retrospective study.

Results: preliminary data analysis favor the blood rich of group. Conclusion: preliminary findings show that here are less arrhythmias leading to cardioversion after the removal of the cross clamp and less hemodilution with the non-traditional (4:1) method of re-dosing of cardioplegia.