

# Outcomes in Truncus Arteriosus with and without Interrupted Aortic Arch

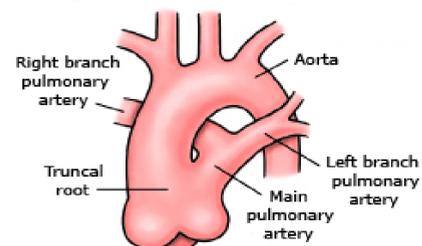
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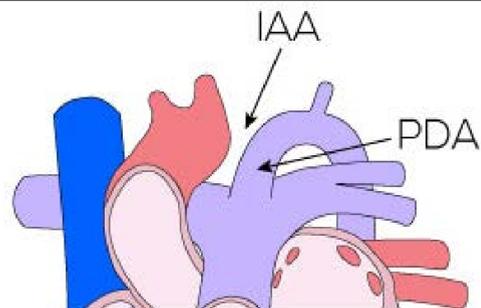
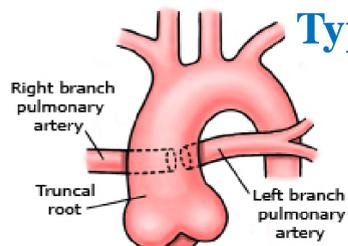
## Introduction

- Truncus Arteriosus (TA) is an uncommon congenital heart disease, estimated at 6-10 per 100,000 live births, requiring repair in the neonatal period (1, 2).
- It is estimated that 11-19% of those who have TA also have Interrupted Aortic Arch (IAA); another life threatening congenital heart anomaly
- In hospital mortality for primary repair of TA has previously been reported as ~11%, however those who required truncal valve repair and IAA correction were noted to have an in-hospital mortality of 60%.
- Large multi-institutional study, those with TA and IAA had poor prognosis with increased mortality and higher need for re-intervention, overall survival at 10 years: 31%

### Type I



### Type II



## Question/Hypothesis

- The objective of this study is to better define long-term, transplant-free survival in children with TA in comparison to those who have TA with IAA.
- We hypothesize that those with TA types 1 and 2 with IAA will have poorer long-term outcomes in comparison to those with TA types 1 and 2 alone.

## Methods

### Inclusion Criteria:

≤21 years at TA repair  
 US Resident and Treatment Center  
 1<sup>st</sup> TA repair, Type 1 or Type 2 TA  
 PCCC between 1982-2003  
 Linked with NDI and OPTN

Eligible Cohort

Exclude Patients:  
 Inadequate Identifiers or  
 Missing Data

Cohort for Analysis

Type 1 or Type 2  
 TA without IAA

Type 1 or Type 2  
 TA with IAA

## Summary

- The key end-point will be the comparison of cardiac transplant-free survival (years) from date of first cardiac intervention between the two groups (TA with IAA and TA without IAA).
- Evaluate influence of additional variables (including sex, race, genetic condition, and era of surgical correction) on survival when completing our analysis
- Patient characteristics using chi-squared tests (categorical variables), t-tests and Wilcoxon rank-sum tests (continuous variables).
- Adjusted odds ratios for associations between characteristics and early mortality will be estimated using logistic regression.
- Kaplan-Meier survival curves will be generated for transplant-free survival

## Funding/References

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