

# Practice Patterns of Antimicrobial Suppression Therapy in Total Knee Arthroplasty Infections

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## Introduction

There are no current established guidelines for the role of antimicrobial suppression therapy after a prosthetic joint infection (PJI). The IDSA in 2013 provides initial treatment guidelines for PJI but do not address suppressive therapy. In this study, we surveyed infectious disease providers to see how they would respond in various clinical scenarios involving suppression therapy in PJI.

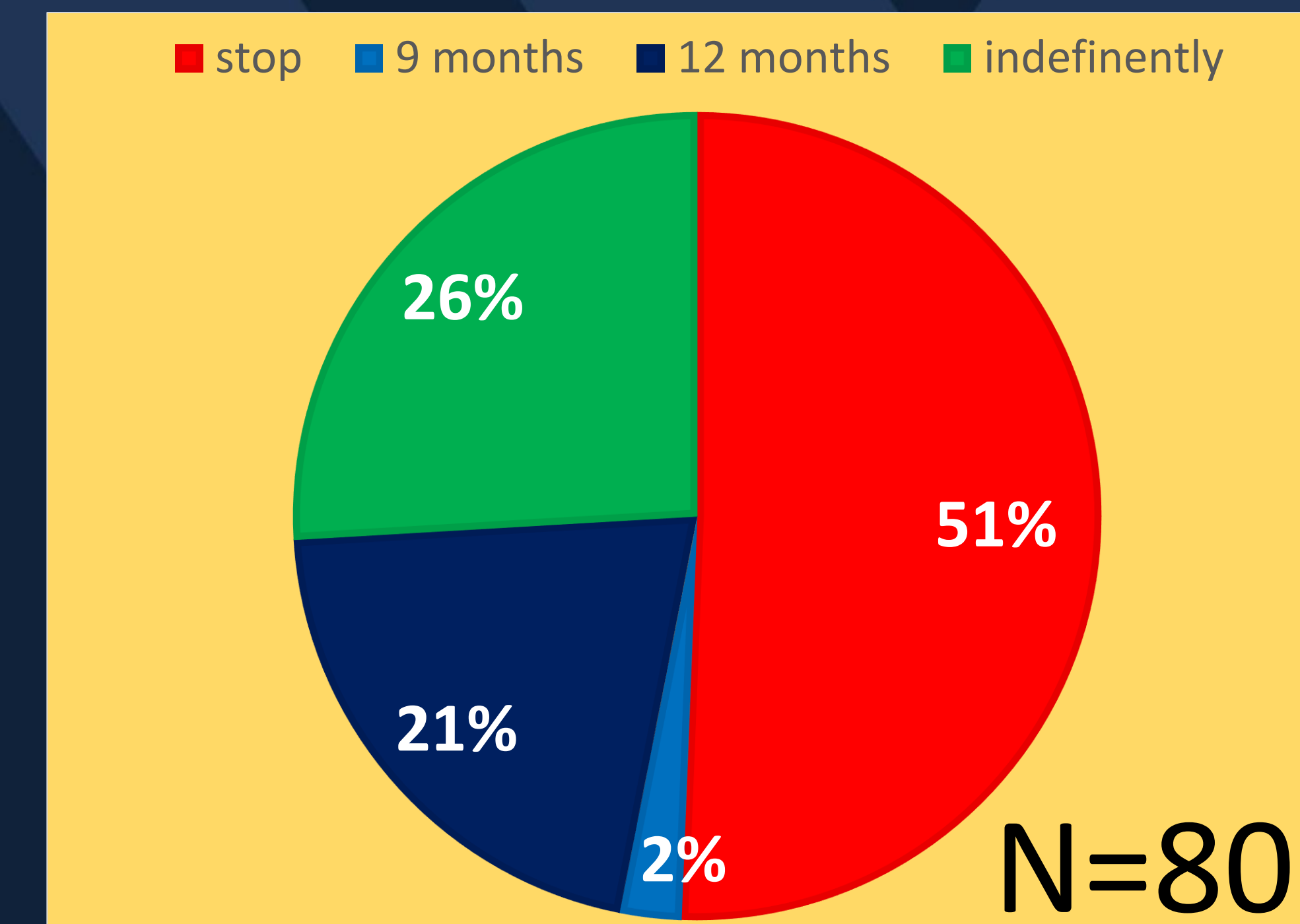
## Purpose

To discover if there was a uniform pattern among infectious diseases providers' use of antimicrobial suppression for different clinical scenarios involving PJI.

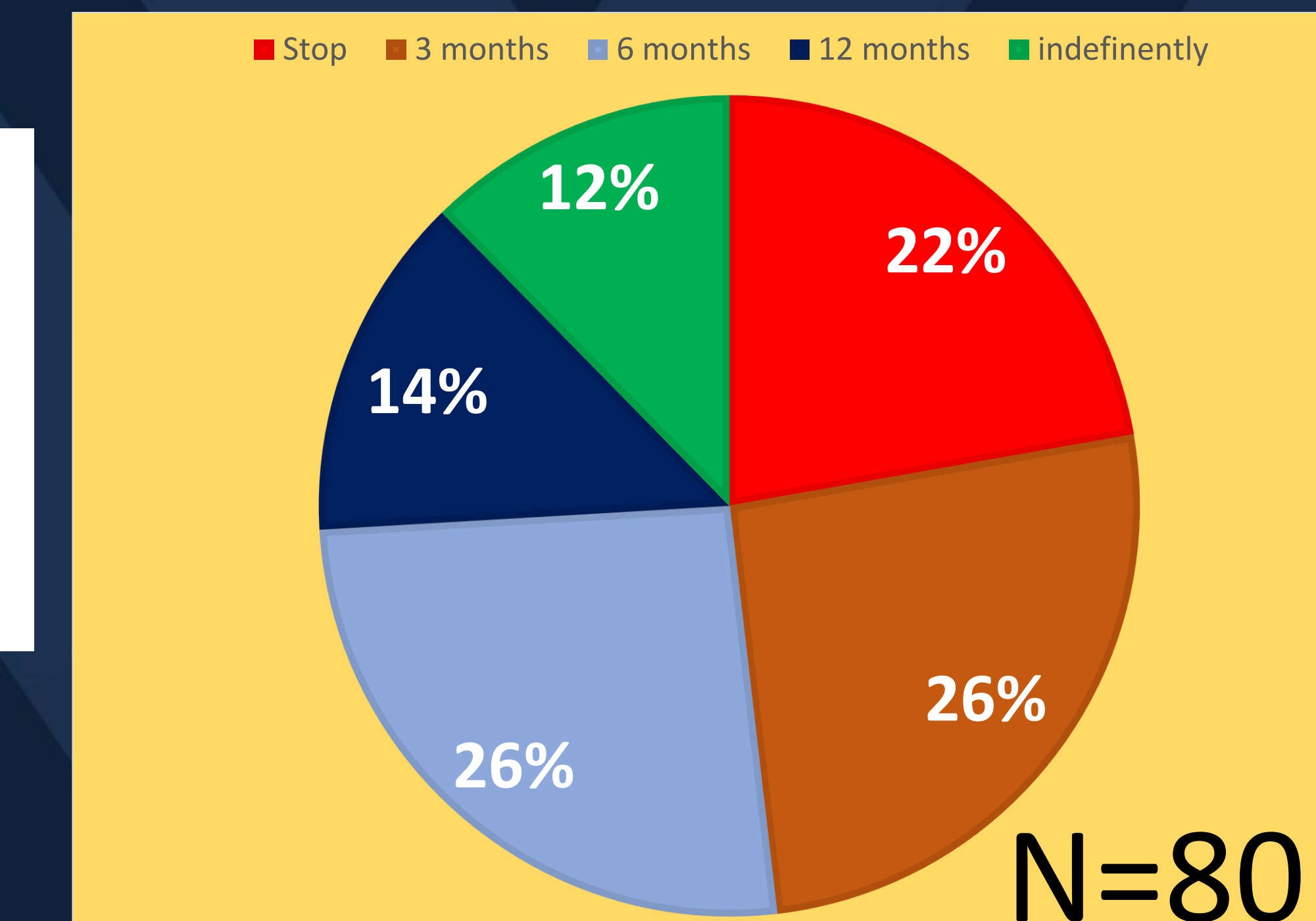
## Methods

This was a survey study of infectious disease providers across the USA from April 2022 to May 2022. There were 80 unique response from 31 different states. In the survey, six different multiple choice clinical scenarios were presented Demographic data, years of practice, and number of PJI treated per month were assessed.

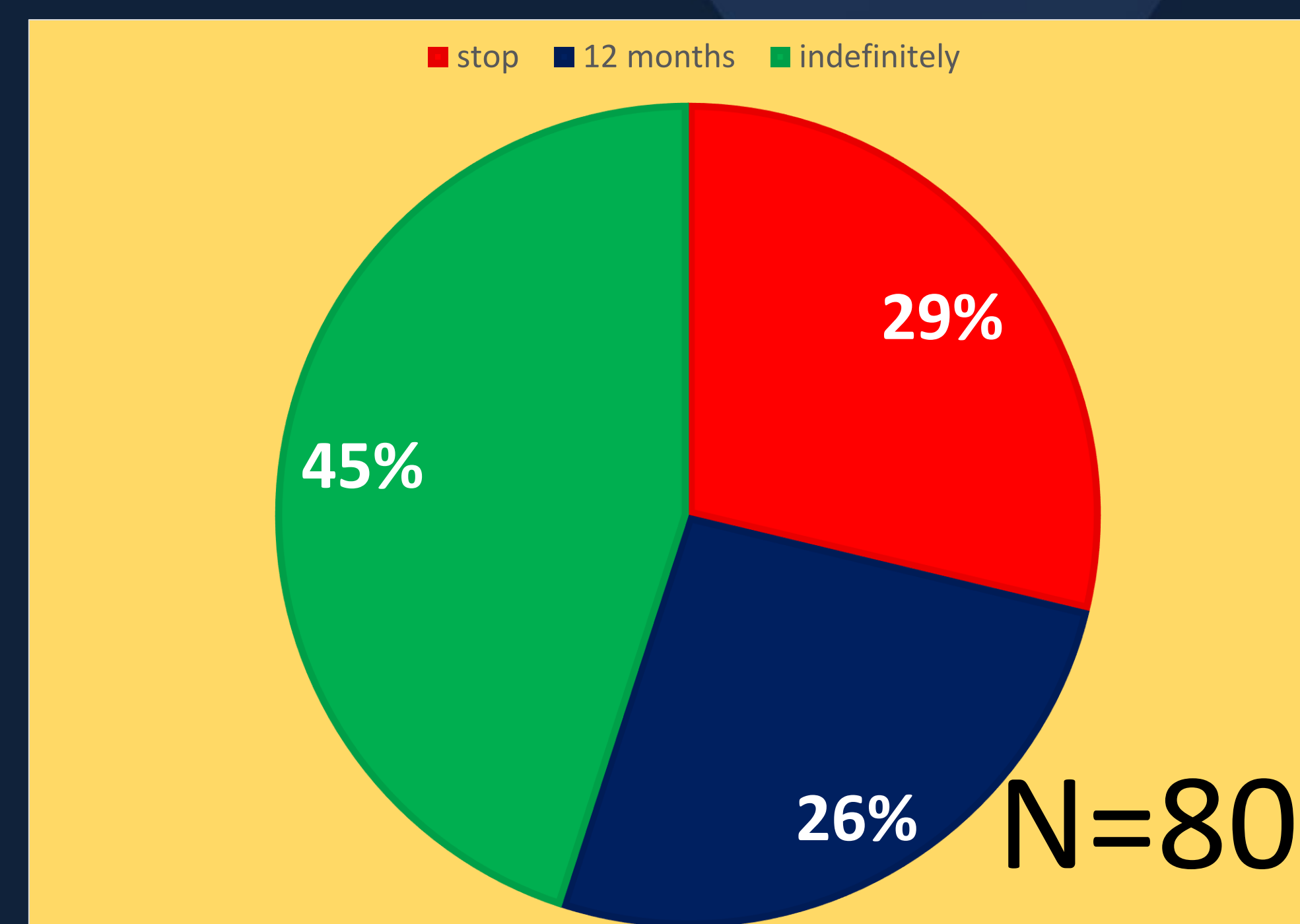
**Scenario 1**  
**Surgery: single stage**  
**Organism: MRSA**



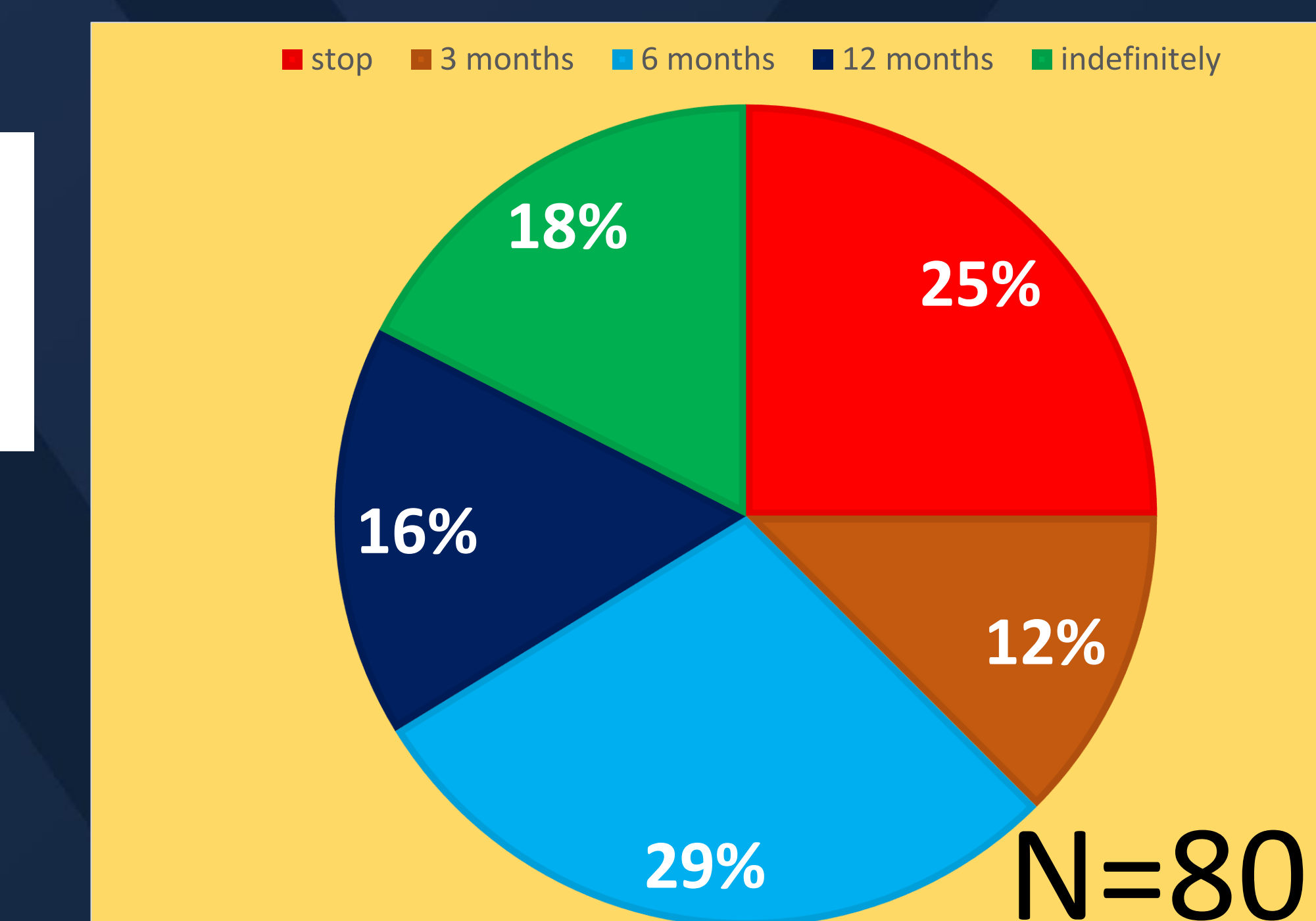
**Scenario 2**  
**Surgery: single stage**  
**Organism: Streptococcus agalactiae**



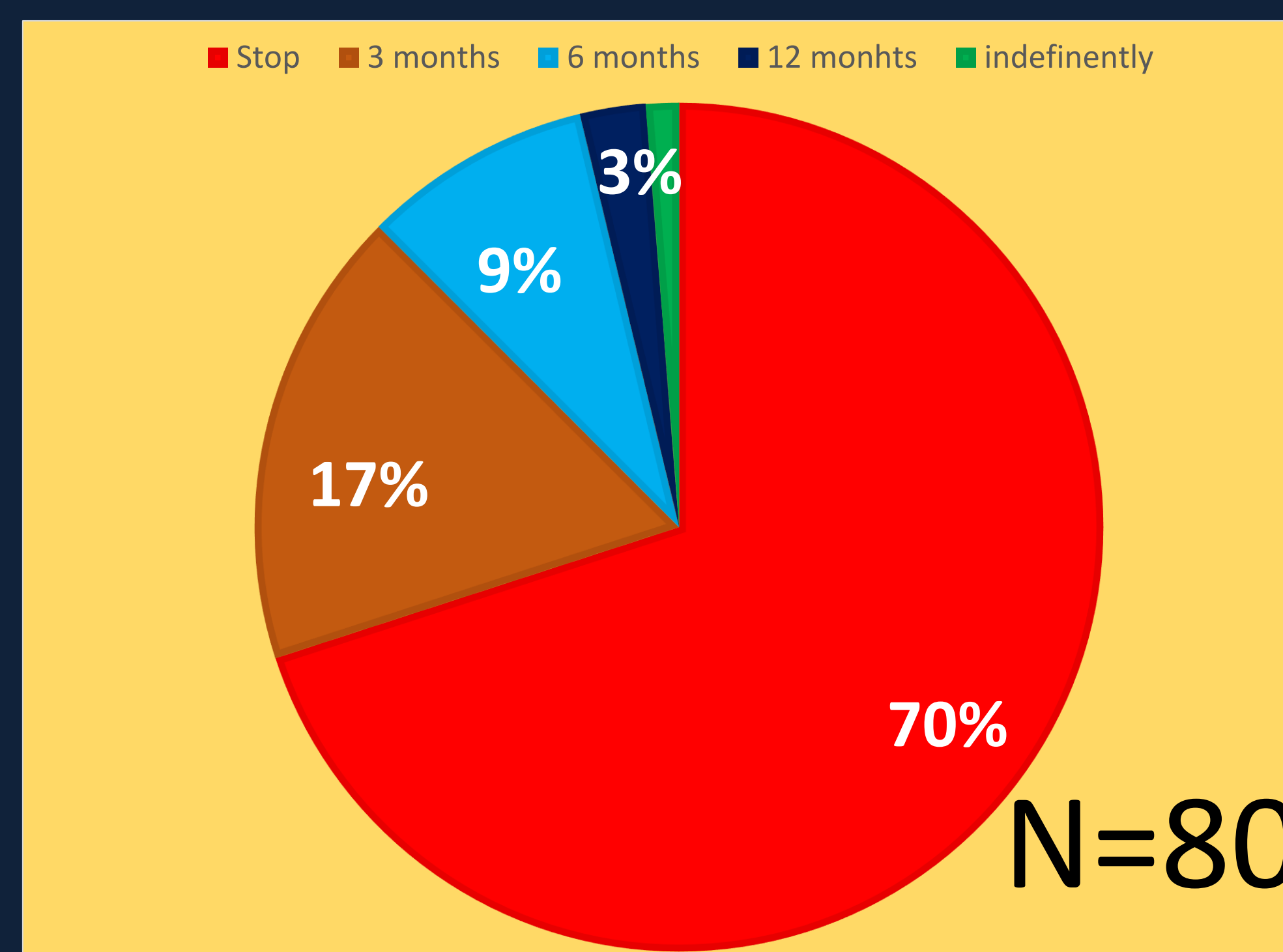
**Scenario 3**  
**Surgery: DAIR**  
**Organism: MRSA**



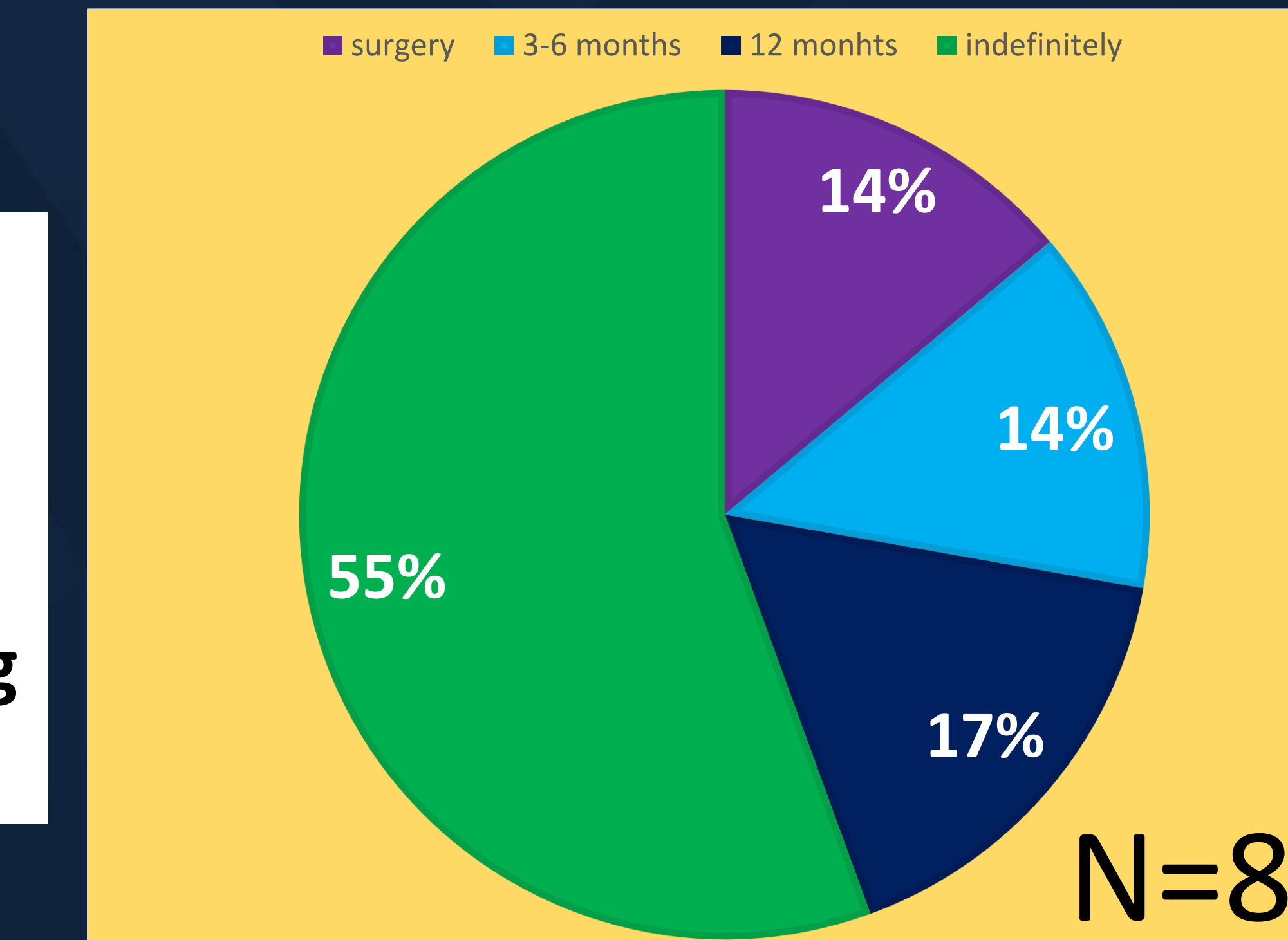
**Scenario 4**  
**Surgery: DAIR**  
**Organism: E coli**



**Scenario 5**  
**Surgery: 2 stage**  
**Organism: MSSA with negative cultures at re-implant**



**Scenario 6**  
**Surgery: 2 stage**  
**Organism: MSSA with cultures at re-implant also growing MSSA**



## Conclusions

The survey results showed there was a variety of ways that Infectious Diseases providers approached suppressive therapy in PJI. Of the six scenarios, only three had greater than 50% consensus (50.6%, 51.3%, and 70.1%). The results highlight how there is no consensus on how to use antimicrobial suppression in patients with PJI. Randomized controlled trials should be performed to determine in what clinical scenarios antimicrobial suppression may be beneficial.

## Acknowledgment

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