



American  
College  
of Allergy, Asthma  
& Immunology

# USAsthma SUMMIT 2024

## Oral Corticosteroids (OCS) and Biologics Perception: Results from a National Survey for Parents and Caregivers

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# **Oral Corticosteroids (OCS) and Biologics Perception: Results from a National Survey for Parents and Caregivers**

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Chief Research Officer

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# Disclosures

Study was funded by Sanofi-Regeneron

# Parents of Children with Asthma Perceptions of Oral Corticosteroids and Biologics

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# Background and Methods

# Study Purpose

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This project examined the perceptions of parents of a child diagnosed with asthma and treatment with OCS and biologic medications.



Focused on the perception of parents of a child with uncontrolled asthma and OCS use.



Assessed parent understanding of OCS short & long-term side effects.



Gauged the interests of parents of a child with uncontrolled asthma use of a biologic for treatment.

# Parents of Children with Asthma Participated

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Parents who were 18 or older of a child between ages 6 – 17 years of age and diagnosed with asthma and living in the US



Online Panel



Between October 1 – November 2, 2023

# Parent Characteristics

(N=500)

Parent's Age	
18 – 29	29%
30 – 39	37%
40 – 49	20%
50 or older	14%
Gender	
Male	27%
Female	73%
Race	
White/Caucasian	63%
Black/African-American	18%
Other*	19%
Ethnicity	
Hispanic	20%
Not Hispanic	80%
Had an asthma flare	
Within the past 6 months	66%
In the past 7-12 months	34%

Education	
Less than a high school degree	1%
High school degree or equivalent (e.g., GED)	14%
Some college but no degree	18%
Associate degree	16%
Bachelor's degree	34%
Graduate degree, law degree, post-doctoral or doctoral degree	17%
Annual Household Income	
\$0 – \$29,999	16%
\$30,000 – \$59,999	22%
\$60,000 – \$99,999	44%
\$100,000 or more	16%
Prefer not to answer	2%



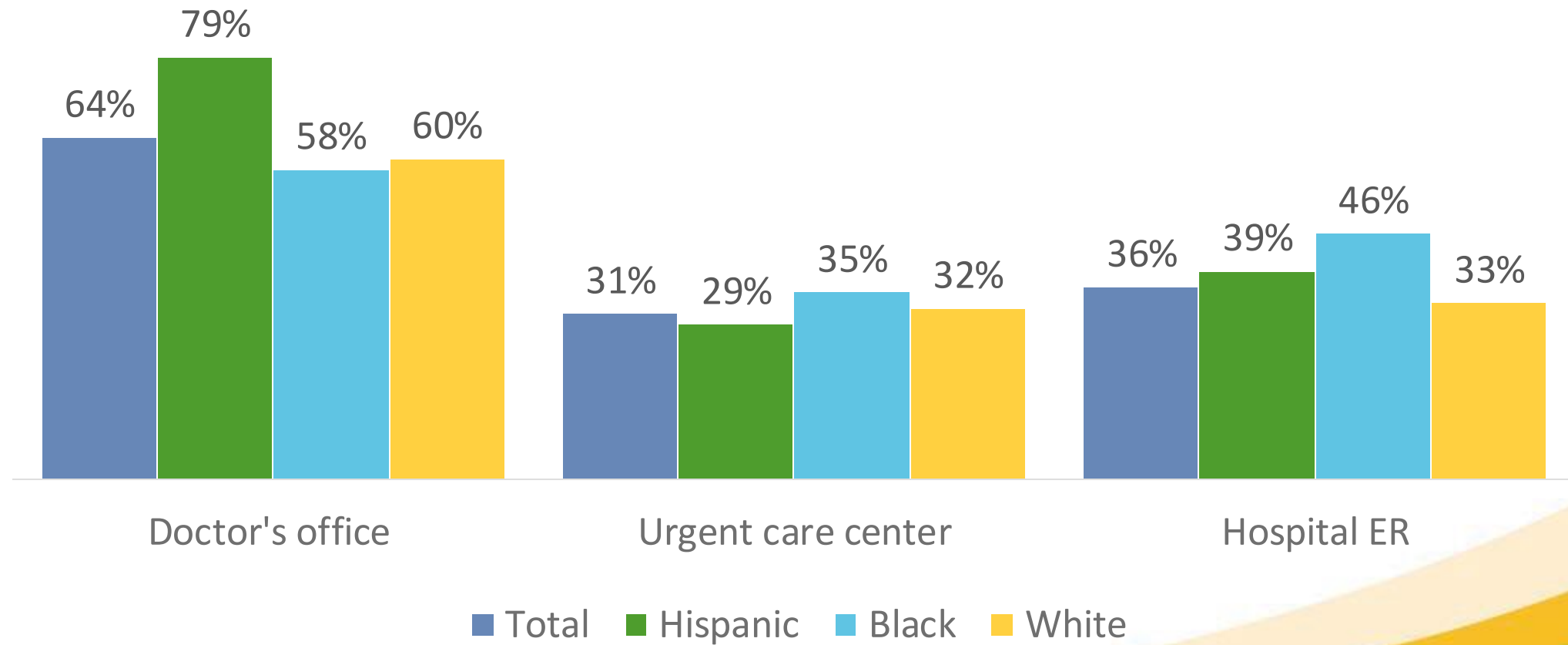
# POLL QUESTION

Where do you think asthma flares were most often treated in the last 12 months, according to our survey?

- A) Doctor's office
- B) Urgent care
- C) Hospital ER



# Where children were treated for asthma flare in the last 12 months (N=500)



## Asthma Control (% Yes)(n=500)



### Rules of Two™

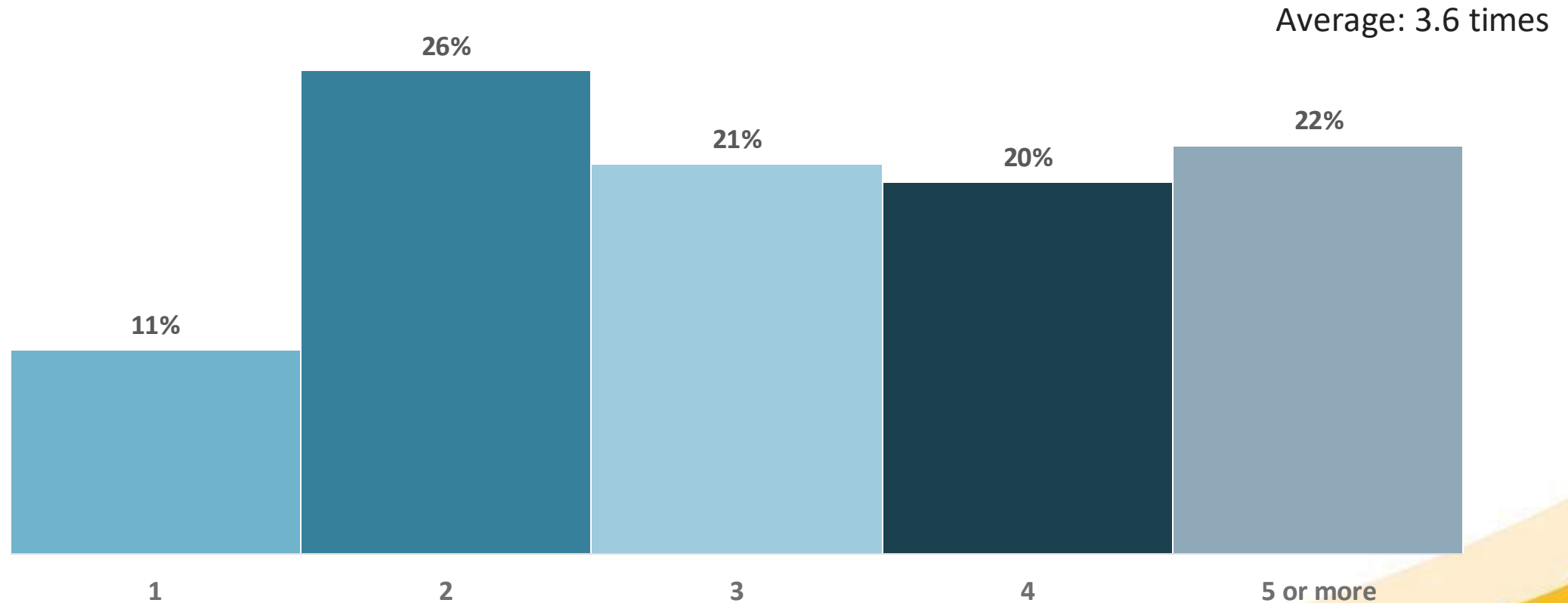


■ Uncontrolled

■ Controlled

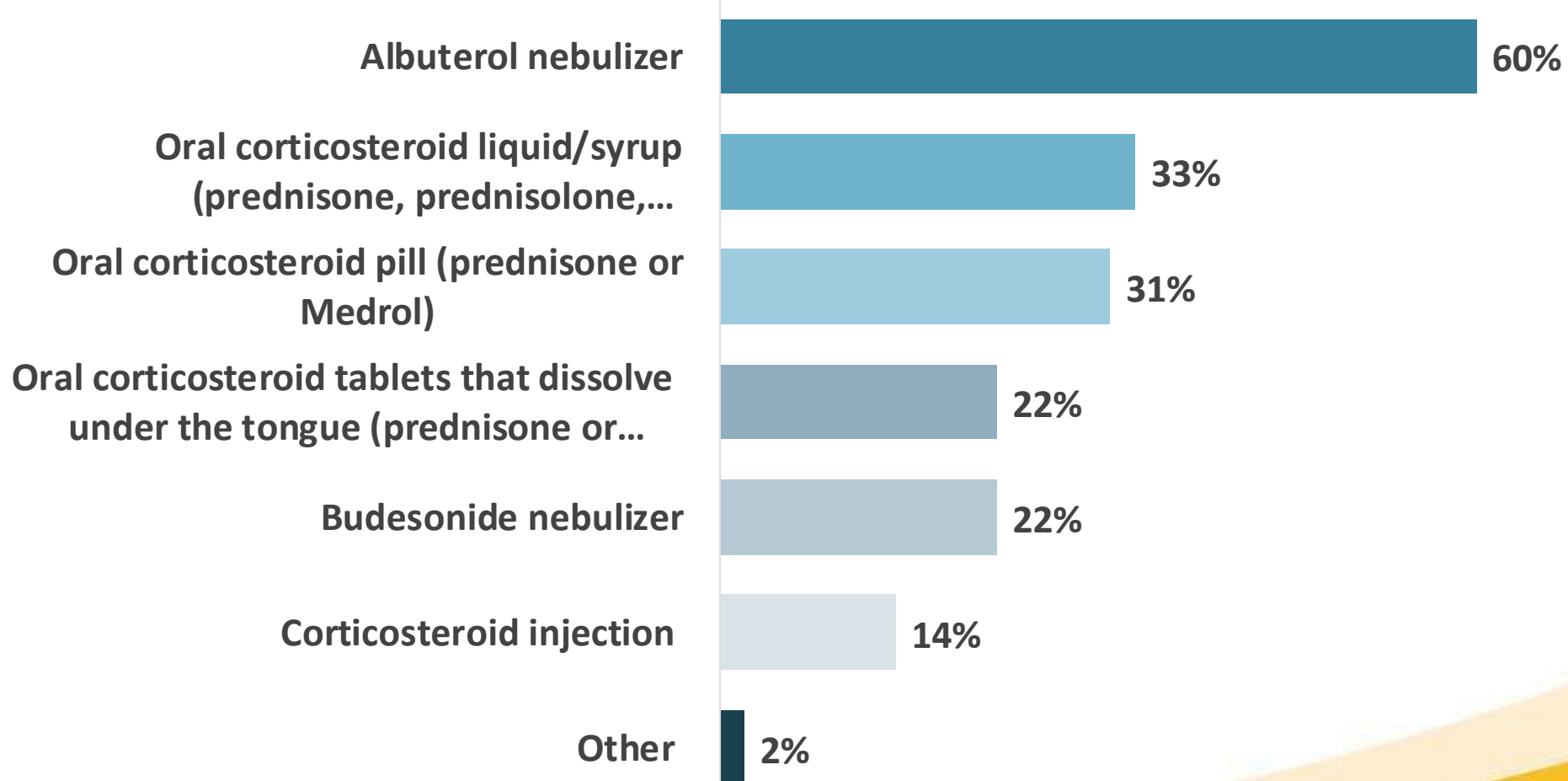


## Number of Times Child Treated for Asthma Flare in Past 12 Months (Treated in Doctor's Office, Urgent Care Facility or Hospital ER; n=445)



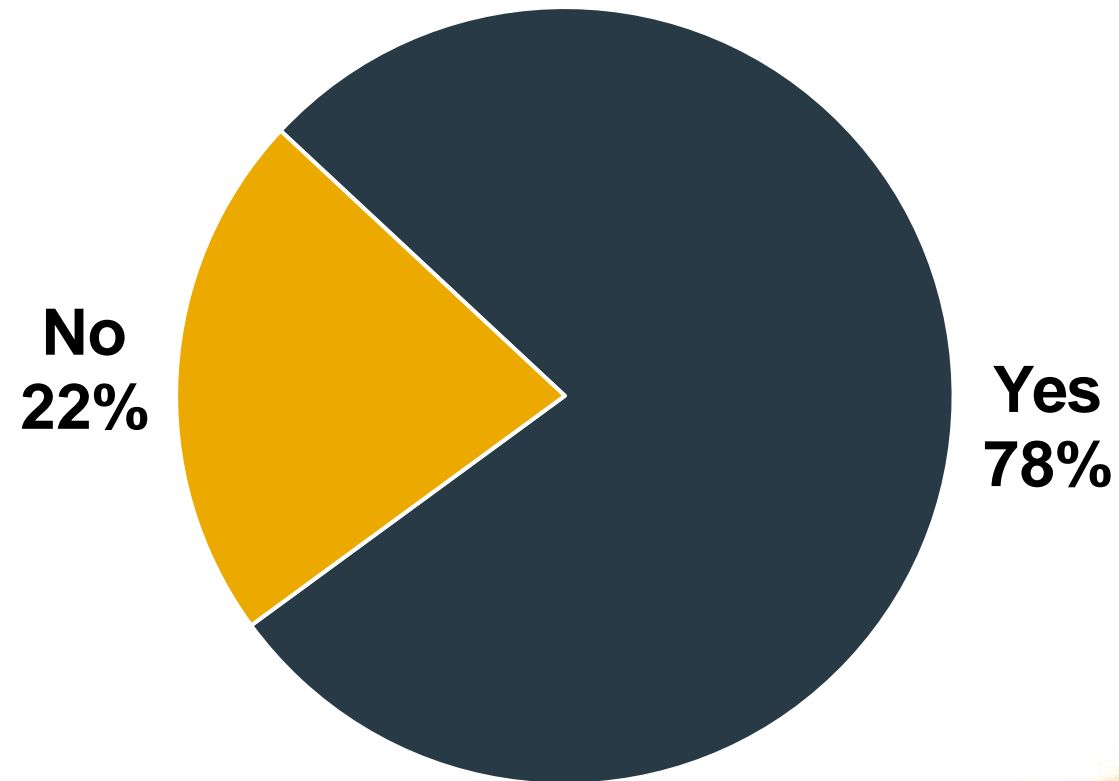
Q24. When your child experienced an asthma flare in the past 12 months, did you see a healthcare provider (a doctor, nurse practitioner or physician assistant) in any of the following locations?

## Medications Prescribed for Asthma Flare (Saw Healthcare Provider for Last Flare; n=445; Multiple Responses)



Q26. When your child saw a healthcare provider for an asthma flare in the past 12 months, which of the following medications were prescribed?

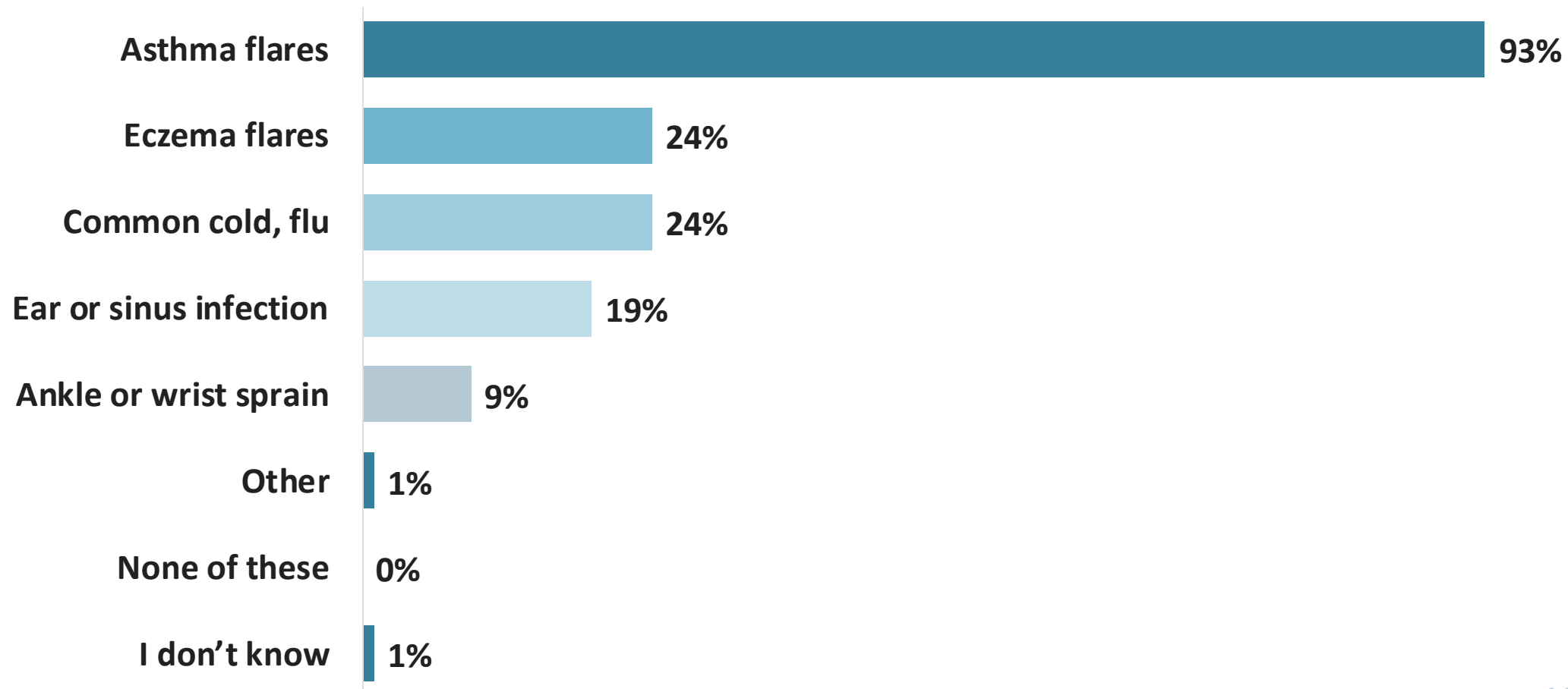
# Child Has Missed School Because of Asthma Attack in the Past 12 Months (n=500)



Q16. Has your child missed a school day (or usual daily activities) because of an asthma attack/flare in the past 12 months?

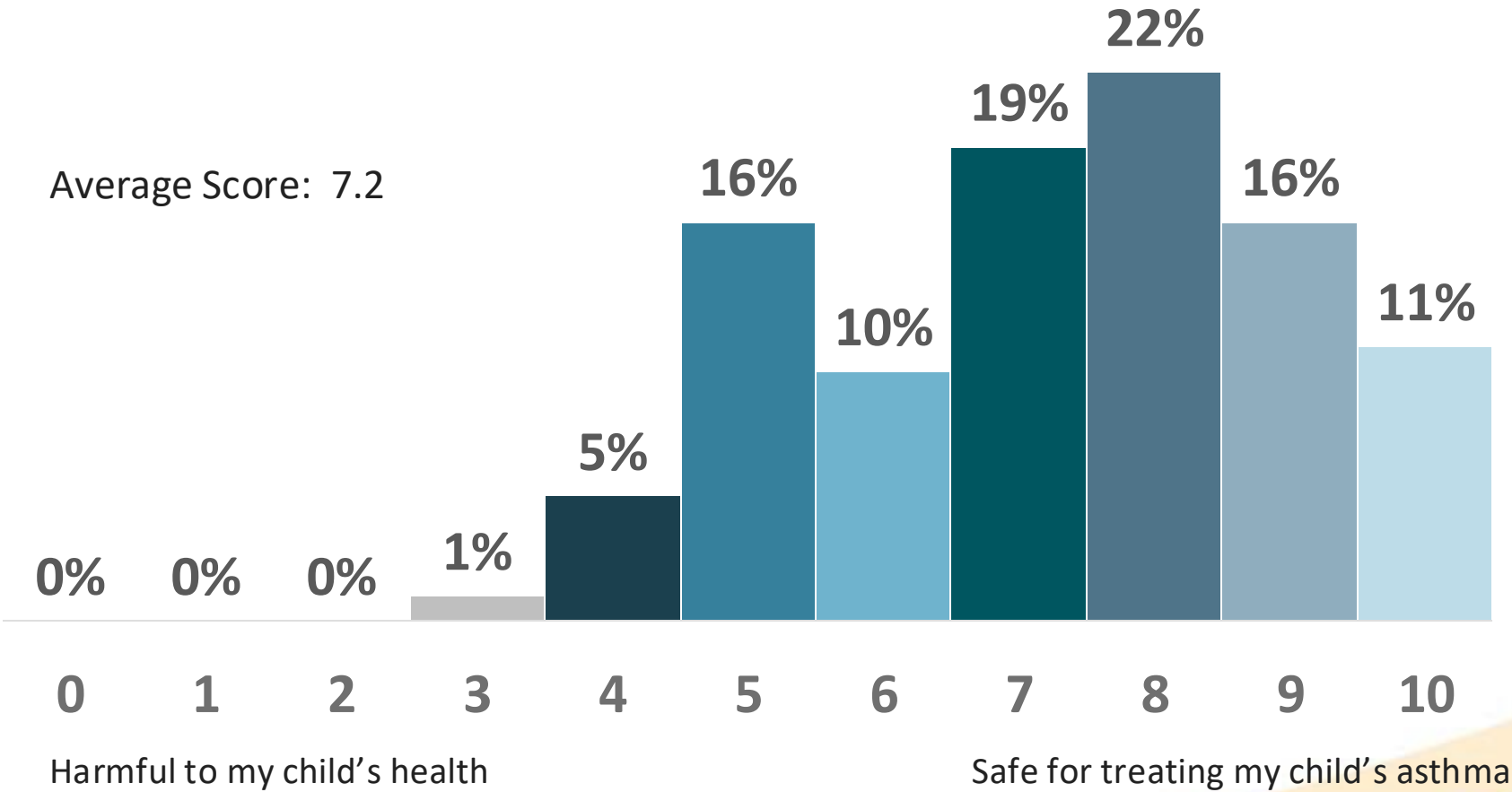
# Perceptions of Oral Corticosteroids (OCS)

## Conditions OCS are Believed to Treat (n=500; Multiple Responses)





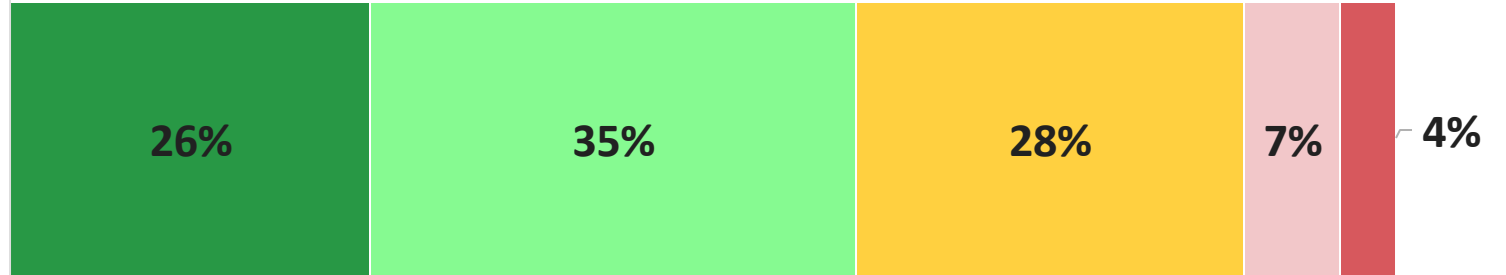
# Perceived Safety of OCS for Child



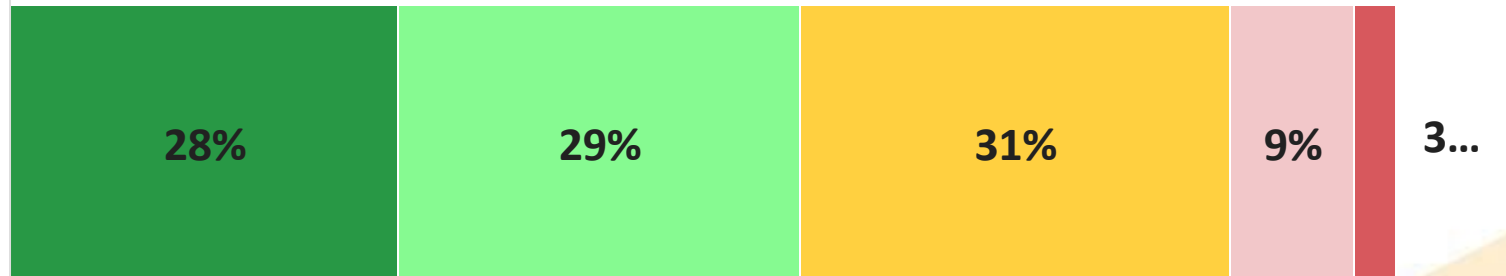
Q20. How strongly do you believe that, when prescribed by a healthcare provider for asthma, oral corticosteroids are either harmful or safe for your child?

## Agreement Regarding OCS

I believe that my child with asthma will be sick longer when having an asthma flare if not treated with an oral corticosteroid.



When I visit a healthcare provider (e.g., doctor, nurse practitioner, physician assistant) for my child's asthma flare, I expect a prescription for medication, including a prescription for an oral...



■ Strongly agree - 5

■ 4

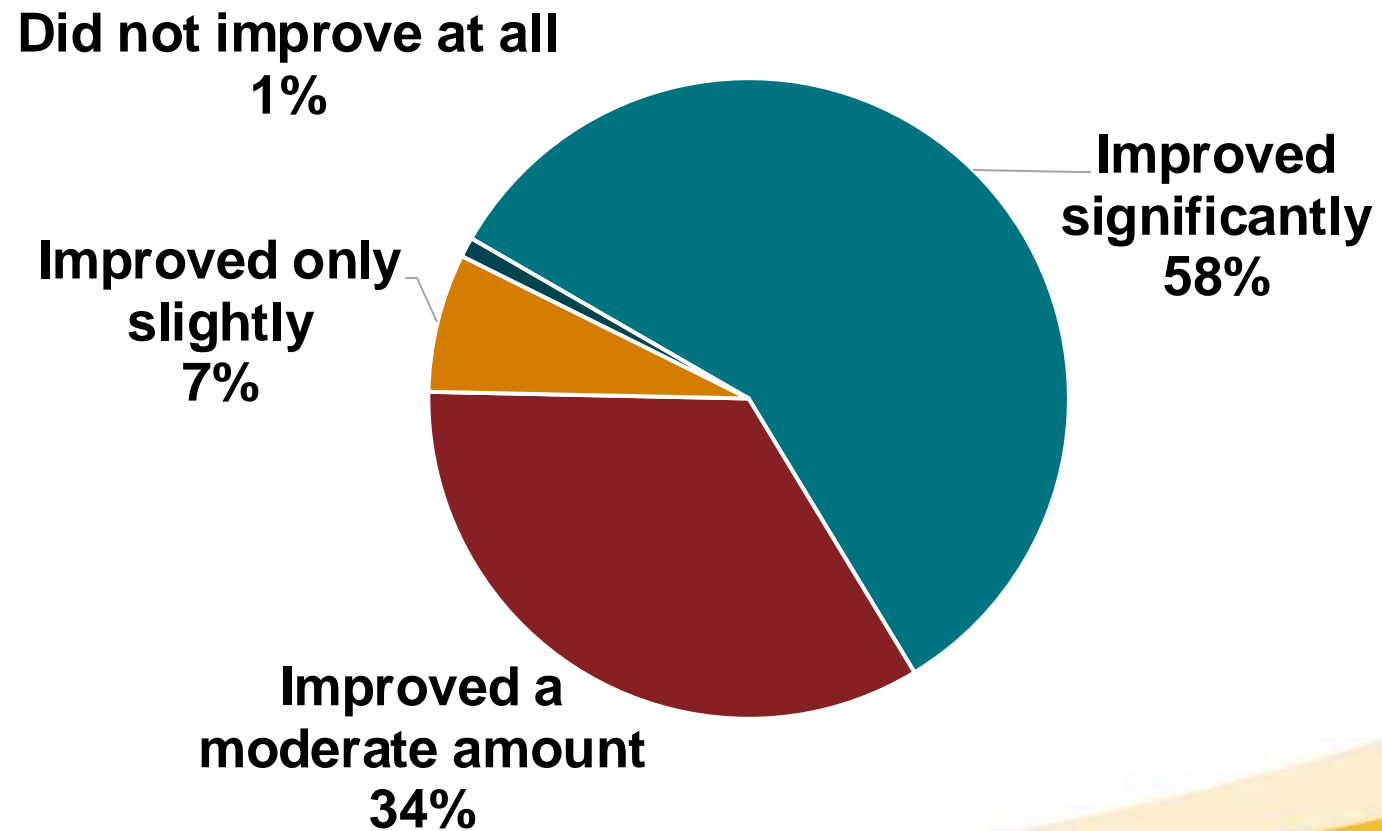
■ 3

■ 2

■ Strongly disagree - 1

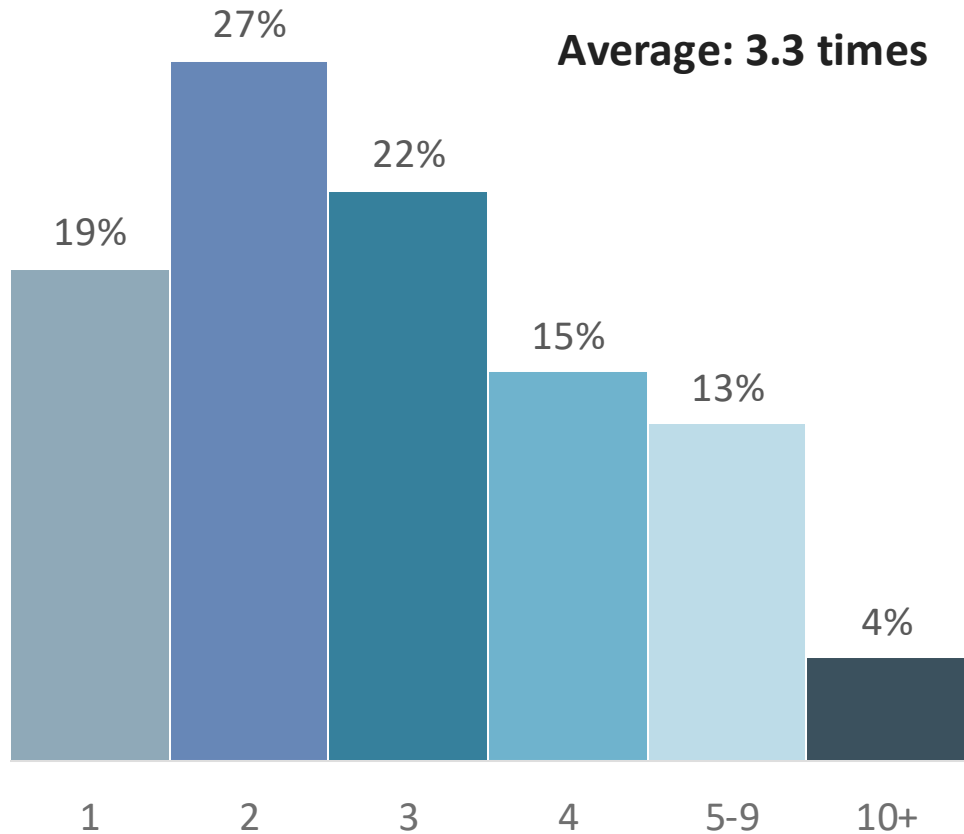
Q22. How strongly do you agree with the following statements?

# Child's Outcome After Taking OCS (Child Finished A Little or More of Prescription; n=299)



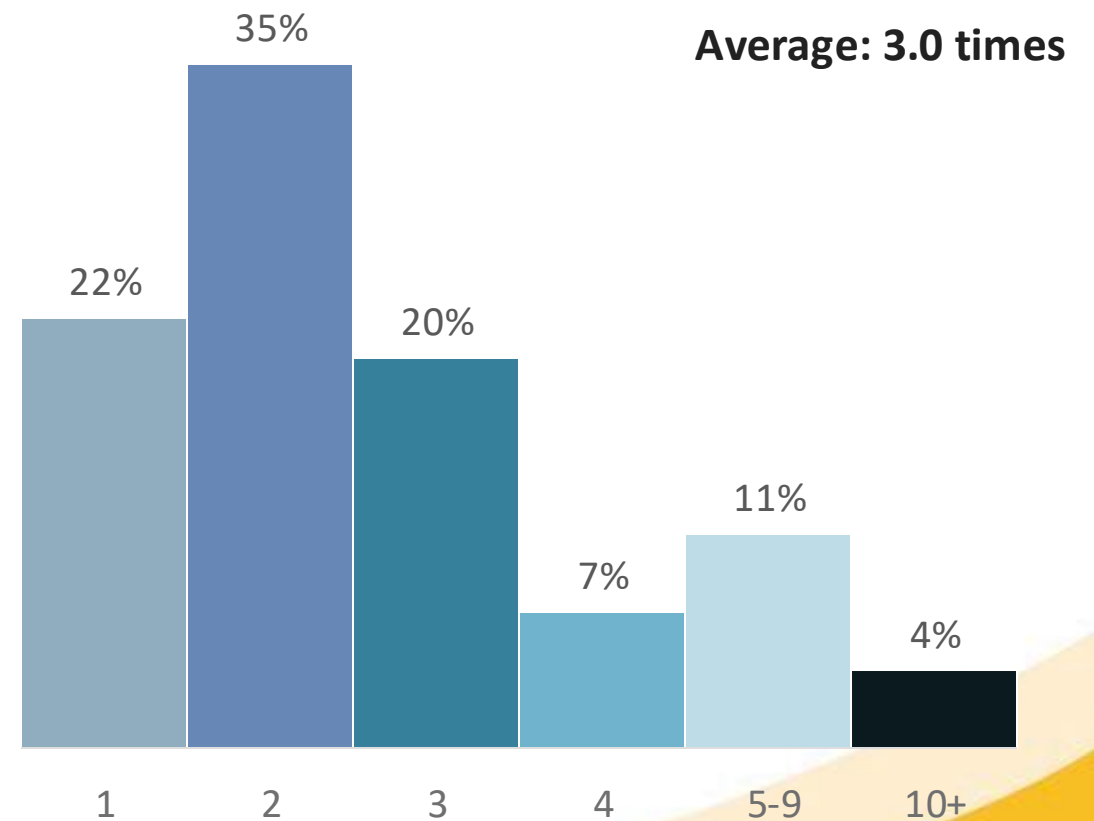
Q30. When your child was taking oral corticosteroids over the past 12 months, what was the outcome?

### Number of Times Prescribed OCS Pills or Tablets in Past 12 Months for Asthma Flare (OCS Pills/Tablets were Prescribed; n=210)



Q27A. Approximately how many times in the past 12 months was your child prescribed an oral corticosteroid (pills or dissolving tablet)?

### Number of Times Prescribed Liquid or Syrup in Past 12 Months for Asthma Flare (OCS Liquid/Syrup was Prescribed; n=147)



Q27B. Approximately how many times in the past 12 months was your child prescribed an oral corticosteroid (liquid or syrup)?

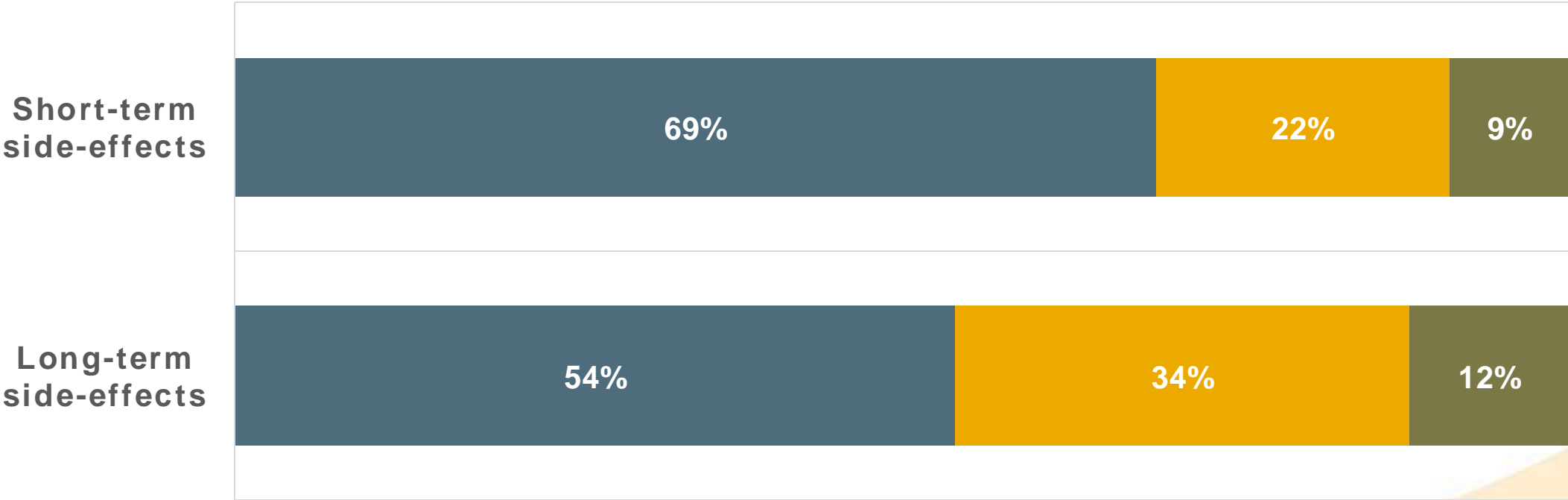
# Parents' Familiarity with Short-Term and Long-Term Side Effects of OCS

**Short-term side effects** – Short-term side effects are unwanted symptoms or health conditions that are a result of taking a medication. For example, experiencing mood changes while taking oral corticosteroids for an asthma flare.

**Long-term side effects** – Long-term side effects are unwanted symptoms or health conditions that are the result of taking a medication repeatedly for many years. For example, developing cataracts after taking oral corticosteroids for asthma flares. Long-term use of oral corticosteroids would be defined as taking more than 4 doses (courses) over a lifetime.

# Familiarity with Short-Term and Long-Term Side Effects of OCS

N=500

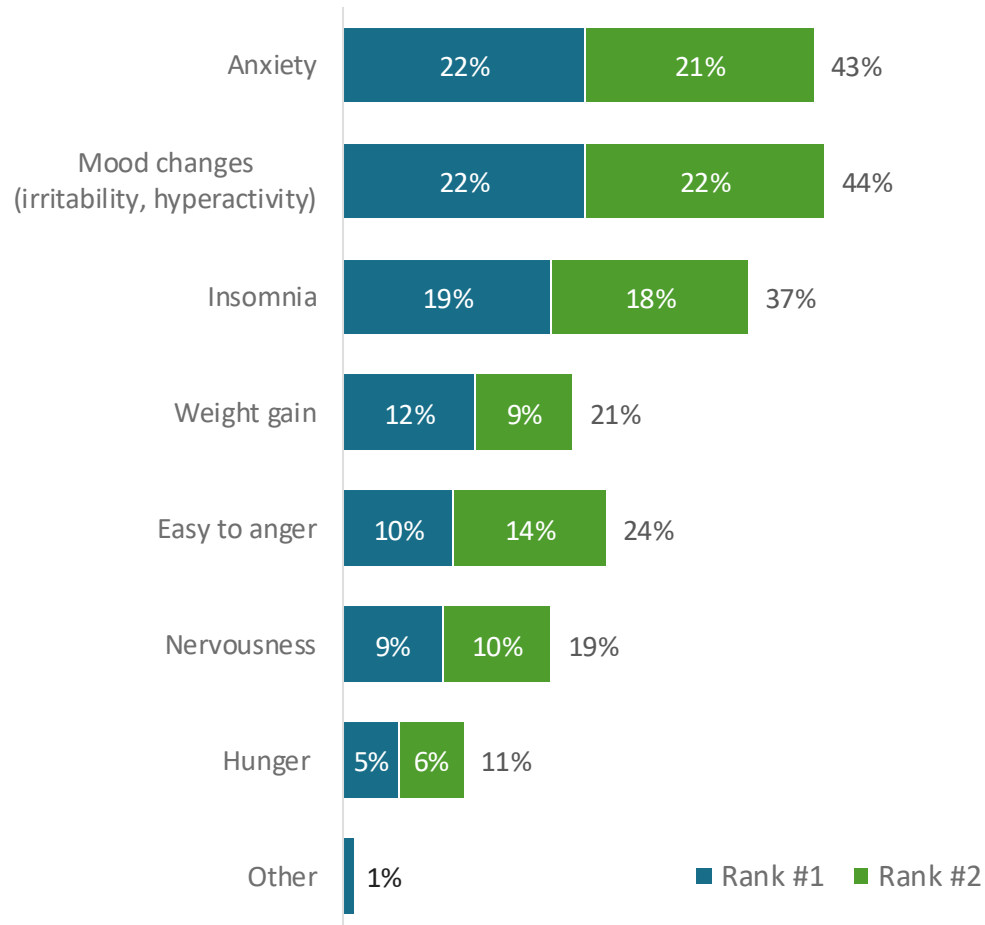


■ Familiar ■ Not familiar ■ Not sure

Q31. Are you familiar with the short-term side effects and long-term side effects of oral corticosteroid use?

### OCS Short-Term Side-Effects Most Concerned About

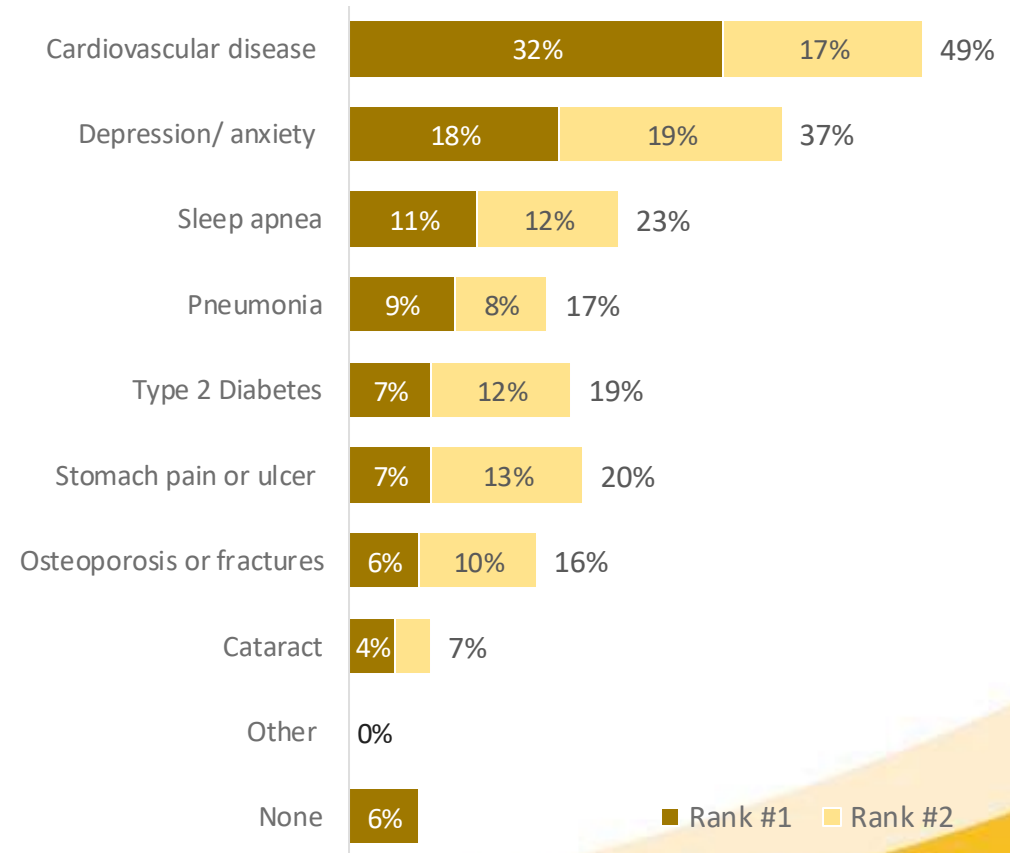
(n=500; Multiple Responses)



Q33. Of the following short-term side effects of oral corticosteroid use, which two are you most concerned about?

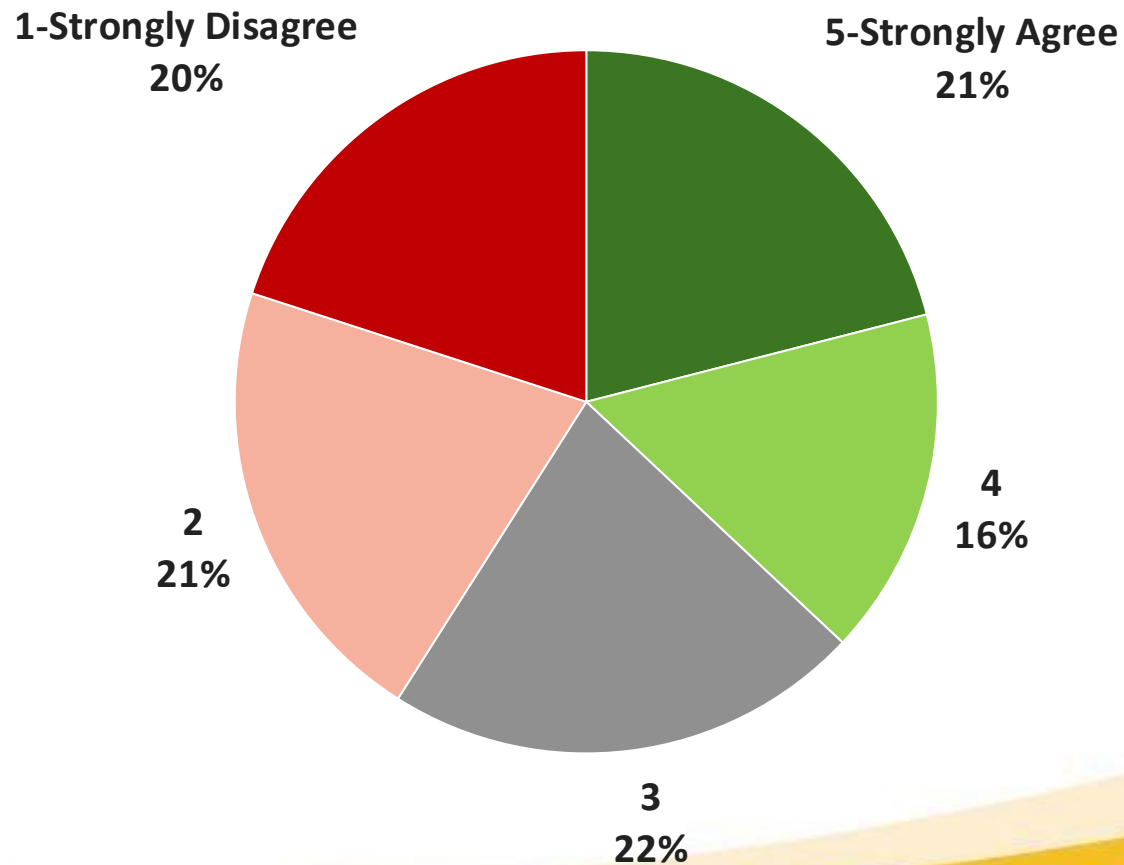
### OCS Long-Term Side-Effects Most Concerned About

(Two Most Concerned About; n=500; Multiple Responses)



Q34. Of the following long-term side effects of oral corticosteroid use, which two are you most concerned about?

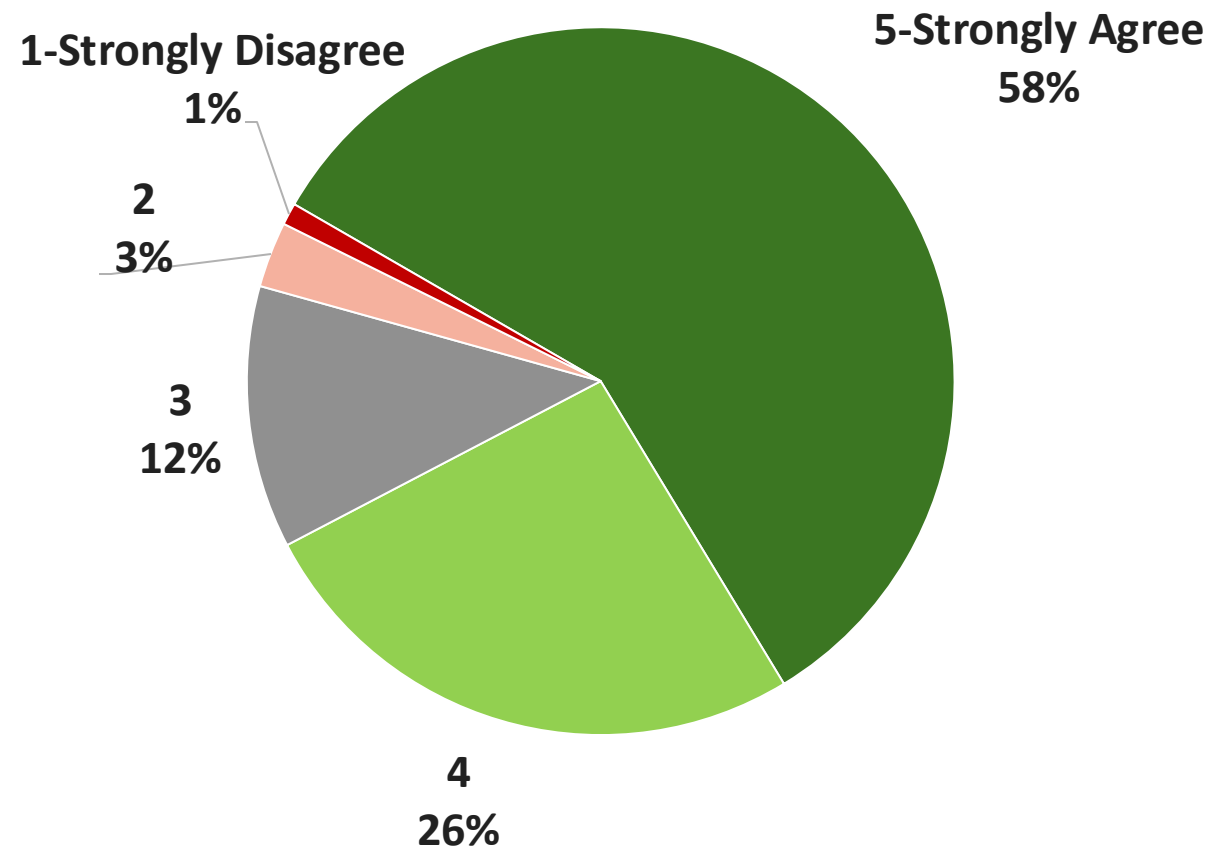
**My child's asthma healthcare provider has prescribed  
*too many oral corticosteroids* to my child  
for asthma treatment.  
(Prescribed OCS; n=310)**



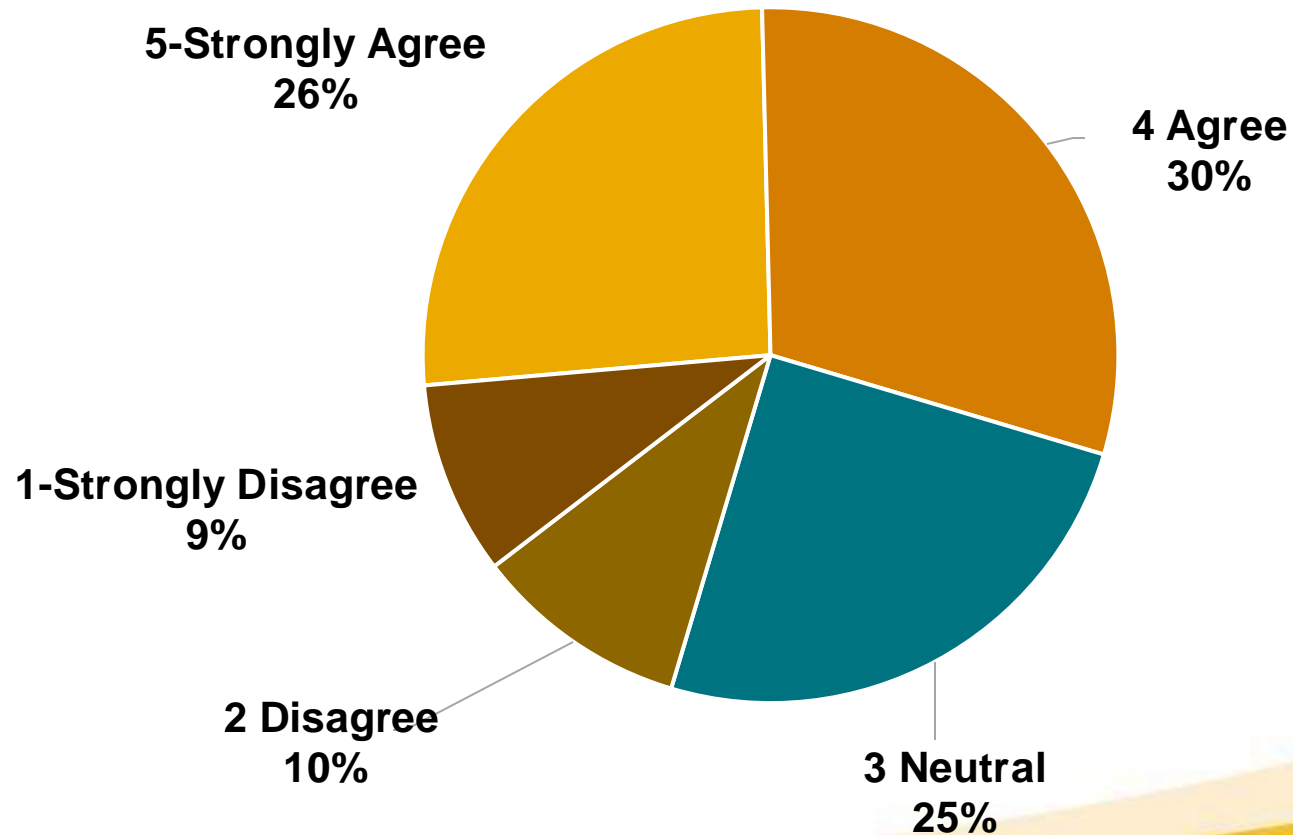
Q35A. How strongly do you agree with the following?



**My child's asthma healthcare provider *is aware of the number of times* my child has been prescribed oral corticosteroids in the last 12 months.  
(Prescribed OCS; n=310)**



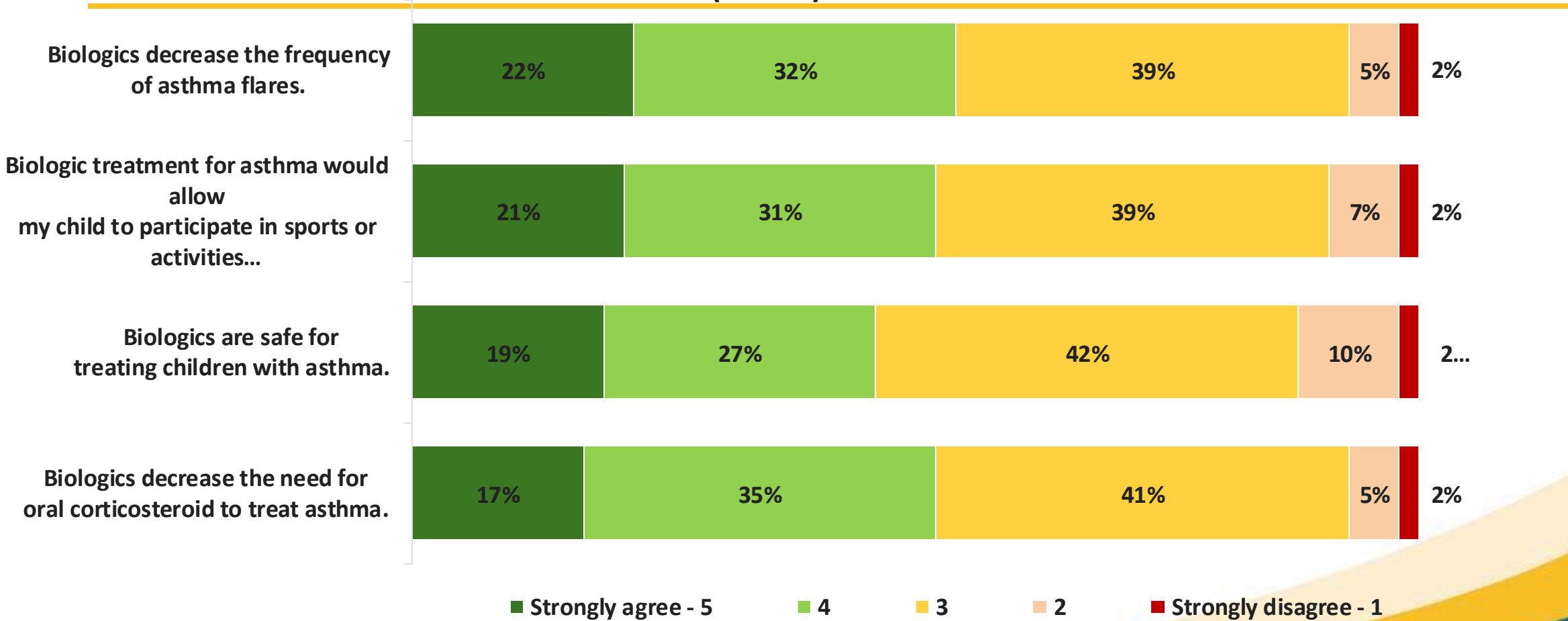
**My child's asthma healthcare provider  
(e.g., doctor, physician assistant, nurse practitioner, etc.) has informed me  
about the cumulative long-term side effects of oral corticosteroid use.  
(Total Respondents; n=500)**



Q35D How strongly do you agree with the following?

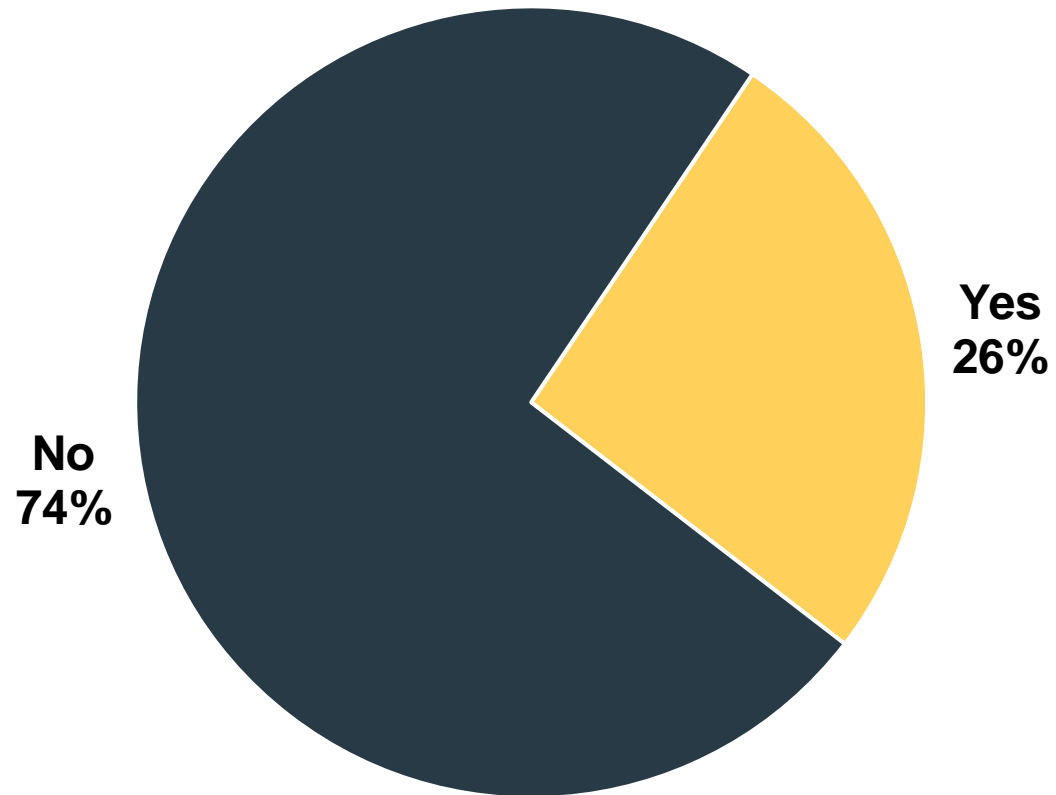
# Perceptions of Biologics

## Agreement Regarding Biologics (n=500)



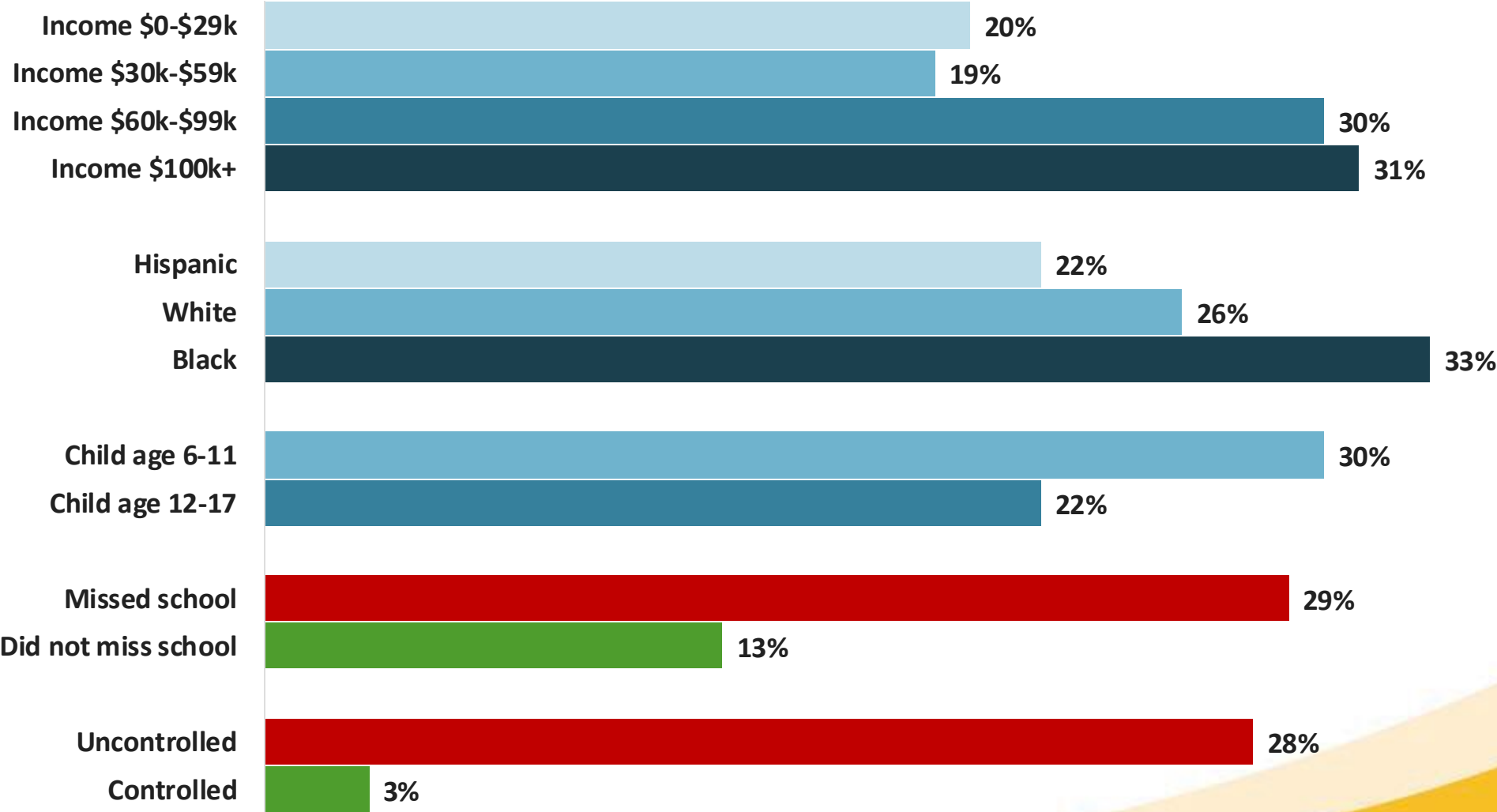
Q36 How strongly do you agree with the following?

## HCP Has Prescribed Biologics in the last 12 months (Total Respondents; n=500)



Q38. Has a health care provider prescribed a biologic for your child to treat asthma in the past 12 months?

### Prescribed Biologics by Segment - % Yes, n = 130



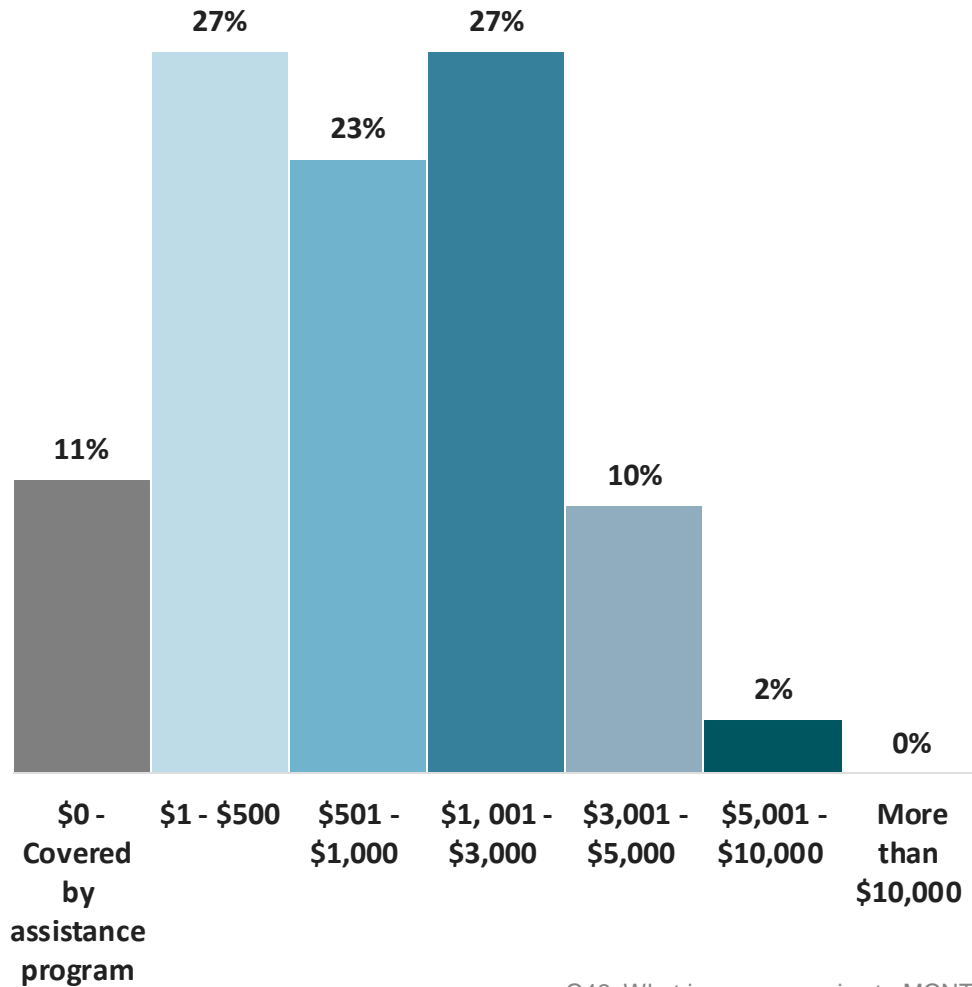
Q38. Has a health care provider prescribed a biologic for your child to treat asthma in the past 12 months?

## Type of Biologic used by a Child

	<b>n =130</b>
<b>dupilumab</b>	<b>32%</b>
<b>mepolizumab</b>	<b>27%</b>
<b>omalizumab</b>	<b>29%</b>
<b>reslizumab</b>	<b>22%</b>
<b>benralizumab</b>	<b>14%</b>
<b>tezepelumab-ekko</b>	<b>9%</b>
<b>No biologic prescribed; or prescribed and did not use it</b>	<b>6%</b>

Q39. Which of the following has your child with asthma used in the past 12 months?

## Monthly Out-of-Pocket Cost for Biologics (Used Biologics; n=130)



Q42. What is your approximate MONTHLY average out-of-pocket cost (not covered by insurance or pharmaceutical assistance program) for biologics to treat your child's asthma?

## Monthly OOP Cost by Segment (Used Biologics) (%)

	Hispanic	White	Black
<b>N</b>	<b>21</b>	<b>73</b>	<b>22</b>
<b>\$0 - Covered by pharma assistance program</b>	<b>19%</b>	<b>10%</b>	<b>9%</b>
<b>\$1-\$500</b>	<b>33%</b>	<b>26%</b>	<b>27%</b>
<b>\$501-\$1,000</b>	<b>14%</b>	<b>30%</b>	<b>9%</b>
<b>\$1,001-\$3000</b>	<b>19%</b>	<b>30%</b>	<b>28%</b>
<b>More than \$3,000</b>	<b>15%</b>	<b>4%</b>	<b>27%</b>
<b>Average (\$)</b>	<b>\$1143</b>	<b>\$1106</b>	<b>\$1773</b>



## HCP Has Prescribed Biologics by Type of Child's Insurance (Total Respondents, n=130) (% Yes)

Group/Private Insurance

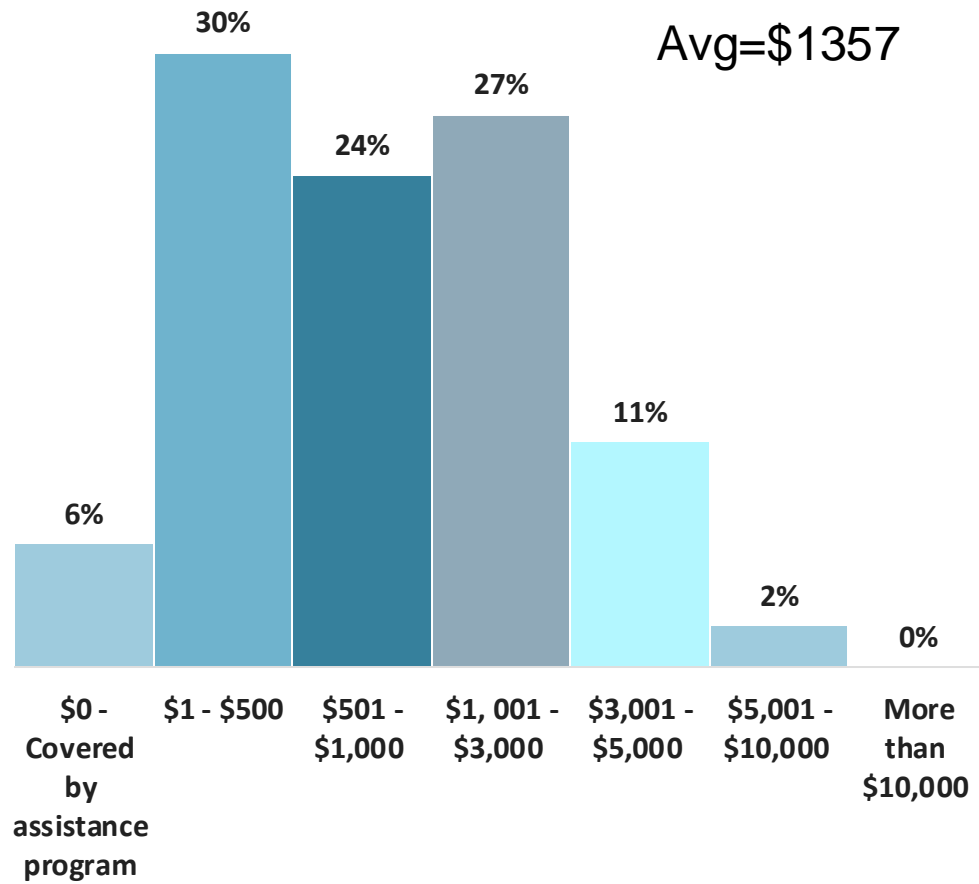
27%

Medicaid

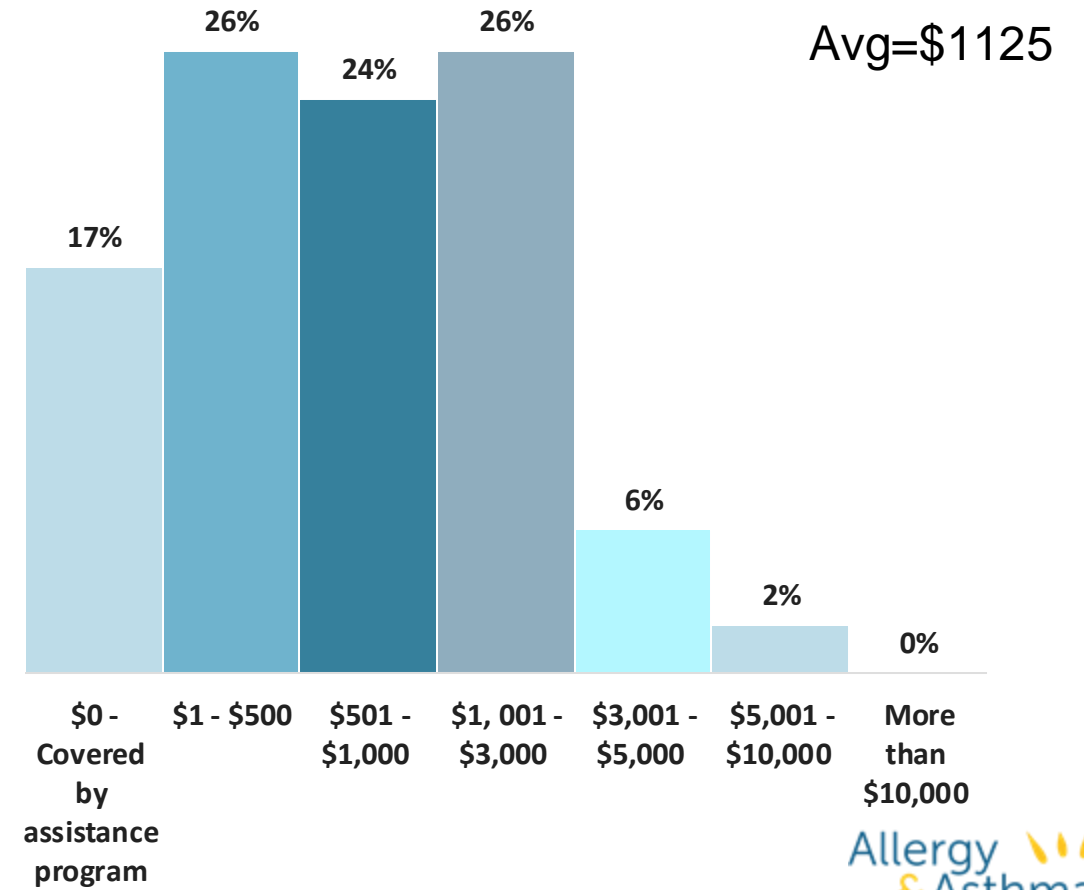
24%

Q38. Has a health care provider prescribed a biologic for your child to treat asthma in the past 12 months?

**Monthly Out-of-Pocket Cost for Biologics -  
Child Covered by Group/Private Insurance  
(Base=Used Biologics; n=63)**



**Monthly Out-of-Pocket Cost for Biologics -  
Child Covered by Medicaid  
(Base=Used Biologics; n=54)**

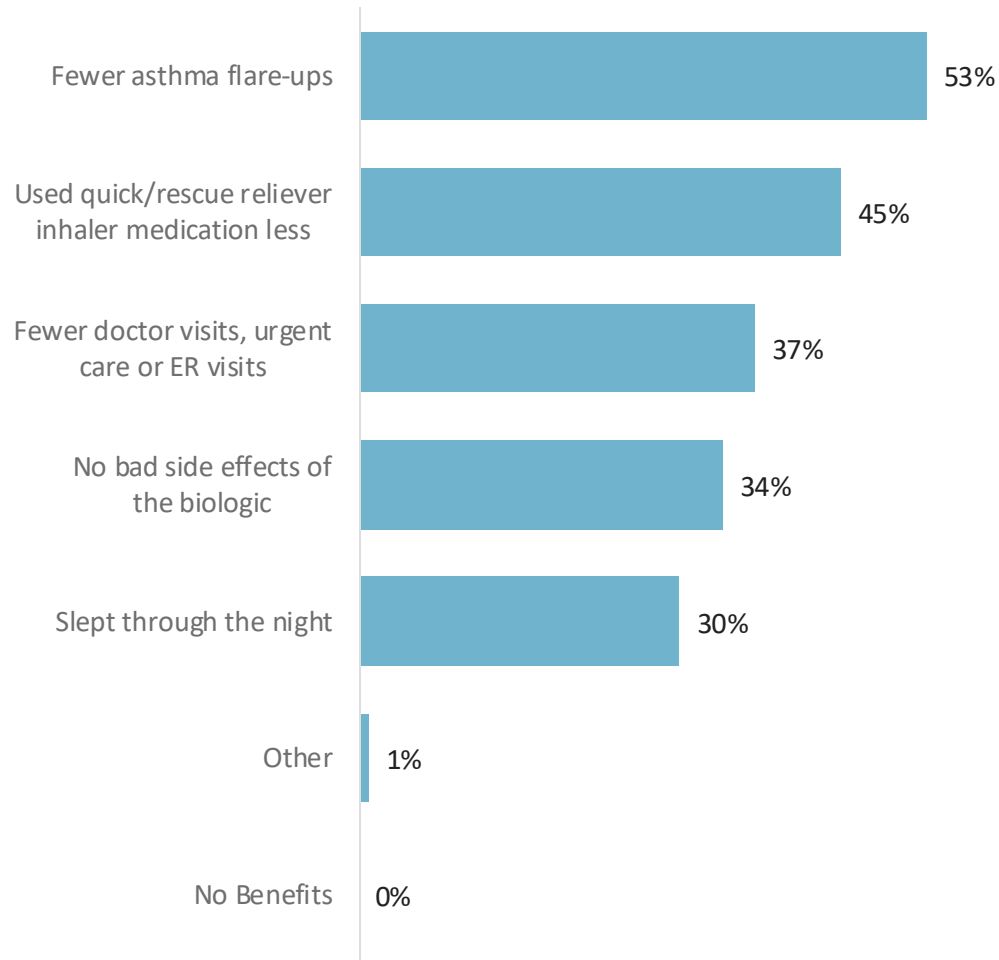


Q42. What is your approximate MONTHLY average out-of-pocket cost (not covered by insurance or pharmaceutical assistance program) for biologics to treat your child's asthma?



### Benefits of Child Using Biologics

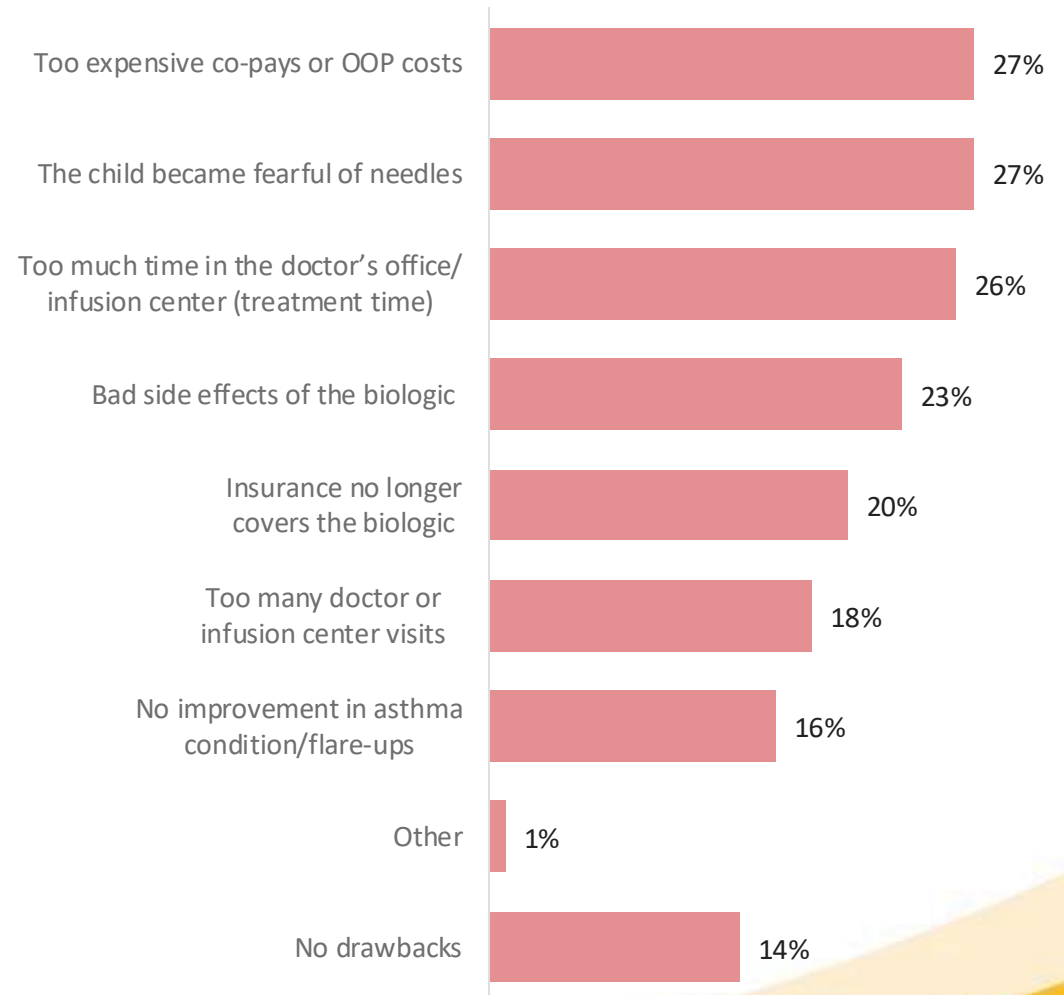
(Base=Used Biologics; n=120; Multiple Responses)



Q43. Which of the following benefits has your child experienced as a result of using biologics for their asthma?

### Drawbacks of Child Using Biologics

(Base=Used Biologic; n=120; Multiple Responses)



Q43. Which of the following benefits has your child experienced as a result of using biologics for their asthma?

# Conclusions

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- Parents of children with asthma perceive OCS use for asthma flares as:
  - Safe.
  - Expect HCP to prescribe OCS when an asthma flare occurs.
- Parents were not as familiar with the long-term side effects of OCS compared to short-term side effects.
  - Parents are most concerned about short-term side effects such as anxiety, mood changes, insomnia, and weight gain.
  - Parents are concerned about long-term side effects
- Parents agree biologics have benefits: decreased need for OCS and frequency of flares; children with asthma can participate in activities
- Average monthly out-of-pocket costs for biologics is \$1,357

