

# Total Direct Costs of Ovarian Cancer in Colombia: A National Cohort Study Based on Administrative Claims Databases

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In a 5-year period after diagnosis, mean cost per patient was 17,622 international dollars, with a 95% confidence interval of 16,899 to 18,165

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Supplemental data

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## Introduction

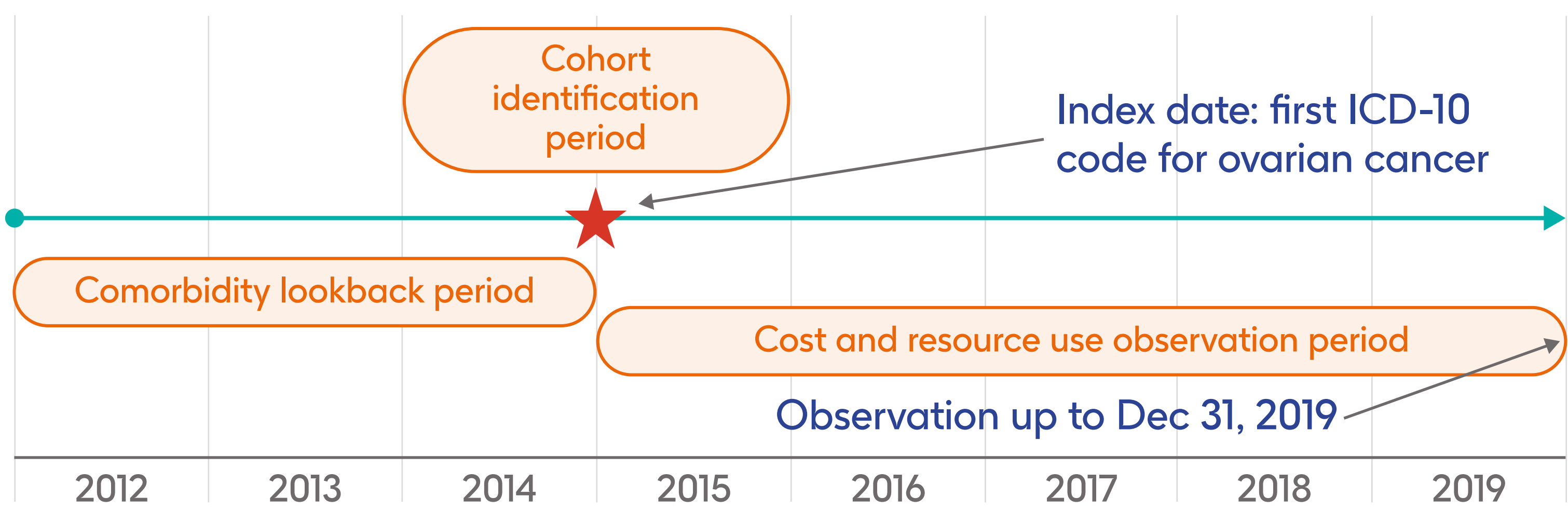
Ovarian cancer (OC) is associated with a substantial increase in healthcare costs worldwide  
This study aims to describe healthcare costs borne by the health system and incurred by patients with OC affiliated with the contributory regime in Colombia (see Background for further information)

## Population

- Adult women with
- Continuous healthcare affiliation from Jan 2014 to Dec 2019
  - At least two months of OC-related (C56) ICD-10 codes
  - One or more OC-related procedure(s)
- and without
- Any cancer-related ICD-10 codes in 2012 and 2013
  - More than four months of other cancer-related ICD-10 codes
  - Pregnancy or radiotherapy codes during the observation period

## Methods

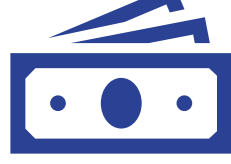
Figure 1: Study schematics



Main data source: Ministry of Health's sufficiency of the capitation unit database, which includes frequency of healthcare resource use and actual direct costs of treatment for patients in the contributory regime



An algorithm was designed to identify the patients and calibrated to approximate the OC incidence rate estimated by GLOBOCAN<sup>1</sup>



Costs were adjusted using Kaplan–Meier overall survival sample-average estimators with monthly intervals and expressed in 2019 international dollars



Variables associated with higher costs of care were identified using a generalized linear model with a squared-root link function and a Poisson distribution

## Results



Figure 2: Charlson Comorbidity Index

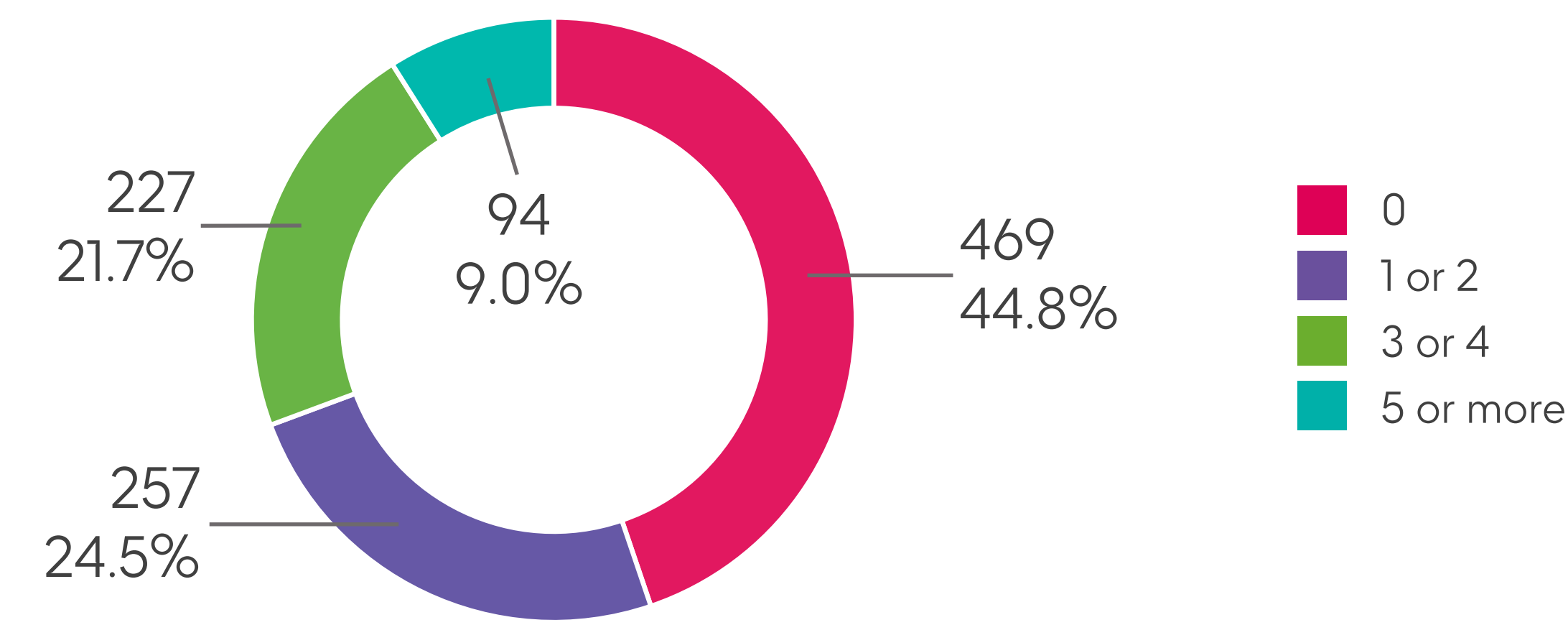
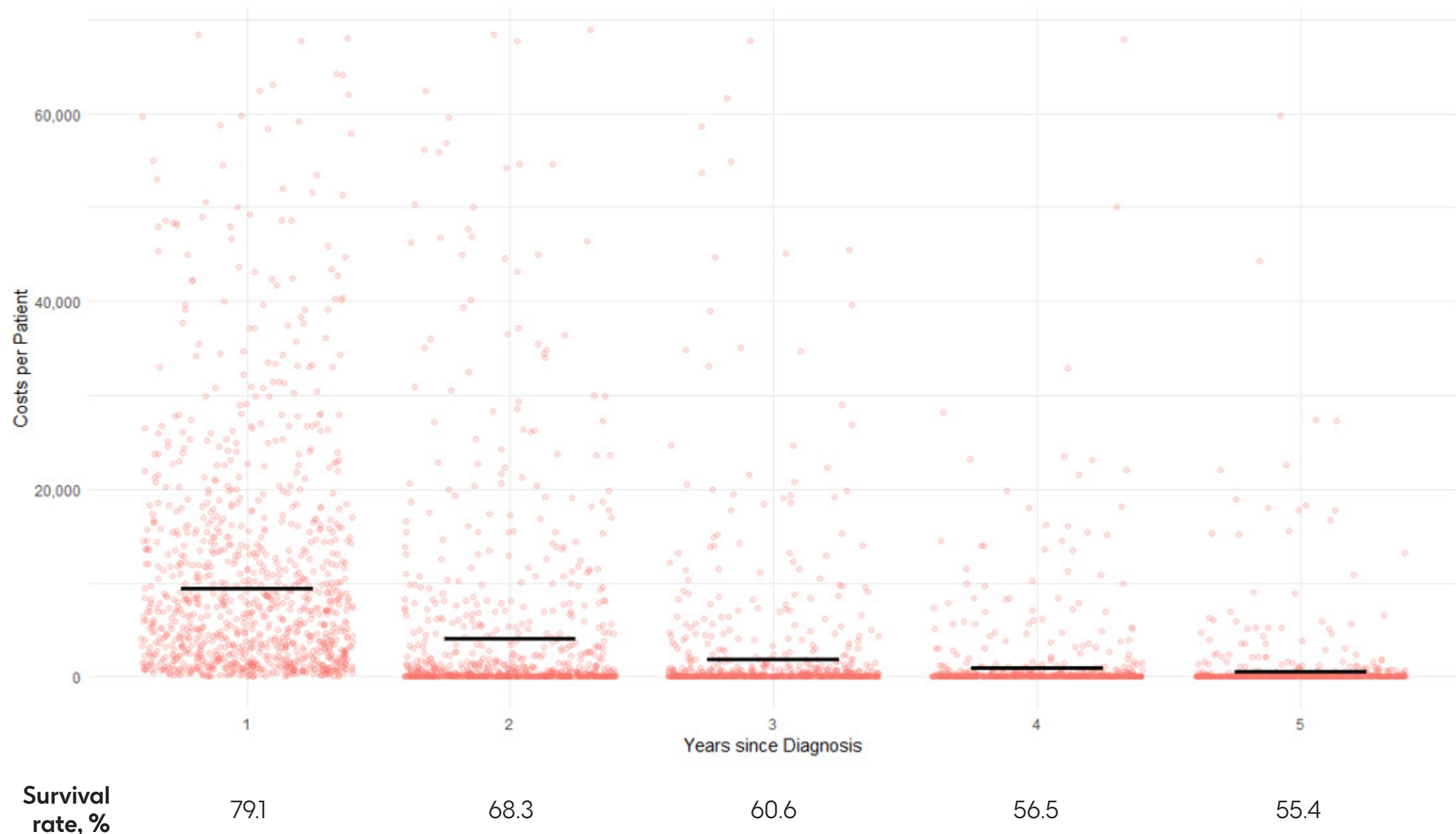


Figure 3: Direct costs of delivering health services in patients with ovarian cancer by year since diagnosis

Survival-adjusted costs expressed in 2019 international dollars  
The dots represent the raw data, and the horizontal lines represent survival-adjusted medians per year since diagnosis



Affiliation with some insurers, older age at diagnosis, a higher comorbidity burden, a longer follow-up before death, and a higher proportion of services paid under fee were associated with increases in healthcare costs (see supplement)

## Background

- Colombia has two main healthcare regimes: contributory (financed by employers and employees) and subsidized
- For both regimes, funds are gathered by the government and distributed among the insurers based on the size, risk profile, and resource use of its affiliated population
- The database is used by the Ministry of Health to assess the sufficiency of the capitation unit for the contributory regime
- The system covers all medical visits, hospitalizations, and procedures, as well as the medications listed in the national formulary

## Conclusions



OC is associated with substantial healthcare costs in the population affiliated with the contributory regime in Colombia



Despite the health system providing a unique health benefit package, substantial differences in healthcare costs remain between insurers and between types of incentives to providers

### Abbreviations

OC, ovarian cancer;  
SD, standard deviation

### References

- GLOBOCAN. Cancer over time: age-specific incidence rates for ovarian cancer in Colombia, 2012. Data version 1.0.

### Acknowledgements

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### Disclosures

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