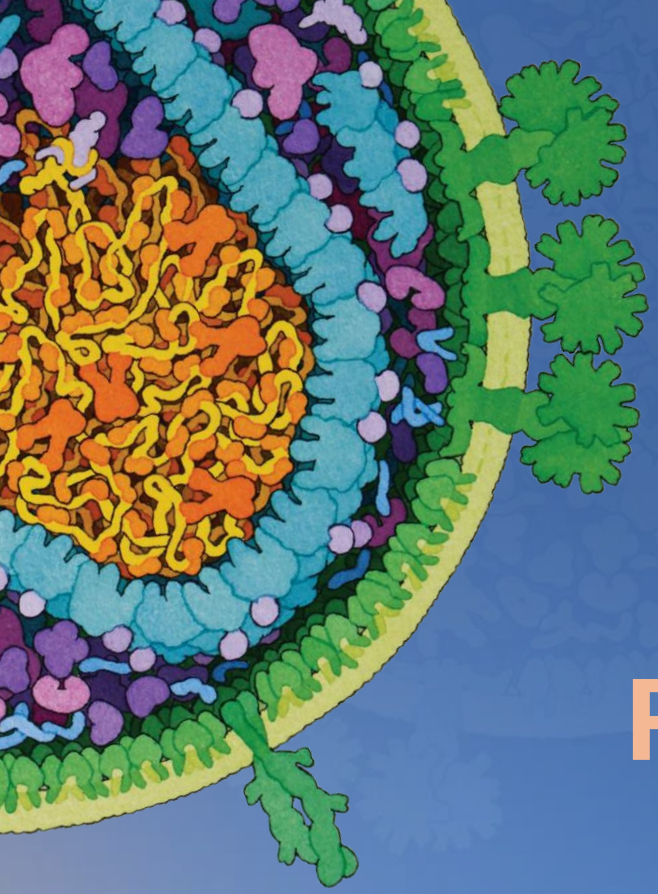

SCIENCE SPOTLIGHT™

The Antiretroviral Pregnancy Registry: 30 years of Monitoring for Congenital Anomalies

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Disclosure: Consultant: ViiV. Speaking Honorarium: ViiV, Janssen

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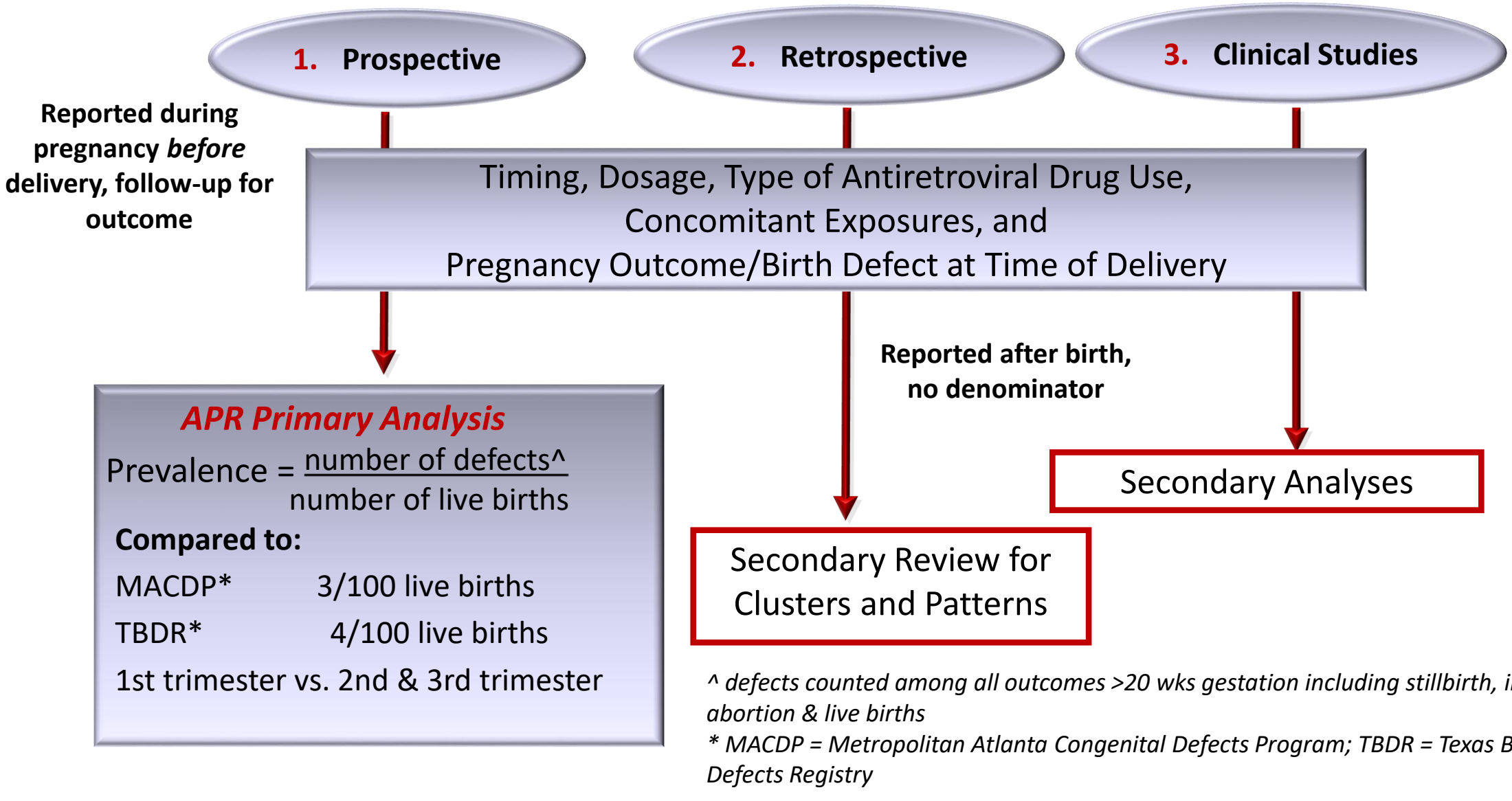
The Antiretroviral Pregnancy Registry

- The Antiretroviral Pregnancy Registry (APR) is a voluntary, international, prospective exposure-registration cohort study
  - Started as Zidovudine in Pregnancy Registry in 1989; became APR in 1993
  - Currently 29 sponsoring ARV manufacturers
  - Overseen by an independent Advisory Committee
  - As of July 31, 2020, include >20,437 live births with antiretroviral (ARV) exposure
- Designed to assist clinicians and patients in weighing potential risks and benefits of HIV treatment used during pregnancy
  - Monitors prenatal exposures to ARV drugs to detect a potential increase in the risk of birth defects
  - 150 ARV drugs: 57 brand-name single-entity drugs or fixed-dose combinations; 94 generic versions
- APR Objectives:
  - Provide early warning signals of major teratogenicity
  - Estimate prevalence of major birth defects and compare to the general population
  - Supplement animal toxicology, clinical, and epidemiological study data

Antiretroviral Pregnancy Registry Analysis



^ defects counted among all outcomes >20 wks gestation including stillbirth, induced abortion & live births

** MACDP = Metropolitan Atlanta Congenital Defects Program; TBDR = Texas Birth Defects Registry*

Overall Birth Defect Rate

Confidence Intervals for Birth Defects – All Prospective Registry Cases with Follow-up Data Closed Through 31 July 2020

Number of Live Births	20,437
Number of Live Births with at least one defect	580 (2.8%)

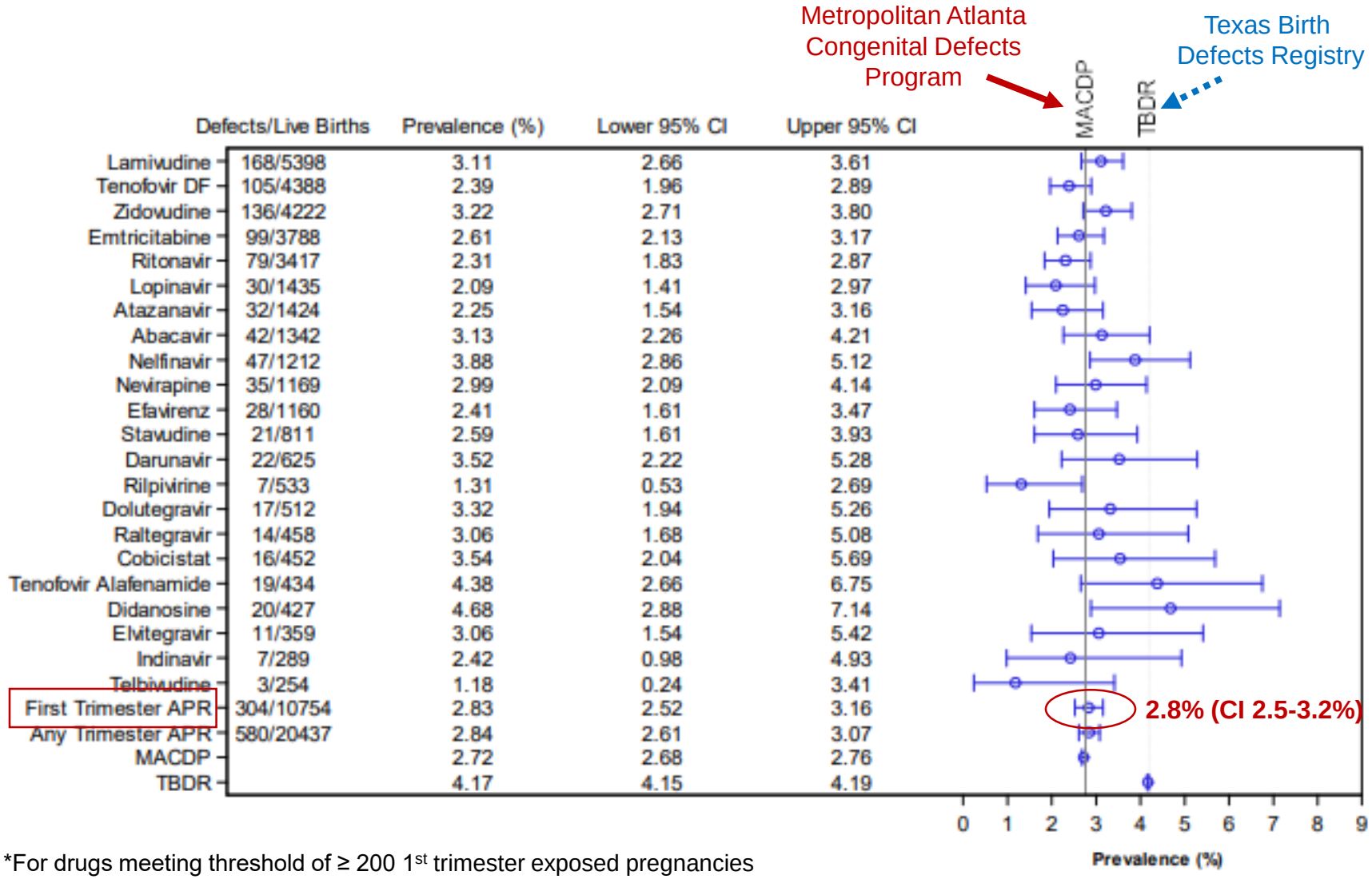
95% Confidence Intervals for % of Birth Defects for exposures in:

First Trimester	304/10,754	(2.8%) *(95% CI: 2.5–3.2%)*
Second/Third Trimester	274/9,680	(2.8%) *(95% CI: 2.5–3.2%)*
Any Trimester	580/20,437	(2.8%) *(95% CI: 2.6–3.1%)*
Relative Risk (first vs second/third trimester)	1.00	(95% CI: 0.85, 1.17)

Due to unknown trimester of exposure data for 2 case(s) with birth defects, specific counts may not sum to the overall total

APR Drug-Specific Birth Defect Rates*

Prevalence of Birth Defects (95% CI): 1 January 1989 – 31 July 2020
First Trimester Exposure



*For drugs meeting threshold of ≥ 200 1st trimester exposed pregnancies
MACDP: Vertical solid line = upper 95% CI, 2.76%
TBDR: Vertical dashed line = upper 95% CI, 4.19%

Conclusions

- The APR has not found a significant difference in CA prevalence overall or by trimester of exposure compared to population based surveillance systems
- A detailed review of cases for DDI, NFV, and TAF did not identify a pattern of CAs. The relevance of the statistical findings for DDI and NFV are unclear.

ADVISORY COMMITTEE CONSENSUS Statement (Precis)

- The Antiretroviral Pregnancy Registry finds no apparent increases in frequency of defects with first trimester exposures compared to exposures starting later in pregnancy and no pattern to suggest a common cause; however, potential limitations of registries should be recognized.

- Providers are strongly encouraged to report eligible patients to **SM_APR@APRegistry.com** or visit **www.APRegistry.com**

The Antiretroviral Pregnancy Registry: 30 years of Monitoring for Congenital Anomalies

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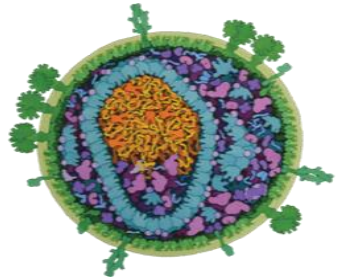

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