

*Obstetrics*

## Druggable Target for Premature Birth

### Brief Description of Technology

Analysis of the genetic factors that contribute to the duration of gestation and risk of preterm birth has led to identification of druggable targets to prevent preterm birth.

**TECHNOLOGY ID**

2019-0411

**BUSINESS OPPORTUNITY**

Exclusive License or Sponsored  
Research

**TECHNOLOGY TYPE**

Small Molecule

**PATENT INFORMATION**

Provisional Filed

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CTC Business Development  
partnering@cchmc.org  
1.513.636.4285

innovation.cincinnatichildrens.org

### Technology Overview

Genetic factors that contribute to the duration of gestation and the risk of preterm birth have been identified and replicated in large, well-powered datasets revealing new and potentially druggable targets. These genome-wide association studies specifically evaluated the maternal genome. These loci are associated with cell surface receptors and other pathways that have led us to druggable target(s). In vivo models are currently being explored that are strong models for preterm birth; as well as, positive and negative controls to evaluate the target and small molecules.

### Applications

Premature birth prevention

### Advantages

Small molecule approach for prevention of premature birth.

### Market Overview

Preterm birth complications are the leading cause of death among children under 5 years of age. Despite substantial attention, relatively little progress has been made. Of particular concern, preterm birth rates have been rising in the United States and remain at approximately 10% globally.

### Investigator Overview

Louis Muglia, MD, PhD, Co-Director, Perinatal Institute; Director, Center for Prevention of Preterm Birth; Director, Division of Human Genetics