

# Q&A: THE ROLE OF CLINICAL TRIALS IN KEEPING MOTHERS AND BABIES SAFE

## *Considerations and Frequently Asked Questions*



### **Q: Why is it important to have pregnant and lactating mothers in clinical trials?**

**A:** Pregnancy doesn't stop women from getting sick; needing to manage an already-existing medical condition like asthma, diabetes, or depression; or developing a chronic illness or ailment, such as kidney stones, during pregnancy. In fact, up to 95% of pregnant women take prescription medications. Almost half of pregnant women use four or more drugs at some point during their pregnancy. Yet, for 98% of the drugs approved by the U.S. Food and Drug Administration

(FDA) between 2000 and 2010 we don't know the risk to the baby (known as the teratogenic risk), and just 1% of studies on how drugs are metabolized include pregnancy-specific data. As our nation fights the maternal mortality crisis, women and their health care providers deserve to know if the medications they are taking are safe and effective for mothers and their babies.

### **Q: Do clinical trials put the baby at risk?**

**A:** All clinical trials have risk. Yet, there is arguably more risk to a mother (and her baby) when she is navigating in the unknown. Further, if the mother and baby participate in a clinical trial, their exposures to new medications will be closely monitored, and any adverse effects could be recognized more quickly. This could help prevent harm to both mother and baby as well as prevent potential future harm to other mothers and babies.

### **Q: How do researchers ensure safety of the mother and baby in clinical trials?**

**A:** As part of the FDA's drug development process, drug discovery and development and preclinical research (including animal model research) must occur **before a drug is tested in people**. Early tests gather information on dosing, drug administration methods, side effects, drug interactions, and more. In addition to these steps, there are federal regulations outlining the conditions that must be met for pregnant women to participate in a research study.

### **Q: How does pregnancy affect a woman's reaction to medication?**

**A:** There are many physiologic changes that take place during pregnancy, including changes in the cardiovascular system, an increase in plasma volume, reduced platelet count, and more. These can affect the absorption, distribution, and metabolism of medications—all of which can affect the effectiveness of the medication. Accounting for these physiologic changes is vital to ensure that pregnant women do not underdose or overdose on medications; clinical trials are important for identifying the appropriate dosage for pregnant women.

### **Q: Which women are most impacted by the lack of research on the safety and efficacy of treatments used during pregnancy and lactation?**

**A:** All women are impacted by the lack of research in this space. This includes women who live with diseases or chronic conditions that require medication for disease management, such as type 2 diabetes, narcolepsy, lupus, or hypertension, and women who become sick or develop a condition during pregnancy, ranging from gestational diabetes to depression or anxiety, that require the use of a medication.

### **Q: Is having pregnant and lactating mothers in clinical trials ethical?**

**A:** Including pregnant and lactating mothers in clinical trials is ethical and can be done appropriately. By excluding these populations from clinical trials, pregnant women may take themselves off of certain medications or treatments when it's unwarranted, or they may have to make decisions about whether to start or stop medications without evidence and outside of a controlled setting. Moreover, other women will not be able to benefit from the information gleaned during a trial, thereby informing future clinical care. We can better protect mothers and babies through research.

### **Q: What oversight is conducted on clinical trials with pregnant and lactating women?**

**A:** Regulatory authorities and ethical review boards play a critical role in ensuring the well-being of the populations included within these trials. This oversight includes regulatory guidelines set by the FDA, the Common Rule (45 CFR 46 Subpart A), and 45 CFR 46, Subpart B-Additional Protections for Pregnant Women, Human Fetuses and Neonates Involved in Research. In addition, other groups, including Institutional Review Boards, ethics committees, independent data monitoring and safety boards, play a role in ensuring that research complies with regulations, meets ethical standards, and protects research participants. Beyond these regulatory bodies, post-market surveillance assesses safety and effectiveness of medications at time of approval or clearance, and informed consent is central to ensuring that women involved in studies have sufficient understanding of research protocols, risks of participation, and that participation is voluntary.

### **Q: Why were pregnant and lactating women historically excluded from clinical trials?**

**A:** In 1977—on the heels of a disaster, in which the drug Thalidomide (prescribed to pregnant women for nausea) resulted in severe birth defects in children—the FDA published guidelines advising the exclusion of “women of childbearing potential” from participating in Phase I and II clinical research. While Thalidomide was ultimately prevented from being marketed in the United States by the FDA, its impact created a culture of fear. In reality, Thalidomide revealed the far-reaching harm that can come to pregnant women and their children through untested drugs and made evident the responsibility we have to protect pregnant women and future generations of pregnant women through research.

### **Q: What is an example of a successful clinical trial that included pregnant and lactating women?**

**A:** There are numerous independent studies and multi-center trials that are successfully completing research in pregnant women. These include trials of drugs (e.g., pravastatin); interventions (pessary, labor induction); and other therapies (CPAP, and Vitamins C). In addition, the Maternal Fetal Medicine Units Network, established by the National Institutes of Health's National Institute of Child Health and Human Development, is conducting several research studies that are intended to promote maternal-child health and prevention of disease. There are fewer studies in lactating women.

## **ABOUT THE COALITION TO ADVANCE MATERNAL THERAPEUTICS**

The Coalition to Advance Maternal Therapeutics (CAMT) was founded in 2014 to advocate for policy changes and raise awareness of the need for greater inclusion of pregnant and lactating populations in clinical research. Through the CAMT's efforts, the Common Rule was revised to declassify pregnant people as a vulnerable population, PRGLAC was established, and additional programs and support for the inclusion of this population in research have been promoted.

