Diabetes research part of Tour de California race

In a first step to fill a major void in diabetes sports research, global sports organization Team Type 1, the official parent company of the Team Type 1-sanofi aventis professional men's cycling team, will launch a clinical study at the Amgen Tour de California.

The pioneering study conducted by the TT1 Diabetes Sports Research Institute, will assess blood glucose levels of elite cyclists – with and without diabetes – with a goal of identifying optimal levels for peak athletic performance. The study will be led by Institute Medical Director Juan P. Frias. Frias is affiliated with the UC San Diego Department of Medicine, and is the former chief medical officer of Johnson & Johnson, Diabetes Care.

"While there have been several athletes with type 1 diabetes who have competed and succeeded at the professional and Olympic levels, there is very little published clinical data related to optimization of athletic performance in persons with type 1 diabetes," Frias said in a statement. "We strongly believe our efforts will play an important role in expanding research in this field and in helping other athletes with diabetes manage their glucose to perform safely and optimally."

Throughout the eight stages of the ride, which includes grueling climbs and hundreds of miles of racing from Lake Tahoe to Thousand Oaks, Team Type 1-sanofi-aventis athletes who have volunteered to take part in the study will wear continuous glucose monitors, while meters on their bikes measure parameters such as speed, power and energy expenditure.

The study will continue at other cycling events throughout the racing season including the USA Pro Cycling Challenge in Colorado from Aug. 22-28. Additionally, a controlled laboratory component is planned in collaboration with the San Diego State University School of Exercise and Nutritional Sciences.