

NFL players: Study to detect CTE markers in the living needs you

Kent Somers, *azcentral sports* Published 11:28 a.m. MT March 23, 2018 | Updated 12:09 p.m. MT March 24, 2018



(Photo: Kirby Lee-USA TODAY Sports)

Beginning on Wednesday, NFL players past and present have an opportunity to help researchers one day diagnose chronic traumatic encephalopathy (CTE) in the living, not just at autopsy.

All it takes is about an hour and donations of small amounts of blood, urine and saliva.

A research study with roots in Arizona has been approved that may help one day identify biomarkers that indicate CTE. Calls are going out to football players age 20 or older to donate fluid samples and answer a simple questionnaire.

Exosome Sciences, a subsidiary of Aethlon Medical, Inc., in San Diego, and the Translational Genomics Research Institute (TGen) in downtown Phoenix are collaborating on the project. They hope to convince about 200 past and present football

players, mostly with NFL ties, to participate in the hopes of helping those who have CTE now or might in the future.

“This is ground zero for the launch of this really important study,” said former NFL player and broadcaster Solomon Wilcots, who leads a "players council" for Exosome Sciences. “If there was ever a time to have a call to action, this would be it. This is where the rubber meets the road. And there is a tremendous number of former NFL players in the Phoenix area.”

That’s one reason Wilcots and others contacted the Arizona chapter of the NFL Alumni Association to support the study. This week, Wilcots, former Cardinals and Browns linebacker Jamir Miller, former Vikings tight end Steve Jordan and Aethlon CEO Jim Joyce are making a media blitz to spread the word about the study.

The study’s first “collection date” is scheduled for Wednesday from 8 a.m. to 4 p.m. at TGen, 445 N. 5th Street, Phoenix. Walk-ins are accepted and players seeking more information and appointments can contact the study coordinator at CTE@tgen.org or 602-343-8653. Information is also available at tgen.org/CTE.

The players council also includes members from Florida, Southern California and New York, and study coordinators will schedule collection dates at various places around the country.

Arizona was a natural place to start because of its large NFL alumni base and is the home of TGen.

“From a statistical standpoint, the more people we can enroll, the better,” Joyce said.

The study also will enroll members in a control group comprised of subjects who didn’t participate in activities that involved repetitive head trauma.

Few, if any, CTE diagnosis studies are looking at finding biomarkers that would indicate the presence of CTE, Joyce said. Most studies involve scans.

The tau protein is at the center of the research. It’s present in brain cells and when working, allows a cell’s transportation system to work correctly, according to the website, concussionfoundationn.org.

Repeated head injuries can cause “tau tangles” that disrupt or stop the flow of information.

A previous study by Exosome examined 78 former NFL players and a control group of 16 athletes in non-contact sports. That study showed levels of the tau protein in the blood of the players was nine times higher than in the control group.

The tau levels in 22 Alzheimer's patients were 10 times higher than people in the control group.

If CTE can be detected in the living, then treatments such as drug therapies could be used to treat it. Or treatment might be as simple as holding an athlete out of contact until the blood marker returns to a normal level.

"We love the game of football; we wouldn't be here talking about this if we didn't," said Miller, who played eight seasons in the NFL. "In order for football to survive in this climate, we have to step up and face some of the ills. We look at it as this has to be contribution to the game, to the health of the game."

Jordan, who played at South Mountain High and Brown University, spent 13 seasons in the NFL, and his son, Cameron, is a defensive end for the Saints. The study, he said, isn't just about helping football players. It could have an impact on athletes in other sports and those in the military.

"We've been talking about this since the '80s, the concussion issue," Jordan said. "Here's an opportunity for us to be a part of research project that's going to, hopefully, get us into a new position."

Jordan said he would be involved in the project even if he didn't have a son in the NFL.

"I just happen to have, in this case, skin in the game," he said. "Literally.

<https://www.azcentral.com/story/sports/nfl/cardinals/2018/03/23/nfl-players-study-cte-markers-living-exosome-sciences-tgen/451293002>