Duke scientist asks to retract cancer work

A discovery once touted by Duke University as a major leap in using genetics to prolong the lives of cancer patients is now likely to be retracted, officials said Friday.

The work, led by Dr. Anil Potti, appeared to establish a genetic basis for predicting which treatments would best benefit individual cancer patients.

Potti has been on paid administrative leave since July under the taint of having padded his academic credentials.

His scientific findings have also been questioned for more than a year, leading to Friday's request to retract a 2007 article in The Journal of Clinical Oncology. One of Potti's leading collaborators and co-authors at Duke, Joseph Nevins, reassessed their work and found it didn't support the conclusions they reported. Nevins asked the editors to retract it.

Editors at the journal said Friday that they are reviewing the request. Nevins and Potti did not return phone messages for comment.

For scientists, retractions are embarrassing public acknowledgements of errors and other serious problems. But the Potti controversy has also blemished Duke, which investigated him late last year and declared his work acceptable for use in human trials.

"Having something wrong on a research paper is OK; people make mistakes," said Keith Baggerly, a biostatistician at MD Anderson Cancer Center in Texas who was among the first to question Potti's research when it couldn't be replicated. "To my mind, there is a different level of error involved when you go to say this is how we're going to treat patients."

Duke had been running three clinical trials based on Potti's findings, enlisting 111 lung and breast cancer patients, primarily in the Triangle. The patients were steered to different medicines based on the Potti group's calculations of their genetic susceptibility to chemotherapies.

Dr. Michael Cuffe, vice president of medical affairs at Duke, said the patients were never put in harm's way.

"The trials have been on hold since last summer, appropriately so, and the patients are under the care of their clinical oncologists," Cuffe said, noting that all the patients received common chemotherapies, although some of the drugs were not approved for their type of cancer.

Duke had halted the clinical trials a year ago after Baggerly and others raised concerns that the science behind them was faulty. The university lined up an outside reviewer to check Potti's research, although Duke never disclosed who led that probe.

Sally Kornbluth, Duke's vice dean of research, said last year's investigation of Potti's work did not "drill down" to re-check the actual data that were used to form his calculations.
She said that review team was "not aware that there were data integrity issues with the work." As a result, the reviewers did not catch the problems that have now led to Nevin's request for a retraction.

A skeptic's surprise

Baggerly said he cautioned Duke officials that the data were wrong and was surprised when officials reaffirmed their support of Potti's work and restarted the trials in January.

"I still have a question: If we told them about these exact problems last November, while the trials were suspended, why did they choose to reopen the trials in January?" Baggerly said. "That's my basic question."

Potti has been a lucrative source of federal and private research dollars to Duke, garnering at least $1 million in recent years. In addition, his findings appeared to prove some of the promise of genomic medicine, which aims to use a person's unique genetic information to tailor therapies.

After Duke cleared Potti's work in January, the controversy simmered until July, when a scientific newsletter called The Cancer Letter published discrepancies in Potti's résumé and biographical information. Among the embellishments were claims he received a prestigious Rhodes Scholarship.

Duke then put Potti on paid leave, launched a second round of investigations into the scientific findings, and looked into the résumé charges. In August, the university said it found "issues of substantial concern" related to Potti's professional credentials but did not elaborate. Potti had been characterized in Duke publications as a Rhodes Scholar.

Although he cannot teach or conduct research, he continues to be employed while the inquiries into his research continue. Kornbluth defended the university's handling of the case, which could well result in additional scientific clarifications.

"We cannot rush to judgment," Kornbluth said. "This has to be dealt with appropriately through the misconduct process."

A separate effort is under way by the Institute of Medicine to use the Potti experience to explore whether additional rules and disclosures are needed in genomic research. Kornbluth said that effort will benefit all of science.

"This is a very new, cutting-edge area," Kornbluth said. "We're developing the guidelines. Duke is on the cutting edge of these areas, and we have to think carefully what is best."

savery@newsobserver.com or 919-829-4882