

Successful outcome with novel aPKC protein inhibitor cancer drug development candidate

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Cancer Research Technology (CRT), the commercial arm of Cancer Research UK announces a successful outcome to their existing collaboration with Teva through the identification of a novel atypical Protein Kinase C (aPKC) inhibitor pre-clinical candidate, licensed by Teva.

The successful multi-year, cross-discipline, collaboration between CRT and Teva has produced a first-in-class, highly selective and orally-active pre-clinical candidate inhibitor for development by Teva into possible new drug therapies for <u>cancer patients</u>.

The drug compound blocks the atypical class of Protein Kinase C (PKC) proteins that are differentially activated in defined subsets of cancer patients. The aPKC inhibitor pre-clinical candidate was discovered following lead optimisation of early stage compounds identified within the CRT Discovery Laboratories. Teva provided significant resource and expertise during the collaborative research term to boost existing investment by Cancer Research UK.

The aPKC isoforms PKC iota and PKC zeta are types of enzymes called serine/threonine kinases that have a key role in regulating the formation of tumours (tumourigenesis), the early steps of tumor invasion and metastasis (tumor spread) to distant tissues, and the expansion and growth of <u>cancer stem cells</u>, which contribute to the emergence of tumor resistance to a variety of standard cancer therapies. Inhibition of the aPKC isoenzymes is an attractive target for anti-tumour treatments.



Professors Peter Parker and Neil McDonald, at Cancer Research UK's London Research Institute, significantly contributed to understanding the structural biology of the aPKC drug targets and their validation as important players in cancer cell growth and spread.

"The fruits of this collaboration are significant. These aPKC targets may play a role in a pathway that leads to the formation and progression of cancer. The ability to inhibit this pathway may provide a new approach to the treatment of multiple <u>cancer</u> types in a number of different patient populations", said Dr. Michael Hayden, Teva's President of Global R&D and Chief Scientific Officer.

Under the terms of the license, CRT receive an upfront payment, and will be eligible to receive future success-based development milestone payments and royalty payments upon reaching specified targets once the drug is marketed.

Dr Keith Blundy, Cancer Research Technology's chief executive officer, said: "This successful outcome from our collaboration represents the pinnacle of a highly productive collaboration to discover and develop first-in-class inhibitors of aPKC.

"By working with our industry partner, Teva and academic collaborators, we've accessed a much wider range of specialist expertise and experience, and demonstrated our ability to execute successfully the development of novel inhibitors.

"This approach has allowed us to move fast on this project, ahead of other commercial and academic groups interested in developing atypical PKC inhibitors."

Provided by Cancer Research UK



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